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Date: May 29, 1998 12:11:59 PM PDT
To: Ronald_Wojnar@admin.tc.faa.gov
Subject: Wiring/cargo door evidence from US government documents

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Dear elected, appointed, and employed US government officials
involved with TWA 800 investigation, 29 May 1998

Gentleman, I respectfully address all as if this were a cyberspace meeting and it is my turn to speak. Most of us have exchanged letters, emails, conversations in person or telephone calls in the past. The case for wiring/cargo door opening in flight as an explanation for the TWA accident grows stronger every day with evidence such as this:

Quote from TWA 800 Public Docket 516A, Exhibit 9A Systems Group Chairman's Factual report of Investigation, Page 47, "A Boeing telefax of June 25, 1997, stated that: The Poly-X wire was used as general purpose wire on the RA164 (TWA 800) aircraft. Wire insulation known as Poly-X had three in-service problems:

-Abrasion of the insulation in bundles installed in high vibration areas.

(This problem was corrected by Boeing Service Bulletin No.

747-71-7105, Dated July 19, 1974)

-Random flaking of the topcoat.

-Insulation radial cracks in tight bend radii.

Radial cracking phenomenon of the Poly-X wire was mainly associated with mechanical stress. Bend radius is the largest contributor to mechanical stress in installed wire or cable.

Presence of moisture in conjunction with mechanical stress is also a contributor."

The Systems Exhibit 9A continues on same page 47, "Evidence of arcing or short circuiting was found in the fuselage of N93119, (TWA 800) in addition to what was found in the wiring from the raceway below the left cabin floor and near the forward wing spar.

The Systems Exhibit 9A continues, page 116:

"Some wires found in the section of W480 from forward of station 570 and identified as BMS13-42A had numerous cracks in the insulation. Most of the cracks in this bundle were found to expose the core conductor when examined by microscope. Only within five feet of the aft end of the W480 bundle from station 570-900 were insulation cracks found."

(Please note that BMS13-42A is Poly-X wiring. Cargo door location is FS 560-670 and cracked wires discovered are within that zone. Frayed wires in that area have shorted before and caused the forward cargo door to open in flight, NTSB AAR 92/02 UAL 811. Water has been seen pouring out of a forward cargo bay of a Boeing airliner. Water and leaking electricity make a powerful conductor. Both are known to exist in Boeing airliners.)

NTSB Exhibit 9C, Attachments to the Systems Group Factual

Report, page 44:

"Response: There was one reported wire insulation abrasion on the 747 in 1996. There operator reported that a burning smell was noted during cargo loading in the forward cargo compartment. Cargo loading system wiring was found damaged and shorted to ground below the cargo floor at station 650, below the aft right corner of a large ball mat. A wiring loom "p" clip was found broken enabling the wire to chafe against structure. A hole was found burned through the bottom angle of the cargo floor cross member, where the wiring clip attached, and charring was evident in the surrounding insulation blanket. Repairs were made."

Page 44: "Response: There were seven reported wiring fires on the 747 in 1996."

Page 45: "f. 747-200 reported on October 12, 1996
Wire bundle arcing and resultant fire at aft bulkhead of forward lower lobe cargo hold on a747-200 freighter. This occurred with the airplane on the ground, during post C-check functional test. Note: Portions of the damaged wire bundles were forwarded to Boeing for evaluation in determining the cause of the damage. The results of the analysis indicated the primary conductor(s) sustained mechanical or thermal damage prior to the application of electrical power."

Page 46, "g. 747-400 reported on November 1, 1997, (see response to question 1)

There was one reported wire insulation abrasion on the 747 in 1996. There operator reported that a burning smell was noted during cargo loading in the forward cargo compartment. Cargo loading system wiring was found damaged and shorted to ground below the cargo floor at station 650, below the aft right corner of

a large ball mat. A wiring loom "p" clip was found broken enabling the wire to chafe against structure. A hole was found burned through the bottom angle of the cargo floor cross member, where the wiring clip attached, and charring was evident in the surrounding insulation blanket. Repairs were made."

Page 57, Letter from Commander Naval Air Systems Command to National Electrical Manufacturers Association, 1 Oct 82, "As you know, the problems with poly-x wire are well known to headquarters and its use had been curtailed."

FAA Aircraft Certification Service Mission Statement:

<http://www.faa.gov/avr/air/hq/mission.htm>

"Aviation Safety Begins With Safe Aircraft

The Aircraft Certification Service is responsible for the safety of civil aircraft. The inherent safety of an aircraft is a function of its design integrity and its manufacturing quality. It is the mission of the Aircraft Certification Service to promote safety by:

Prescribing safety standards governing the design, production quality, and airworthiness of civil aeronautical products;

Administering design, production quality, and finished product certification programs in compliance with the prescribed safety standards;

Monitoring safety performance, and acting to provide continued operational safety of aircraft;

Working in partnership with aviation safety authorities of other countries to continuously improve the safety of the international air transportation system and achieve international harmonization of aircraft certification standards and practices.

Our program priorities are:

ÊÊÊÊÊFIRST: Continued operational safety including surveillance.

ÊÊÊÊSECOND: Safety standards, policies, and procedures.
ÊÊÊÊTHIRD: Type, production, and airworthiness
certification."

Text of 1 May 98 letter from Congressman Farr:

"Dear Mr. Smith:

Thank you for contacting me recently regarding your ongoing interest in the forward cargo door of TWA flight 800. I appreciated hearing from you.

I am, of course, glad to help, and am therefore in touch with the appropriate government agency on your behalf. I will write to you again as soon as a response is available, but please let me know if there is anything further that I can do for you in the interim.

Sincerely,

Sam Farr
Member of Congress

Text of 12/19/86 email Senator McCain:

Dear Mr. Smith,

Thank you again for contacting me with your concerns regarding the potential hazards involving Boeing 747s.

As you know, I have passed the information you sent to Chris Paul and he has informed me of your findings. I have since forwarded the material you sent to the Commerce, Science and Transportation Committee for their review.

Again, thank you for contacting me. I am always glad to have the opportunity to be of assistance.

Sincerely,
John McCain
U.S. Senator
JM/jes

Excerpt of 4 Mar 98 letter from Senator John McCain to me: "I have received your letter regarding the forward cargo door of TWA Flight 800, and your interest in meeting with someone at the National Transportation Safety Board (NTSB) relating your concerns.

I have contacted the NTSB on your behalf, about your concerns. I have asked for a prompt response to be sent directly to you."

FAA and NTSB and manufacturers are taking efforts to inspect fuel tank wiring on all airliners. Cargo door wiring on Boeing 747s should also be inspected. A wiring caused inadvertent opening of the forward cargo door of TWA 800 in flight should also be investigated.

It's prudent.

1. Check known faulty Poly X wiring in cargo door areas of early 747s for chafed to bare wires.
2. Figure out explanation of red paint smears, outward peeled skin, and petal bulge at aft midspan latch of forward cargo door of TWA 800.
3. Attempt to locate missing eighty percent of forward cargo door by either finding it in Orange Zone, Calverton hangar, or from the bottom of the ocean.

4. Meet face to face with a citizen, as the suggestion of Senator McCain, to discuss and consider real evidence as discovered in research of NTSB and FAA documents regarding wiring/cargo door explanation for TWA 800.

Following the example of Congressman Farr of open discussion of TWA 800 and the inclusion of relevant correspondence in letters, I have put all your correspondence to me on my web site www.corazon.com. All emails and scanned letters are seen at [<http://www.corazon.com/correspondence.html>](http://www.corazon.com/correspondence.html)

Democracy and the internet in action.

Regards,

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From: John Barry Smith <barry@corazon.com>
Date: June 5, 1998 9:41:23 AM PDT
To: Ronald_Wojnar@admin.tc.faa.gov
Subject: **Inspect cargo door wiring too.**

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Dear Mr. Wojnar and Official Persons who feel responsibility in
explaining TWA 800, 5 June 1998

There are cracked wires to the bare conductors in the cargo door area of TWA 800 as described by NTSB Systems Exhibit 9A, page 116:

"Some wires found in the section of W480 from forward of station 570 and identified as BMS13-42A had numerous cracks in the insulation. Most of the cracks in this bundle were found to expose the core conductor when examined by microscope. Only within five feet of the aft end of the W480 bundle from station 570-900 were insulation cracks found." Page 47 also states, "Evidence of arcing or short circuiting was found in the fuselage of N93119, (TWA 800) in addition to what was found in the wiring from the raceway below the left cabin floor and near the forward wing spar.

That's a fact and NTSB told me so. To be prudent, determine if the forward cargo door unlatch motor power on wire is among those cracked to the bare wires located by NTSB in TWA 800. NTSB did it before with UAL 811 in AAR 92/02 where a bare chafed wire turned on the forward cargo door unlatch motor. There is a precedent of bare wires in that area causing a fatal accident in a high time Boeing 747. It would be prudent to rule out that event happening again by checking the bare wires discovered by NTSB in TWA 800 wreckage in cargo door area to see if it is the door unlatch motor wire.

True power always wants to know if it may be wrong and

immediately take steps to confirm or rebut. True power knows error is weakness and will immediately correct the error to become strong again. Fake power ignores any evidence of error. It is weak and will fail. NTSB discovers the cause and makes recommendations to FAA. FAA orders the manufacturer to fix the problem. The problem is old cracked wiring. I come to elected officials, NTSB, and FAA officials because only you have to power to persuade the manufacturer to replace defective, old, and chafed wiring if necessary and it is necessary.

Very many, very red, and very large red paint smears exist on TWA 800 above the forward cargo door area on top of normal white paint in between the passenger windows. That's a fact and NTSB showed it to me by presenting the TWA 800 reconstruction photograph in which the many, large, red paint smears are clearly evident. <<http://www.corazon.com/TWA800hullrupture.html>> A precedent has been set of paint transfer marks in that area by UAL 811 as described in NTSB AAR 90/01 and AAR 92/02. <<http://www.corazon.com/811page42paintondoor.html>>

It would be prudent to confirm or rule out the red paint smears indicating an open cargo door in flight or not. One way would be to examine the cargo door hinge for overtravel impression damage, another precedent set by UAL 811 in NTSB in AAR 92/02. <<http://www.corazon.com/811reportcontentpage.html>>

There is outward peeled skin high up on the right side of TWA 800, also more outward shattered skin on the belly, and most of all, there is outward peeled skin forward of the wing on the right side, centered around the outward petal shaped bulge at the aft midspan latch of the forward cargo door. That's a fact and I know that because NTSB presented the photograph of TWA 800

wreckage reconstruction and described the outward peeled skin in NTSB exhibits.

Main deck floor beams above the forward cargo hold were broken downward in UAL 811 during the explosive decompression. That also happened in TWA 800. An explanation was offered by Mr. James Wildey of NTSB: Docket No. SA-516, Exhibit No. 18A, Sequencing Study, page 20, "The initial opening of the fuselage lower lobe (e.g. LF6A) would have the expected result of rapid depressurization accompanied by collapse of the main deck floor for some distance forward of STA 1000. The red area recovery of interior components as far forward as STA 600 would not be inconsistent with this floor collapse and associated structural breakup."

The red paint smears and the outward peeled skin strongly indicate the forward cargo door opened in flight, an opinion shortly held by Mr. Fred Schalekamp of FAA:

30 Jan 1998 letter from Neil Schalekamp, FAA, to JBS: "The paint markings and structural deformation that you cite, do indicate an outward explosion, generally accepted to be caused by the explosion of the CWT."

That's a fact and NTSB and FAA told me so in a letter and shown in sooting diagrams in exhibits. To not see the very red, very many, and very large unusual paint smears, and to not see the outward, not inward, peeled skin is to defy reality. The red smears, downward floor beams, and the outward skin are there and strongly indicate cargo door opened in flight based on physics and precedent.

The forward cargo door did open in flight, but not by the

overpressure of a center tank explosion because the cargo door pieces were unsooted, just like the forward pieces of the center fuel tank.

What else could cause the forward cargo door to open inflight? There is a precedent, UAL 811, as described in NTSB AAR 90/01 and AAR 92/02 in which a high time Boeing 747 suffered a hull rupture in flight forward of the wing which left a sudden loud sound on the CVR and an abrupt power cut to the FDR, paint transfer marks in cargo door area, and outward peeled skin, all caused by chafed to bare wire conductor in the cargo door area. <<http://www.corazon.com/811reportcontentpage.html>>

TWA 800 had a hull rupture forward of the wing which left a sudden loud sound on the CVR and an abrupt power cut to the FDR, paint transfer marks in cargo door area, outward peeled skin, and chafed to bare wire conductor discovered in cargo door area.

That is enough of a match to justify inspection of cargo door wiring in early Boeing 747s irrespective of other corroborative evidence of faulty Poly-X wiring discovered in Boeing airliners under NTSB and FAA orders.

Bare shorted wires have also caused fires in forward cargo holds of Boeing 747s before.

NTSB Exhibit 9C, Attachments to the Systems Group Factual Report page 44, 45, 46. "1996, burning smell in forward cargo compartment, found damaged wiring shorted to ground, charring found.

B. Oct 12, 1996, Wire bundle arcing and resultant fire at aft bulkhead of forward lower lobe cargo hold on 747-200

freighter."

It would be prudent to inspect cargo door wiring in the forward cargo hold of early 747s since that wiring has been shown to be faulty in general, early Boeing airliner wiring has been shown to be faulty in particular, UAL 811, and faulty cargo door area wiring has shown up in the same area on a new fatal accident, TWA 800.

A solution to the mystery of the ignition source of the fireball and center tank fire may well be a fodded and on fire engine number 3 igniting disintegrating wing fuel tanks thousands of feet lower and seconds later than the initial event.

TWA 800 engine number three shows foreign object damage, fire, and uncontainment in the NTSB powerplant report and the structures report.

Exhibit 8A, page 11, paragraph 3, discussing results of engine 3 disassembly, "Of the 46 fan blades in the fan rotor, 21 blades with complete or partial airfoils and 6 root sections were recovered. All of the fan blades had sooting on the convex airfoil surfaces. Most of the full length airfoils were bent rearward and the tips outboard of the outer midspan shroud were bent forward slightly. About half of the fan blades had impact damage to the leading and trailing edges. Almost all of the impact damage to the airfoils could be matched to contact with the midspan shroud on an adjacent blade. One full length blade had four soft body impacts along the leading edge and a partial airfoil had a soft body impact, which had some streaking extending rearward."

Exhibit No. 7A, Structures Group Report, page 33: "5.1 Horizontal Stabilizer, "Some of the items found in the horizontal

stabilizer are sections of seat track, a stator blade from turbine section, and glitter." On 5.1.1 Right Horizontal Stabilizer, page 34, "An engine stator blade from turbine section penetrated the upper honeycomb surface near the outboard trailing edge.

A prudent action would be to rule in or rule out the precedent of UAL 811 applied to TWA 800. A risky action is to ignore many large red paint smears, downward broken floor beams, and much outward peeled skin and their clear implication of cargo door open in flight. The red paint smears will not fade away; they will always be many, large, and red in the photographs on the NTSB CD-ROM. The floorbeams will always be broken in Exhibit 18A. The outward peeled skin will always be shattered outward on the belly, the upper fuselage, and around the aft midspan latch of the forward cargo door in the photographs of TWA 800 on the NTSB CD-ROM. Engine number three will always be sooted, blades missing, and have soft body impacts as shown by NTSB Exhibit 8A.

A more prudent action is to ground all Boeing 747s with Poly-X wiring for total inspections and replacement of that wiring. A total wiring inspection casts the net wider to catch faulty wiring. By inspecting all the wiring to include the fuel tank wiring, the yaw damper wiring, and the known previously faulty cargo door power wiring, all wiring can all be cleared as intact and pose no danger of shorting on, as has happened before fatally.

I understand the difficulty and turmoil the grounding would cause. Boeing would have much work to rewire the planes if necessary. If not feasible, new airliners would have to be built and the grounded ones used for parts, similar to what the Navy has done with their Poly-X F-14 Tomcats.

Am I a traitor? Does my belief of a wiring cargo door fault for TWA 800 and other early 747s hurt my country? Specifically, the Northwest quadrant which has an economy derived from the design, manufacture, and selling of 747s.

Here's my answer to myself on that one. No, I am not a traitor, I am a patriot. Here's why.

Seattle is successful and must remain so. Seattle is successful because nearby is built successful airplanes. Successful airplanes are the best selling ones. The best selling ones are the most made ones. The most made ones are the ones that make the most money. The ones that make the most money are the ones that fly the most. The ones that fly the most are the safest ones. The safest airplane is the most successful airplane. Period.

So, to present an explanation for an unsafe event, the crash of TWA 800, an early Boeing 747, is a good thing to do, even if proven wrong later. The goal is to make safe airplanes which will fly the the most and be sold the most and be made the most, thereby keeping our country's economy thriving.

My personal goal is to prevent death by preventing airplane crashes by preventing hull ruptures in flight on early 747s by preventing cracked bare wires shorting on the door unlatch motor thereby allowing the aft midspan latch to rupture and allow the middle of the forward cargo door to burst open causing a large explosive decompression which allows the 300 knot slipstream to tear nose off. This inner goal was determined by the selfless action of my pilot who saved my life in a sudden night fiery fatal jet plane crash years ago and which I have never forgotten.

It is the duty of aviation professionals to strive to explain TWA

800. And yet, this loyal citizen is rebuffed when presenting to NTSB NTSB derived evidence of a supplemental explanation to TWA 800. Why is that?

If I can't have a real conversation with NTSB or FAA officials regarding TWA 800, here is an imaginary one that sums up the past two years.

JBS: "Hello, NTSB, I'm answering your plea for public assistance regarding the cause of TWA 800."

NTSB: "What do you want?"

"I believe the initial event is moisture meeting chafed to bare wire and shorting on cargo door motor to unlatch position causing rupture at aft midspan latch of forward cargo door in flight leading to thirty by forty foot hole of explosive decompression which allows 300 knot slipstream to tear nose off which leads to disintegrating aft fuselage, wings, and tail which ignite into fireball when fiery foddred engine number three meets vaporizing fuel thousands of feet lower and seconds later."

"No."

"There are many similarities to an event that happened before, UAL 811, and TWA 800."

"You're crazy. Who are you?"

"Commercial licensed pilot, instrument rated, 1000 PIC hours, Navy jet navigator, aircraft owner, FAA Part 135 certificate holder, avionics technician, and survivor of sudden night fiery fatal jet airplane crash talking about a sudden night fiery fatal jet

airplane crash."

"Go away."

"The evidence of red paint smears, outward peeled skin, and petal bulge at aft midspan latch support conclusion forward cargo door opened in flight, just like UAL 811."

"I'm ignoring you and will not respond to further comments."

"You are safety aviation officials who say you turn over every stone, who check out every explanation, who really want to know what happened to TWA 800, regardless of cause. Listen to me; talk to me."

"You are a wacky guy on the internet, you are bothering the real investigators and getting in the way, you have been told over and over again in great detail that you are wrong and we are right, you don't have your basic facts straight about the door, you should check with us before you say your nonsense to others, and you are a flake and we don't like you."

"Maybe, but so what? The messenger's style is independent of the truth of his content. Moisture and shorted wiring caused the crash of TWA 800. Why do you not ask questions to me, as real investigators do, as I ask you?"

"We don't ask questions of citizens that we don't already know the answers to, we just make statements such as this: No, you're wrong, you're crazy, go away, we will not respond, goodbye, and thank you your for your interest in aviation safety."

Below is real:

10 March 1998 letter of John B. Drake of NTSB to JBS :

"We consider our correspondence on this subject to be complete. Should you continue to reiterate your position on this issue in future correspondence, you should expect no further response from the Safety Board."

30 Jan 1998 letter of Neil Schalekamp of FAA to JBS :

"Please note that this office will no longer be responding to your further inquiries about these same concerns, including your February 6 and February 9 letters that I just received."

17 March 1998 letter of Jim Hall of NTSB to JBS :

"We do not believe a meeting is necessary to further discuss this issue."

Summarized conversation between me and ordinary citizens who visit my web site:

Visitor: "What does NTSB and FAA say when you tell them about wiring/cargo door explanation for TWA 800?"

JBS: "They write that all cargo doors were all latched, all locked, and all intact at water impact, they have told me that over and over again and they will not respond to any further inquiries from me."

"What do they say about the red paint smears?"

"They pretend they don't exist except one FAA official who did but changed his mind and now pretends they don't exist."

"What do they say about the outward peeled skin?"

"They say it was caused by inward water impact."

"What do they say about the petal outward bulge at aft midspan latch of forward cargo door?"

"They pretend it does not exist except one FAA official who did but changed his mind and now pretends it doesn't exist."

"What do they say about the missing manual locking handle, the two overpressure relief doors, the viewing ports, the torque tubes, the two pull-in hooks, the midspan latches, and the other eighty percent of forward cargo door skin?"

"They say they are unimportant."

"What do they say about the Orange Zone pieces, the possible mixup in cargo door sills, the unsooted pieces of center fuel tank, the thirty by forty foot shattered skin zone forward of the wing on the right side, the chafed to bare wire discovery in cargo door area, and the many significant matches to UAL 811?"

"Nothing. They say nothing. Well, actually they told me to go away, and stay away."

"Have you gone to your congressman?"

"Yes, Sam Farr, and he has asked many time to NTSB and FAA for information."

"What happened?"

"They wrote to him that the door was all latched, all locked, all intact at water impact, they have told me that many times, and

thanked him for his interest in aviation safety."

"Did you contact any other elected politician?"

"Yes, Senator John McCain, jet plane crash survivor and Chairman of the Committee that oversees NTSB."

"What happened?"

"He reviewed my data and submitted it to his committee for review. He asked me to wait until the hearings. He asked the NTSB to meet with me to related my concerns about the forward cargo door of TWA 800."

"What happened?"

"The Committee on Commerce, Science and Transportation still has the matter under review, I waited until the hearings, I went to the hearings. The suggested meeting by Senator McCain between NTSB officials and me was refused by Chairman Hall of NTSB saying there was sufficient evidence to rule out the cargo door opening in flight, he has told me that many times in great detail and a meeting was not necessary."

"Have you tried the press?"

"Yes, I've had several radio and TV interviews. Some get airplay and some don't."

"Have you tried Boeing?"

"Yes, Boeing and McDonnell Douglas both contacted before the merger. The two safety officers were polite and referred me to

NTSB. Boeing engineers referred me to the Public Relations office of Boeing. The Boeing Public Relations office referred me to the NTSB. NTSB told me to go away."

"Have you tried the internet?"

Yes, I have a 1200 page, 100 meg website which has been online since July, 1996 and visited about 70000 times, according to page counters."

"What are you doing now?"

"I'm continuing to write to appropriate officials presenting the evidence and trusting it will speak for itself. It's not going to go away."

"Have you tried calling them?"

"No, my wife and daughter were approached in my home by two armed federal agents within twenty four hours of me posting an email to Senator McCain about Air Force One crashing. Calling on the telephone out of the blue would be much too aggressive. Prior to the Secret Service interrogation, phone calls usually ended up with the official shouting and hanging up. So now I continue to write non-threatening, polite, full of facts letters and emails."

"Are you saying government public safety aviation officials in writing refuse to adequately respond to your request for a meeting to discuss facts, evidence, documents, photos, which clearly indicate a forward cargo door opening in flight on TWA 800?"

"Yes."

"They will not call you, write to you, or respond to polite letters with sources listed?"

"Nope."

"Are these the same guys that say safety is priority number one, they will turn over every stone, never give up to get a full explanation, and respond to every public inquiry?"

"Yup."

"Who are you? A wacky guy on the 'net?"

"Maybe, although I use government AARs for sources, and I'm also a survivor of a sudden night fiery fatal jet airplane crash, a commercial licensed pilot, instrument rated, FAA Part 135 certificate holder, light aircraft owner, jet carrier navigator, avionics technician including radar operator, and a retired military officer in a converted garage with a computer and a phone line."

"And you've tried for almost two years to meet face to face with the public officials involved with TWA 800?"

"Yes."

What happened?

"Nothing yet. But I'm still trying. It's only been two years for TWA 800. The investigation is open and active. The evidence is not changing or going away."

And I am still trying:

Real facts presented by NTSB about TWA 800 in exhibits, photographs, text, drawings, and testimony:

1. right horizontal stab has red paint smear
2. stator blade in right horizontal stab behind engine number 3
3. inward crush top of cargo door
4. top of cargo door attached to hinge
5. petal shape of rupture area around aft midspan latch
6. missing pieces of forward cargo door include locking handle, latching pins, overpressure relief doors, midspan latches
7. rectangle visible of explosive decompression zone of outward peeled skin on right side forward of the wing on right side
8. downward movement of floor beams near cargo door
9. hoop stresses found
10. CVR sudden loud sound
11. FDR abrupt power cut
12. missing turbine blades in engine number 3.
13. soft body impacts on blades in engine number 3.
14. outward peeled skin near top of nose, under belly, and in cargo door area.
15. red paint smears above cargo door on white paint
16. soot on most blades of engine 3.
17. starboard side more damaged than port side
18. intact R2 door near shattered cargo door.
19. poly x is known to be susceptible to chafing and present
20. section 41 is known to be weak
21. history of cargo door openings in past in various airliners
22. EPR problems on aircraft before or during fatal flight.
23. fires in forward cargo hold in the past on Boeing 747s.
24. vertical tears in fuselage skin forward of the wing on the right

side

25. singe marks on right side of fuselage show burnt skin, then abruptly at tear line there are no singe marks
26. red paint rubbed off revealing white paint underneath on skin above cargo door area
27. first pieces off plane came from forward cargo hold just forward of the wing
28. at least nine missing never recovered bodies, just fragments
29. initially thought to be a bomb
30. wreckage debris shows cargo door shattered in many pieces
31. aft portion of forward door which includes aft midspan latch and locking handle missing from recovery effort
32. no soot on maintenance hatch
33. no soot on front spar of center wing tank
34. no burned bodies forward of the wing and very few burned at all
35. aft cargo door sill, latches, and locks recovered
36. forward cargo door sill, latches, and locks not recorded in data base
37. no orange zone pieces recorded in database
38. no orange zone discussion in public record other than identification
39. chafed to bare wires found in cargo door area
40. wiring defects found on Boeing airliners
41. water observed pouring out of forward cargo hold of a Boeing airliner, cargo holds have bilges.
42. no soot on keel beam forward of the wing
43. compression fractures right side forward of the wing
44. tension fractures left side forward of the wing
45. seats in the rows in the explosive shatter zone above cargo door are in red zone and not sooted
46. aft cargo door sill is sooted
47. many witnesses said they saw downward streak that was red-

orange

48. NTSB official said possibility of forward door popping open was intriguing.

49. FAA official said, then recanted, that paint smears and structural deformation indicated outward explosion.

50. initial event time was 20:31:12 at 13700 on 17 July 1996 eight miles off coast of Long Island.

Reasonable conclusions derived from facts above:

1. water in forward cargo bay.
2. chafed bare wire touched by water.
3. electrical short occurs.
4. forward door motor turns on to unlatch position.
5. aft midspan latch of forward cargo door partially unlatches.
6. pressurized hull ruptures at aft midspan latch.
7. cargo door tears into pieces, some pieces stay with nose, some don't.
8. shiny metal pieces spin away reflecting evening sunlight and perceived as red-orange streak to observers far away.
9. explosive decompression occurs shattering cargo door area forward of the wing on right side exposing twenty foot by forty foot hole in nose producing sudden loud sound on CVR.
10. 300 knots slipstream tears weakened nose off.
11. ejected debris is ingested by starboard engines which catch fire.
12. wing and wing fuel tanks; engines, tail, and fuselage fall and disintegrate on way down.
13. fiery starboard engine ignites fuel vapor clouds from disintegrating tanks, including center tank.
14. fireball observed on the ground.
15. water impact of wreckage, cargo bay material first to hit water.

I may not be alone: "NTSB investigators have suggested unofficially that the streaks the pilots saw could have been light reflections from the skin of the aircraft, tongues of flame from the airliner or the forward door of the aircraft popping open, a possibility that still intrigues investigators, the second official said." AW&ST 3/10/97

Regarding the Aviation Week and Space Technology article quoted above, the following is supplied: <<http://www.corazon.com/800avweekintrigue.html>>

Monica Warnock
Washington Bureau
Aviation Week & Space Technology

Dear Ms. Monica Warnock,

21 May 1998

You wrote to me:> You must remove these
articles and any other Aviation Week copyrighted material from
your
website immediately, or we will consider legal action.

I replied>Consider it done. And not because you threatened me,
but because you may be right."

Ms. Warnock, I now believe you to be wrong.

I'm putting the 10 March 97 Aviation Week and Space
Technology article in dispute back up on my web site at
www.corazon.com at one minute after midnight on 1 June 1998.

Here's why: The content is everything and the content of the
article is very, very important. I agree with the content. AvWeek

agrees with content. The public officials quoted in your article agree with the content. The content quotes a public NTSB official who says that the cause of TWA 800 may have been forward door popping open. It also said the streak seen before TWA 800 crash may have been reflection off the skin of aircraft. I agree with that. It is very important. Let us call it the door pop streak article.

Ms. Warnock, you have done your job well by searching the web for Avweek articles. You found one. You then followed orders and directed it be removed. It was removed. The problem is now above your level of authority. So I direct my comments to your boss: Mary Francis Koerner, the Manager of Bureaus.

Will you please see that this letter goes to her?

Dear Ms. Koerner, I am told several things:

1. Get the door pop streak article off my web site.
2. I should ask permission to put AvWeek articles on web site.
3. Permission will be denied.

I asked permission. It was denied. You were right.

You have done all you can do. The problem is now above your level of authority. I assume you would refer me to 'The Lawyers.' I direct my statements to the lawyers.

Will you please see that this letter goes to them?

Dear AvWeek lawyers:

Ah, copyright, don't you love it?

My name is John Barry Smith. I have a 1200 page, 100 meg website at www.corazon.com mainly devoted to high time Boeing 747 accidents in which the hull ruptures in flight forward of the wing. It contains mostly government scanned in aviation accident reports, AARs, and occasionally copyrighted material from media, such as yours.

Please note, let us stipulate:

1. My site is non profit. I have not made a penny on anything related to that website. In fact, much of my money has gone out, nothing has come in, a problem as my wife will attest.
2. It is research oriented with airplane crash related comments, investigations, reports, pictures, and text.
3. I give full and clear credit to the sources I quote. AvWeek was clearly stated as the author of the door pop streak 10 Mar 97 article in question. In fact, that is very important, that's why I quote clearly and give credit to Aviation Week by scanning in the entire article instead of paraphrasing, which would be quicker to download but not have the authority of the best aviation magazine on the planet, Aviation Week and Space Technology. And I omitted the advertising on the pages, too.

Now for argument:

1. I stole nothing from you.
2. It's fair use.
3. I can publish that article without your permission if certain conditions are met, and are: Non profit, small parts used, and credit given.

"Fair use and implied licenses.

Fair use is a legal license to use others' work, whether they approve or not. It constitutes one of the most important, and least clear cut, limits to copyright. The basic problem is that words like "fair" or "reasonable" cannot be defined with the precision non-lawyers (or many law students) would like. Until 20 years ago, fair use did not appear in U.S. legislation, but it now occupies about half of the copyright statute. In the U.S., partial or limited reproduction of another's work may be permitted under this doctrine.

On the one hand, fair use offers an especially liberal defense to uses that advance public interests such as education or scholarship. On the other hand, it is unlikely to be available if one fails to credit the original artist or author. It is not apt to be available to those who profit or interfere with original artists' or authors' ability to derive income from their works."

" 1998 Franklin Pierce Law Center. All rights reserved." (I hope I have fair use to quote the above.)

I believe I advance the public interest in aviation safety, I credit the original speaker, the reporter, and the magazine, and I do not profit from it. I have fair use.

Conclusion: It will take a Judge to order me to remove the 10 March 97 AvWeek article from my website after it is put back up on 1 June 1998 or to permit me to continue to post it.

So, Lawyers, the problem is above your level of authority. I turn my attention to the Managing Editor:

Will you please see that this letter goes to him?

Dear Managing Editor,

What's the beef? You and your reporter, David Fulghum, have done a fine piece of work. You have pinpointed the cause of a mystery crash now under current investigation, TWA 800. It was the door popping open in flight. The NTSB official you quoted was correct. The streak was the skin spinning away reflecting evening red orange sunlight to observers below. The official was correct and he was quoted correctly by your aviation reporter. The implications of the truth you printed are profound. The cause now leads to chafed wiring shorting on cargo door unlatch motor and allowing rupture at aft midspan latch of forward cargo door which opened in flight. Exactly as has happened before with UAL 811 as described in NTSB AAR 92/02. The 300 knot slipstream tore the nose off TWA 800 because the explosive decompression shatter zone was much bigger on TWA 800 than on UAL 811, as shown by NTSB reconstruction photo of TWA 800 wreckage.

I encourage you to do a follow up story on the wiring/cargo door explanation as described on the website in question, www.corazon.com. Mr. Fulghum and Mr. McKenna are familiar with the details of TWA 800 and wiring cargo door explanation.

Attached:

1. Correspondence between AvWeek Ms. Warnock and me.
2. Three .jpgs of the images published on website of 10 March door pop streak article.
3. Recent email to Government officials regarding this matter. Please note accurate numbers and sources given.

So, I must publish your copyrighted material, the 10 March 97 article on my website at URL <http://www.corazon.com/800avweekintrigue.html> on June 1, 1998.

I'm at email barry@corazon.com or 408 659 3552 or 551 Country Club Drive, Carmel Valley, CA 93924.

I encourage discussion regarding this matter. It's a hot story even though almost two years old. Wiring is the main culprit, not the door, not the center tank. NSTB is in the right church but the wrong pew. Wiring is the problem and it's in places other than the fuel tank tubes. It's in the cargo door unlatching motor circuits.

Cheers,
John Barry Smith

From: monica_warnock@mcgraw-hill.com
Date: Thu, 14 May 98 10:24:37 -0500
To: <barry@corazon.com>
Subject: Aviation Week
Mime-Version: 1.0

To: barry@corazon.com

Dear Sir,

Your website "<http://www.corazon.com/800avweekintrigue.html>" contains several scanned-in pictures of the Aviation Week & Space Technology article "ANG Pilot: TWA Hit By Object," March 10, 1997. Our records do not show that you requested permission to use these articles

on
your website.

Aviation Week & Space Technology is covered by copyright law which states that permission must be granted before our material is used.

Your website is in violation of this law. You must remove these articles and any other Aviation Week copyrighted material from your website immediately, or we will consider legal action.

Sincerely,
Monica Warnock
Washington Bureau
Aviation Week & Space Technology
monica_warnock@mcgraw-hill.com
(202)383-2314

To: monica_warnock@mcgraw-hill.com
From: John Barry Smith <barry@corazon.com>
Subject: Request permission to present article on website.
Cc:
Bcc:
X-Attachments:

To: barry@corazon.com

Dear Sir,

Your website "<http://www.corazon.com/800avweekintrigue.html>" contains

several scanned-in pictures of the Aviation Week & Space
Technology
article "ANG Pilot: TWA Hit By Object," March 10, 1997.
Our records
do not show that you requested permission to use these articles
on
your website.

Dear Madam, 14 May 1998

A thousand pardons. I immediately request permission to reprint
Aviation Week & Space Technology article "ANG Pilot: TWA
Hit By Object," March 10, 1997 on my website,
www.corazon.com. (Corazon is my wife's name.)

The reason I scanned in exact image instead of paraphrasing text
was to be precise and show source, very important for a research
paper.

Should my request be denied, I shall of course, immediately
comply with your request and remove the article from my web
site.

AWST is a fine magazine and one which I have read diligently
for over thirty years. I have watched AWST's web site mature as
time goes on. <http://awgnet.com/awgnews.htm> is on my
bookmarks list and I check it first thing every morning. I'm in
your database of subscribers. Keep up the good work!

Regarding this life and death matter of a sudden night fiery fatal
jet plane crash about which I have published a 1200 page website
presenting my shorted wiring opening forward cargo door in
flight explanation to the general public in a non profit effort:

1. You surely understand I can not alter my website just on an unsolicited email out of the blue from:

Monica Warnock
Washington Bureau
Aviation Week & Space Technology
monica_warnock@mcgraw-hill.com
(202)383-2314

The absence of title indicates your request may be personal in nature and not official. Please confirm your official title which corresponds to your request that I delete an article from AWST from my site. You may be spoofing me and my asking for credentials is prudent and an established protocol.

2. Your response indicates an interest in the subject of TWA 800. Could you refer a reporter to me so I can present my wiring/cargo door explanation to him/her? I would appreciate the opinion of an aviation professional regarding my nine years of amateur research into hull ruptures of hour high time Boeing 747s. Your reporter, David Fuhlgum, in the referenced article, was able to elicit important material from NTSB officials regarding TWA 800; the forward door may have popped open in flight, and the streak may have been pieces of the aircraft reflecting evening sun. I am able to amplify those observations by an anonymous NTSB 'second official' using NTSB documents and photographs. It's a good story and one worthy of AWST's interest. FAA, NSTB, and Boeing are all saying wiring in older Boeing airliners is fraying and shorting causing problems, and so am I, long before the officials came to the realization.

3. >or we will consider legal action.

Why, O why did you threaten me? Your first contact, out of the blue, and it contains a threat of 'legal action'. What does that mean? I don't think it means a good thing. It just sets a wrong tone. Is politeness gone from even presentations about a plane crash?

4. >Your website is in violation of this law.

Whoa! You are calling me a criminal? Just like that? I'm breaking the law? I'm a lawbreaker? This is very disturbing. Maybe that's the way AWST works with the big boys who only respond to threats, not to polite requests with explanation attached. I'm not a big boy. I'm a retired military officer working out of a converted garage in California. I don't like anybody telling me I'm breaking the law unless it's a policeman, judge, or jury. And I still don't like it, but I obey. I really can't tell my friends that I changed my cherished web site because of a strange unauthenticated email from some babe named Monica at McGraw-Hill, now can I? I mean, am I a man or a mouse?

See, a threat always turns a pleasant conversation into stressful one. Squeek, squeek.

To review:

1. I respectfully request permission to display scanned in images of Aviation Week & Space Technology article "ANG Pilot: TWA Hit By Object," March 10, 1997 on my personal website, www.corazon.com.

2. Please to show credentials, madam.

4. Refer reporter to me regarding a subject that you feel strongly enough to want to affect with correspondence, TWA 800.

5. Keep up the good work covering aviation subjects around the world.

Cheers,

John Barry Smith
551 Country Club Drive,
Carmel Valley, CA 93924
408 659 3552
barry@corazon.com
www.corazon.com

From: monica_warnock@mcgraw-hill.com
Date: Thu, 14 May 98 13:48:41 -0500
To: <barry@corazon.com>
Subject: Re: Request permission to present article on website.
Mime-Version: 1.0

Dear Mr. Barry,

I am an editorial assistant in the Washington Bureau of Aviation Week & Space Technology. I work for Mary Francis Koerner. She is the Manager of Bureaus and she is the official contact for Reprints & Permission. We will periodically search the web for Aviation Week on outside websites and that is what brought me to your site.

Unfortunately, at present, Aviation Week & Space Technology does not

allow its material to be reprinted on any websites other than our own.

We appreciate your interest in Aviation Week & Space Technology;

however, we must ask that you remove the article from your website, as

you have indicated you are willing to do.

My interest in this regard is not related to TWA800 but protecting the

magazine in general. Many people are not aware of the rules regarding

copyright on the internet. You may reference the section "Photocopy

and Rights & Permission" on the Contact Us page of Aviation Week if

you have any future requests for permission.

James McKenna would be the best editor to send your correspondence to

regarding TWA 800. He is located in the Washington bureau: 1200 G

Street, NW Suite 922, Washington, DC 20005. (202) 383-2332.

I will mail you a hard copy of this letter on Aviation Week & Space

Technology letterhead to satisfy any concerns you might have about my

identity. Thank you for your understanding.

Monica Warnock
Editorial Assistant, Washington Bureau
Aviation Week & Space Technology

To: monica_warnock@mcgraw-hill.com
From: John Barry Smith <barry@corazon.com>
Subject: Re: Request permission to present article on website.
Cc:
Bcc:
X-Attachments:

Dear Mr. Barry,

I am an editorial assistant in the Washington Bureau of
Aviation Week
& Space Technology. I work for Mary Francis Koerner. She is
the
Manager of Bureaus and she is the official contact for Reprints
&
Permission. We will periodically search the web for Aviation
Week on
outside websites and that is what brought me to your site.

Dear Ms. Monica,

Thank you for your prompt reply. I am saddened by the denial to
present the AWST article on my web site. I shall search through
it and delete it. Do I need permission to post your email in its
place to explain why the article was deleted? I should explain
why the article was removed to squelch any conspiracy coverup
nonsense that pervades this TWA 800 investigation.

Unfortunately, at present, Aviation Week & Space Technology does not allow its material to be reprinted on any websites other than our own.

So sad.

We appreciate your interest in Aviation Week & Space Technology; however, we must ask that you remove the article from your website, as you have indicated you are willing to do.

As soon as I am finished with this upcoming TV interview about wiring/cargo door explanation, I will. The TV station is KOMO-TV, Channel 4, ABC, in Seattle Washington and the arrive within the hour. I'm preparing for it so am unable now to find page, delete, change links, upload it to server right now. But how long to I have? Is 48 hours OK?

My interest in this regard is not related to TWA800 but protecting the magazine in general. Many people are not aware of the rules regarding copyright on the internet. You may reference the section "Photocopy and Rights & Permission" on the Contact Us page of Aviation Week if you have any future requests for permission.

Protecting the magazine? Well, OK, if you say so. I feel that quoting AWST in a non profit website about aviation safety helps AWST, but what do I know.

James McKenna would be the best editor to send your correspondence to regarding TWA 800. He is located in the Washington bureau: 1200 G Street, NW Suite 922, Washington, DC 20005. (202) 383-2332.

Thank you very much, ma'm, and I shall. I shall say you referred me, is that OK?

I will mail you a hard copy of this letter on Aviation Week & Space Technology letterhead to satisfy any concerns you might have about my identity. Thank you for your understanding.

Fine, can I put that on my website?

Let me get back to you on this. I will delete offending article and then send you URL of the new page so you can confirm I have cleansed the dirty deed.

Cheers,
John Barry Smith

Monica Warnock
Editorial Assistant, Washington Bureau
Aviation Week & Space Technology

From: monica_warnock@mcgraw-hill.com
Date: Thu, 14 May 98 14:47:54 -0500
To: <barry@corazon.com>

Subject: Re[2]: Request permission to present article on website.
Mime-Version: 1.0

Mr. Smith,

I will mail your letter today. When it arrives, you are welcome to

place it on your website. We understand that you are busy right now-

as long you are able to delete the pages by next Friday, that's fine

with us. The complete URL is

<<http://www.corazon.com/800avweekintrigue.html>>

If you do contact Mr. McKenna, you may tell him I referred you. Again,

thank you for your interest in Aviation Week.

Monica Warnock

Editorial Assistant, Washington Bureau

Aviation Week & Space Technology

To: monica_warnock@mcgraw-hill.com

From: John Barry Smith <barry@corazon.com>

Subject: Done

Cc:

Bcc:

X-Attachments:

Dear Ms. Warnock,

You must remove these

articles and any other Aviation Week copyrighted material from your

website immediately, or we will consider legal action.

Consider it done. And not because you threatened me, but because you may be right.

<http://www.corazon.com/800avweekintrigue.html>

is the URL which now has deleted article. Completed 6:57PM 14 May 97, nine hours after your request. The TV interview went swimmingly. In fact, the interviewer from KOMO TV ABC Seattle, asked that I send him an email of the article in question. He was interested to hear about your request.

I just want you to know that you have made an old man very very sad. I shall have to research the web, as is my wont, to find out for sure if the copyright laws exist to keep non profit websites from fairly using one article of a magazine to support an aviation safety hypothesis. I make no money from this site, on the contrary, it costs me money to keep it up. The site is 1200 pages deep with on one page assigned to article. The goal of the website is aviation safety, a common goal with Aviation Week. The officials quoted on the article are public officials whose comments are public.

It seems to me that permission should not be necessary for me to put your article on my website as long as I give credit to the author and make no money from it.

It seems to me that when permission was requested to put the article on my website, permission should have been granted.

You said 'protect your magazine,' as motive for requesting I delete the article. Protection from whom? Me? Aviation Week

needs protection from me? I am a retired guy working out of a converted garage with a computer and a modem. You have nothing to fear from me, we are on the same side, aviation safety.

Regardless, the excellent article by David Fulghum in the March 10, 1997 issue has been deleted at your request. Should it become apparent that I do have the fair right to use your article under conditions which I fulfill, then, pop! up it goes again. I shall let you know in advance so you may attempt to dissuade me if you wish. It just seems that a guy ought to be able to pull out old magazine articles to quote from when he's trying to persuade visitors of an aviation safety point. In case I'm wrong, and I'm never wrong, I have erred on the side of safety and complied with your request.

Cheers,
John Barry Smith

Mr. Smith,

I will mail your letter today. When it arrives, you are welcome to place it on your website. We understand that you are busy right now-

as long you are able to delete the pages by next Friday, that's fine

with us. The complete URL is

<<http://www.corazon.com/800avweekintrigue.html>>

If you do contact Mr. McKenna, you may tell him I referred you. Again,

thank you for your interest in Aviation Week.

Monica Warnock

Editorial Assistant, Washington Bureau
Aviation Week & Space Technology

DAVID A. FULGHUM/WASHINGTON

Two New York Air National Guard pilots, with the best view of the crash of TWA Flight 800 last July, are disagreeing about what they saw immediately before destruction of the Boeing 747-131 jetliner.

One believes the airliner was struck by a fast-moving object coming from the east, while the other saw only a fiery trail from the west.

However, both believe a violent explosion ripped the aircraft apart, propelling some of its passengers high enough that they did not hit the water's surface until 3-4 min. after the initial explosion.

Maj. Frederick C. Meyer, pilot of an HH-60 helicopter from the ANG's 106th Rescue Wing, has just been freed from an FBI gag order preventing him from giving interviews about the 1996 disaster off Long Island, N.Y. The copilot, Capt. Christian Baur, remains under FBI restrictions not to speak about the accident. But two officials familiar with his testimony told Aviation Week & Space Technology in detail what he told investigators.

In the days immediately after the accident, before being ordered not to speak, Meyer discussed his initial impressions with news media (AW&ST July 29, 1996, p. 32). Last week, he chose Aviation Week as the first news organization to hear a detailed account of his recollections and his testimony to federal investigators.

Meyer and Baur were in one of the wing's two aircraft operating north of the crash site. The helicopter was operating over Long Island about 12 mi. north of the TWA crash site. Baur, the copilot, was at the controls practicing instrument approaches. The crew was awaiting darkness so they could begin training with night vision goggles.

The key point on which the two pilots disagree is whether a streak of light appeared from the opposite direction of the flight of TWA 800 (which was flying from west to east after takeoff from Kennedy Airport), a possible indication of an intercepting missile or some other object.

Meyer's attention was first called to the area of the sky where the accident occurred "by a streak of light moving from my right (west) to my left (east)," the same direction as the TWA flight, he said.

Baur's account differs on this point. According to the two officials who have heard both pilots' accounts, Baur, on the left side of the cockpit, saw a streak moving from left to right toward the approaching TWA aircraft before the initial explosion.

"Almost due south [of the helicopter], there was a hard white light, like burning pyrotechnics, in level flight," Baur told investigators from the National Transportation Safety Board, FBI and a Federal anti-terrorist task force. "I was trying to figure out what it was. It was the wrong color for flares. It struck an object coming from the right and made it explode."

Baur's first impression was that there had been a midair collision, possibly between two light aircraft that tow banners along the beach.

"They had witnessed these aircraft come very close to each other at that time of day, and that's what they assumed," the second official said.

NTSB investigators have suggested unofficially that the streaks the pilots saw could have been light reflections from the skin of the aircraft, tongues of flame from the airliner or the forward door of the aircraft

popping open,
a possibility that still intrigues investigators, the second official said.

Meyer could not actually see the aircraft, but only the streak, and he admits that Baur, a younger man, has better eyesight. Moreover, Meyer adds,
"Whatever Chris saw on the left side I didn't see because he blocked my view." Baur disputes this, saying that the explosions and crash were virtually dead ahead of the aircraft.

The helicopter was executing a missed approach and was about halfway down Runway 24 at the Francis S. Gabreski International Airport at Westhampton Beach, N.Y. It had started a climbing left turn to the south when the accident occurred. The Sun had not yet set and the sky was still bright.

According to Meyer, the streak was about 15-20 deg. above his line of sight and perhaps 15 deg. left of the aircraft's centerline.

"I don't know if it was a missile that struck the airliner," Meyer said.

"Nothing at that moment said 'missile' to me. I spent a number of years in Vietnam and had seen missiles fired, some of them at me. But, that was

25-year-old missile technology, which left smoke trails. I understand today that they are made with smokeless rocket fuel and don't leave trails. What I saw was a streak of light, not a smoke trail."

The streak of light that Meyer saw made a very shallow, gradually descending arc. He points out that he never saw the actual airframe of the TWA 747 within the streak or subsequent explosions or smoke trails. It was virtually identical to the trajectory of a meteor, with only a slight curve. But unlike a meteor, the streak was red-orange in color, he said.

Meyer observed the descending streak for 3-5 sec. Then there was what Meyer describes as a hard, very sudden, yellowish-white explosion that looked identical to the detonation of an anti-aircraft shell. He did not suggest an anti-aircraft weapon was fired at TWA Flight 800, however.

"It left a cloud of smoke just like a flak explosion does," Meyer said. "One to two seconds later, there was a second, hard explosion almost pure white in color. The position of that explosion appeared to be slightly below and behind where one would have anticipated the streak of light to have gone. The trajectory at that point appeared to be slightly bent down and

slowed."

A new detail in Meyer's story was that almost immediately there was a third explosion and fireball. Meyer doesn't remember if there was an explosion and fireball or if the third explosion turned into the fireball.

"That was a soft explosion unlike the first two," Meyer said. "It began as a tiny point and it grew very rapidly into a huge fireball four times the diameter of the Sun. I was dumbstruck."

Baur also saw three explosions. But he contends that they started from left (east) and went to right (west). He said the explosions created a "huge waterfall of flame that cascaded down," the first official said. "The column of flame was being whipped around violently. First it was tumbling, and then it refined itself into a spiral. The explosions were all before the cascade of flame began."

In the helicopter, Baur spoke first, asking if it was pyrotechnics. ANG operations that night were to have included flares dropped by a HC-130 transport aircraft. The crew then called the Gabreski tower.

"We said we'd observed a fireball south of the field and we would

like
clearance to the beach to investigate," Meyer said. Baur actually
made the
call and reported a possible midair collision, the second official
involved
in the investigation said.

The crash time has been variously reported as being from 8:31 to
8:45 p.m.,
Meyer said. He believes the earlier time is more likely to be
correct
although he can't be sure.

Baur continued to fly the helicopter during the search while
Meyer functioned
as copilot and primary communicator. As they approached the
crash site, after
about 4 min. of flight, debris was still falling so they slowed to
avoid
being hit.

"As they got closer, within two or three miles, Baur could see the
aircraft
body, not tumbling, but in a vortex almost like inside a tornado,"
the second
official said.

Meyer made another revelation that was the result of long
reflection after
the accident.

"I was looking ahead . . . as we approached the crash site,"
Meyer said. "I

saw some debris at 1,200-1,300 ft. falling at terminal velocity and fuselage fragments tumbling at 40-50 mi. per hour. The things falling at high speed were bodies still strapped in their seats. That is logically inconsistent if they came from the same explosion at the same time. On reflection, I have concluded that the bodies must have been blown upward before they came down. That indicates a violent explosion."

On this point, the two pilots' accounts agree, the officials said.

"Debris was falling like snow," according to Baur's testimony. "Among the particulate there was metal and paper, some of it glowing. Through all of that, things would come racing through -- two or three high-speed objects like sacks of potatoes. I believed them to be bodies that had been blown upward."

The pilots' opinion differ from the conclusion of inspectors that all the passengers were in the fuselage when it ripped apart from aerodynamic forces.

In an attempt to debunk the most egregious coverup and conspiracy theories, Meyer and other ANG officials remain adamant that their unit was not part of any larger, undisclosed, multiservice operation. Operations the

night of the
crash were standard training flights to maintain currency with
night vision
goggles, rescue operations and in-air refueling.

The HH-60 flight was to be of about two hours' duration and
would not extend
more than 2 mi. off the Long Island southern coast. The HC-130
would drop
flares, rafts and a para-rescueman and later refuel the helicopter
in a
communications-out, lights-out operation.

"No other people of other services were on the base at the time,"
Meyer said.

Nor were there indications of the operations of drone aircraft,
another
theory that has surfaced as the possible cause of the crash. "No,
there would
have been some kind of notice."

AW&ST 3/10/97

Until the streak is adequately explained, the missile explanation
will always be possible. I say missile explanation will always be
could be, but wasn't. The evidence refutes every missile
explanation suggested event. Likewise for meteor and bomb
explanations, they will always be could have been, but weren't.

The center tank did catch fire and there was a fireball, so center
tank explanation will always be could have been and was, the
only issue is when.

The wiring/ cargo door explanation explains the streak, refutes the bomb and meteor, and supplements the center tank explanation.

The wiring/cargo door explanation for TWA 800 is the more correct, more complete explanation.

I urge that Boeing 747s with Poly-X wiring be grounded until wiring is checked in cargo door areas known to have been faulty in the past.

I again request to meet with NTSB officials to present my wiring/ cargo door explanation.

Sincerely,

John Barry Smith
551 Country Club Drive
Carmel Valley, CA 93924
408 659 3552
barry@corazon.com
www.corazon.com
Citizen: USA
Major: US Army Retired
Pilot: Commercial, instrument rated, FAA Part 135 certificate.
Navigator: RA5C Vigilante
Owner: Mooney M20C
Survivor: Sudden night fiery fatal jet plane crash.

From: John Barry Smith <barry@corazon.com>

Date: June 5, 1998 8:40:33 PM PDT
To: Ronald.Wojnar@faa.dot.gov
Subject: **Inspect cargo door wiring too**

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Congress of the United States
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Washington, DC 20515-2861

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Bob Breneman,
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Dear Mr. Wojnar and Official Persons who feel responsibility in
explaining

TWA 800,

5 June 1998

There are cracked wires to the bare conductors in the cargo door
area of
TWA 800 as described by NTSB Systems Exhibit 9A, page 116:
"Some wires found in the section of W480 from forward of
station 570 and
identified as BMS13-42A had numerous cracks in the insulation.
Most of the
cracks in this bundle were found to expose the core conductor
when examined
by microscope. Only within five feet of the aft end of the W480
bundle from
station 570-900 were insulation cracks found." Page 47 also
states,
"Evidence of arcing or short circuiting was found in the fuselage
of
N93119, (TWA 800) in addition to what was found in the wiring

from the
raceway below the left cabin floor and near the forward wing
spar.

That's a fact and NTSB told me so. To be prudent, determine if
the forward
cargo door unlatch motor power on wire is among those cracked
to the bare
wires located by NTSB in TWA 800. NTSB did it before with
UAL 811 in AAR
92/02 where a bare chafed wire turned on the forward cargo door
unlatch
motor. There is a precedent of bare wires in that area causing a
fatal
accident in a high time Boeing 747. It would be prudent to rule
out that
event happening again by checking the bare wires discovered by
NTSB in TWA
800 wreckage in cargo door area to see if it is the door unlatch
motor wire.

True power always wants to know if it may be wrong and
immediately take
steps to confirm or rebut. True power knows error is weakness
and will
immediately correct the error to become strong again. Fake
power ignores
any evidence of error. It is weak and will fail. NTSB discovers
the cause
and makes recommendations to FAA. FAA orders the
manufacturer to fix the
problem. The problem is old cracked wiring. I come to elected
officials,

NTSB, and FAA officials because only you have to power to persuade the manufacturer to replace defective, old, and chafed wiring if necessary and it is necessary.

Very many, very red, and very large red paint smears exist on TWA 800 above the forward cargo door area on top of normal white paint in between the passenger windows. That's a fact and NTSB showed it to me by presenting the TWA 800 reconstruction photograph in which the many, large, red paint smears are clearly evident. <<http://www.corazon.com/TWA800hullrupture.html>>

A precedent has been set of paint transfer marks in that area by UAL 811 as described in NTSB AAR 90/01 and AAR 92/02. <<http://www.corazon.com/811page42paintondoor.html>>

It would be prudent to confirm or rule out the red paint smears indicating an open cargo door in flight or not. One way would be to examine the cargo door hinge for overtravel impression damage, another precedent set by UAL 811 in NTSB in AAR 92/02. <<http://www.corazon.com/811reportcontentpage.html>>

There is outward peeled skin high up on the right side of TWA 800, also more outward shattered skin on the belly, and most of all, there is

outward
peeled skin forward of the wing on the right side, centered
around the
outward petal shaped bulge at the aft midspan latch of the
forward cargo
door. That's a fact and I know that because NTSB presented the
photograph
of TWA 800 wreckage reconstruction and described the outward
peeled skin in
NTSB exhibits.

Main deck floor beams above the forward cargo hold were
broken downward in
UAL 811 during the explosive decompression. That also
happened in TWA 800.
An explanation was offered by Mr. James Wildey of NTSB:
Docket No. SA-516,
Exhibit No. 18A, Sequencing Study, page 20, "The initial
opening of the
fuselage lower lobe (e.g. LF6A) would have the expected result
of rapid
depressurization accompanied by collapse of the main deck floor
for some
distance forward of STA 1000. The red area recovery of interior
components
as far forward as STA 600 would not be inconsistent with this
floor
collapse and associated structural breakup."

The red paint smears and the outward peeled skin strongly
indicate the
forward cargo door opened in flight, an opinion shortly held by
Mr. Fred

Schalekamp of FAA:

30 Jan 1998 letter from Neil Schalekamp, FAA, to JBS: "The paint markings and structural deformation that you cite, do indicate an outward explosion, generally accepted to be caused by the explosion of the CWT."

That's a fact and NTSB and FAA told me so in a letter and shown in sooting diagrams in exhibits. To not see the very red, very many, and very large unusual paint smears, and to not see the outward, not inward, peeled skin is to defy reality. The red smears, downward floor beams, and the outward skin are there and strongly indicate cargo door opened in flight based on physics and precedent.

The forward cargo door did open in flight, but not by the overpressure of a center tank explosion because the cargo door pieces were unsooted, just like the forward pieces of the center fuel tank.

What else could cause the forward cargo door to open in flight? There is a precedent, UAL 811, as described in NTSB AAR 90/01 and AAR 92/02 in which a high time Boeing 747 suffered a hull rupture in flight forward of the wing which left a sudden loud sound on the CVR and an abrupt power

cut to the
FDR, paint transfer marks in cargo door area, and outward
peeled skin, all
caused by chafed to bare wire conductor in the cargo door area.
<<http://www.corazon.com/811reportcontentpage.html>>

TWA 800 had a hull rupture forward of the wing which left a
sudden loud
sound on the CVR and an abrupt power cut to the FDR, paint
transfer marks
in cargo door area, outward peeled skin, and chafed to bare wire
conductor
discovered in cargo door area.

That is enough of a match to justify inspection of cargo door
wiring in
early Boeing 747s irrespective of other corroborative evidence of
faulty
Poly-X wiring discovered in Boeing airliners under NTSB and
FAA orders.

Bare shorted wires have also caused fires in forward cargo holds
of Boeing
747s before.

NTSB Exhibit 9C, Attachments to the Systems Group Factual
Report page 44,
45, 46. "1996, burning smell in forward cargo compartment,
found damaged
wiring shorted to ground, charring found.
B. Oct 12, 1996, Wire bundle arcing and resultant fire at aft
bulkhead of
forward lower lobe cargo hold on 747-200 freighter."

It would be prudent to inspect cargo door wiring in the forward cargo hold of early 747s since that wiring has been shown to be faulty in general, early Boeing airliner wiring has been shown to be faulty in particular, UAL 811, and faulty cargo door area wiring has shown up in the same area on a new fatal accident, TWA 800.

A solution to the mystery of the ignition source of the fireball and center tank fire may well be a foddred and on fire engine number 3 igniting disintegrating wing fuel tanks thousands of feet lower and seconds later than the initial event.

TWA 800 engine number three shows foreign object damage, fire, and uncontainment in the NTSB powerplant report and the structures report.

Exhibit 8A, page 11, paragraph 3, discussing results of engine 3 disassembly, "Of the 46 fan blades in the fan rotor, 21 blades with complete or partial airfoils and 6 root sections were recovered. All of the fan blades had sooting on the convex airfoil surfaces. Most of the full length airfoils were bent rearward and the tips outboard of the outer

midspan shroud were bent forward slightly. About half of the fan blades had impact damage to the leading and trailing edges. Almost all of the impact damage to the airfoils could be matched to contact with the midspan shroud on an adjacent blade. One full length blade had four soft body impacts along the leading edge and a partial airfoil had a soft body impact, which had some streaking extending rearward."

Exhibit No. 7A, Structures Group Report, page 33: "5.1

Horizontal

Stabilizer, "Some of the items found in the horizontal stabilizer are

sections of seat track, a stator blade from turbine section, and glitter."

On 5.1.1 Right Horizontal Stabilizer, page 34, "An engine stator blade from

turbine section penetrated the upper honeycomb surface near the outboard trailing edge.

A prudent action would be to rule in or rule out the precedent of UAL 811

applied to TWA 800. A risky action is to ignore many large red paint

smears, downward broken floor beams, and much outward peeled skin and their

clear implication of cargo door open in flight. The red paint smears will

not fade away; they will always be many, large, and red in the

photographs
on the NTSB CD-ROM. The floorbeams will always be broken
in Exhibit 18A.
The outward peeled skin will always be shattered outward on the
belly, the
upper fuselage, and around the aft midspan latch of the forward
cargo door
in the photographs of TWA 800 on the NTSB CD-ROM. Engine
number three will
always be sooted, blades missing, and have soft body impacts as
shown by
NTSB Exhibit 8A.

A more prudent action is to ground all Boeing 747s with Poly-X
wiring for
total inspections and replacement of that wiring. A total wiring
inspection
casts the net wider to catch faulty wiring. By inspecting all the
wiring to
include the fuel tank wiring, the yaw damper wiring, and the
known
previously faulty cargo door power wiring, all wiring can all be
cleared as
intact and pose no danger of shorting on, as has happened before
fatally.

I understand the difficulty and turmoil the grounding would
cause. Boeing
would have much work to rewire the planes if necessary. If not
feasible,
new airliners would have to be built and the grounded ones used
for parts,
similar to what the Navy has done with their Poly-X F-14

Tomcats.

Am I a traitor? Does my belief of a wiring cargo door fault for TWA 800 and other early 747s hurt my country? Specifically, the Northwest quadrant which has an economy derived from the design, manufacture, and selling of 747s.

Here's my answer to myself on that one. No, I am not a traitor, I am a patriot. Here's why.

Seattle is successful and must remain so. Seattle is successful because nearby is built successful airplanes. Successful airplanes are the best selling ones. The best selling ones are the most made ones. The most made ones are the ones that make the most money. The ones that make the most money are the ones that fly the most. The ones that fly the most are the safest ones. The safest airplane is the most successful airplane. Period.

So, to present an explanation for an unsafe event, the crash of TWA 800, an early Boeing 747, is a good thing to do, even if proven wrong later. The goal is to make safe airplanes which will fly the the most and be sold the

most and be made the most, thereby keeping our country's economy thriving.

My personal goal is to prevent death by preventing airplane crashes by preventing hull ruptures in flight on early 747s by preventing cracked bare wires shorting on the door unlatch motor thereby allowing the aft midspan latch to rupture and allow the middle of the forward cargo door to burst open causing a large explosive decompression which allows the 300 knot slipstream to tear nose off. This inner goal was determined by the selfless action of my pilot who saved my life in a sudden night fiery fatal jet plane crash years ago and which I have never forgotten.

It is the duty of aviation professionals to strive to explain TWA 800. And yet, this loyal citizen is rebuffed when presenting to NTSB NTSB derived evidence of a supplemental explanation to TWA 800. Why is that?

If I can't have a real conversation with NTSB or FAA officials regarding TWA 800, here is an imaginary one that sums up the past two years.

JBS: "Hello, NTSB, I'm answering your plea for public assistance regarding

the cause of TWA 800."

NTSB: "What do you want?"

"I believe the initial event is moisture meeting chafed to bare wire and shorting on cargo door motor to unlatch position causing rupture at aft midspan latch of forward cargo door in flight leading to thirty by forty foot hole of explosive decompression which allows 300 knot slipstream to tear nose off which leads to disintegrating aft fuselage, wings, and tail which ignite into fireball when fiery foddred engine number three meets vaporizing fuel thousands of feet lower and seconds later."

"No."

"There are many similarities to an event that happened before, UAL 811, and TWA 800."

"You're crazy. Who are you?"

"Commercial licensed pilot, instrument rated, 1000 PIC hours, Navy jet navigator, aircraft owner, FAA Part 135 certificate holder, avionics technician, and survivor of sudden night fiery fatal jet airplane crash talking about a sudden night fiery fatal jet airplane crash."

"Go away."

"The evidence of red paint smears, outward peeled skin, and
petal bulge at
aft midspan latch support conclusion forward cargo door opened
in flight,
just like UAL 811."

"I'm ignoring you and will not respond to further comments."

"You are safety aviation officials who say you turn over every
stone, who
check out every explanation, who really want to know what
happened to TWA
800, regardless of cause. Listen to me; talk to me."

"You are a wacky guy on the internet, you are bothering the real
investigators and getting in the way, you have been told over and
over
again in great detail that you are wrong and we are right, you
don't have
your basic facts straight about the door, you should check with us
before
you say your nonsense to others, and you are a flake and we don't
like you."

"Maybe, but so what? The messenger's style is independent of
the truth of
his content. Moisture and shorted wiring caused the crash of
TWA 800. Why
do you not ask questions to me, as real investigators do, as I ask
you?"

"We don't ask questions of citizens that we don't already know the answers to, we just make statements such as this: No, your're wrong, you're crazy, go away, we will not respond, goodbye, and thank you your for your interest in aviation safety."

Below is real:

10 March 1998 letter of John B. Drake of NTSB to JBS :

"We consider our correspondence on this subject to be complete. Should you continue to reiterate your position on this issue in future correspondence, you should expect no further response from the Safety Board."

30 Jan 1998 letter of Neil Schalekamp of FAA to JBS :

"Please note that this office will no longer be responding to your further inquiries about these same concerns, including your February 6 and February 9 letters that I just received."

17 March 1998 letter of Jim Hall of NTSB to JBS :

"We do not believe a meeting is necessary to further discuss this issue."

Summarized conversation between me and ordinary citizens who visit my web site:

Visitor: "What does NTSB and FAA say when you tell them about wiring/cargo

door explanation for TWA 800?"

JBS: "They write that all cargo doors were all latched, all locked, and all intact at water impact, they have told me that over and over again and they will not respond to any further inquiries from me."

"What do they say about the red paint smears?"

"They pretend they don't exist except one FAA official who did but changed his mind and now pretends they don't exist."

"What do they say about the outward peeled skin?"

"They say it was caused by inward water impact."

"What do they say about the petal outward bulge at aft midspan latch of forward cargo door?"

"They pretend it does not exist except one FAA official who did but changed his mind and now pretends it doesn't exist."

"What do they say about the missing manual locking handle, the two overpressure relief doors, the viewing ports, the torque tubes, the two pull-in hooks, the midspan latches, and the other eighty percent of forward cargo door skin?"

"They say they are unimportant."

"What do they say about the Orange Zone pieces, the possible mixup in cargo door sills, the unsooted pieces of center fuel tank, the thirty by forty foot shattered skin zone forward of the wing on the right side, the chafed to bare wire discovery in cargo door area, and the many significant matches to UAL 811?"

"Nothing. They say nothing. Well, actually they told me to go away, and stay away."

"Have you gone to your congressman?"

"Yes, Sam Farr, and he has asked many time to NTSB and FAA for information."

"What happened?"

"They wrote to him that the door was all latched, all locked, all intact at water impact, they have told me that many times, and thanked him for his interest in aviation safety."

"Did you contact any other elected politician?"

"Yes, Senator John McCain, jet plane crash survivor and

Chairman of the
Committed that oversees NTSB."

"What happened?"

"He reviewed my data and submitted it to his committee for review. He asked me to wait until the hearings. He asked the NTSB to meet with me to related my concerns about the forward cargo door of TWA 800."

"What happened?"

"The Committee on Commerce, Science and Transportation still has the matter under review, I waited until the hearings, I went to the hearings. The suggested meeting by Senator McCain between NTSB officials and me was refused by Chairman Hall of NTSB saying there was sufficient evidence to rule out the cargo door opening in flight, he has told me that many times in great detail and a meeting was not necessary."

"Have you tried the press?"

"Yes, I've had several radio and TV interviews. Some get airplay and some don't."

"Have you tried Boeing?"

"Yes, Boeing and McDonnell Douglas both contacted before the merger. The two safety officers were polite and referred me to NTSB. Boeing engineers referred me to the Public Relations office of Boeing. The Boeing Public Relations office referred me to the NTSB. NTSB told me to go away."

"Have you tried the internet?"

Yes, I have a 1200 page, 100 meg website which has been online since July, 1996 and visited about 70000 times, according to page counters."

"What are you doing now?"

"I'm continuing to write to appropriate officials presenting the evidence and trusting it will speak for itself. It's not going to go away."

"Have you tried calling them?"

"No, my wife and daughter were approached in my home by two armed federal agents within twenty four hours of me posting an email to Senator McCain about Air Force One crashing. Calling on the telephone out of the blue would be much too aggressive. Prior to the Secret Service interrogation, phone calls usually ended up with the official shouting and hanging up. So

now I continue to write non-threatening, polite, full of facts letters and emails."

"Are you saying government public safety aviation officials in writing refuse to adequately respond to your request for a meeting to discuss facts, evidence, documents, photos, which clearly indicate a forward cargo door opening in flight on TWA 800?"

"Yes."

"They will not call you, write to you, or respond to polite letters with sources listed?"

"Nope."

"Are these the same guys that say safety is priority number one, they will turn over every stone, never give up to get a full explanation, and respond to every public inquiry?"

"Yup."

"Who are you? A wacky guy on the 'net?"

"Maybe, although I use government AARs for sources, and I'm also a survivor of a sudden night fiery fatal jet airplane crash, a commercial

licensed
pilot, instrument rated, FAA Part 135 certificate holder, light
aircraft
owner, jet carrier navigator, avionics technician including radar
operator,
and a retired military officer in a converted garage with a
computer and a
phone line."

"And you've tried for almost two years to meet face to face with
the public
officials involved with TWA 800?"

"Yes."

What happened?

"Nothing yet. But I'm still trying. It's only been two years for
TWA 800.

The investigation is open and active. The evidence is not
changing or going
away."

And I am still trying:

Real facts presented by NTSB about TWA 800 in exhibits,
photographs, text,
drawings, and testimony:

1. right horizontal stab has red paint smear
2. stator blade in right horizontal stab behind engine number 3
3. inward crush top of cargo door
4. top of cargo door attached to hinge

5. petal shape of rupture area around aft midspan latch
6. missing pieces of forward cargo door include locking handle, latching pins, overpressure relief doors, midspan latches
7. rectangle visible of explosive decompression zone of outward peeled skin on right side forward of the wing on right side
8. downward movement of floor beams near cargo door
9. hoop stresses found
10. CVR sudden loud sound
11. FDR abrupt power cut
12. missing turbine blades in engine number 3.
13. soft body impacts on blades in engine number 3.
14. outward peeled skin near top of nose, under belly, and in cargo door area.
15. red paint smears above cargo door on white paint
16. soot on most blades of engine 3.
17. starboard side more damaged than port side
18. intact R2 door near shattered cargo door.
19. poly x is known to be susceptible to chafing and present
20. section 41 is known to be weak
21. history of cargo door openings in past in various airliners
22. EPR problems on aircraft before or during fatal flight.
23. fires in forward cargo hold in the past on Boeing 747s.
24. vertical tears in fuselage skin forward of the wing on the right side
25. singe marks on right side of fuselage show burnt skin, then abruptly at tear line there are no singe marks
26. red paint rubbed off revealing white paint underneath on skin above cargo door area
27. first pieces off plane came from forward cargo hold just

forward of the

wing

28. at least nine missing never recovered bodies, just fragments

29. initially thought to be a bomb

30. wreckage debris shows cargo door shattered in many pieces

31. aft portion of forward door which includes aft midspan latch and

locking handle missing from recovery effort

32. no soot on maintenance hatch

33. no soot on front spar of center wing tank

34. no burned bodies forward of the wing and very few burned at all

35. aft cargo door sill, latches, and locks recovered

36. forward cargo door sill, latches, and locks not recorded in data base

37. no orange zone pieces recorded in database

38. no orange zone discussion in public record other than identification

39. chafed to bare wires found in cargo door area

40. wiring defects found on Boeing airliners

41. water observed pouring out of forward cargo hold of a Boeing airliner, cargo holds have bilges.

42. no soot on keel beam forward of the wing

43. compression fractures right side forward of the wing

44. tension fractures left side forward of the wing

45. seats in the rows in the explosive shatter zone above cargo door are in

red zone and not sooted

46. aft cargo door sill is sooted

47. many witnesses said they saw downward streak that was red-orange

48. NTSB official said possibility of forward door popping open

was intriguing.

49. FAA official said, then recanted, that paint smears and structural deformation indicated outward explosion.

50. initial event time was 20:31:12 at 13700 on 17 July 1996 eight miles off coast of Long Island.

Reasonable conclusions derived from facts above:

1. water in forward cargo bay.
2. chafed bare wire touched by water.
3. electrical short occurs.
4. forward door motor turns on to unlatch position.
5. aft midspan latch of forward cargo door partially unlatches.
6. pressurized hull ruptures at aft midspan latch.
7. cargo door tears into pieces, some pieces stay with nose, some don't.
8. shiny metal pieces spin away reflecting evening sunlight and perceived as red-orange streak to observers far away.
9. explosive decompression occurs shattering cargo door area forward of the wing on right side exposing twenty foot by forty foot hole in nose producing sudden loud sound on CVR.
10. 300 knots slipstream tears weakened nose off.
11. ejected debris is ingested by starboard engines which catch fire.
12. wing and wing fuel tanks; engines, tail, and fuselage fall and disintegrate on way down.
13. fiery starboard engine ignites fuel vapor clouds from disintegrating tanks, including center tank.

14. fireball observed on the ground.
15. water impact of wreckage, cargo bay material first to hit water.

I may not be alone: "NTSB investigators have suggested unofficially that the streaks the pilots saw could have been light reflections from the skin of the aircraft, tongues of flame from the airliner or the forward door of the aircraft popping open, a possibility that still intrigues investigators, the second official said." AW&ST 3/10/97

Regarding the Aviation Week and Space Technology article quoted above, the following is supplied: <<http://www.corazon.com/800avweekintrigue.html>>

Monica Warnock
Washington Bureau
Aviation Week & Space Technology

Dear Ms. Monica Warnock,

21 May 1998

You wrote to me:> You must remove these articles and any other Aviation Week copyrighted material from your website immediately, or we will consider legal action.

I replied>Consider it done. And not because you threatened me, but because you may be right."

Ms. Warnock, I now believe you to be wrong.

I'm putting the 10 March 97 Aviation Week and Space Technology article in dispute back up on my web site at www.corazon.com at one minute after midnight on 1 June 1998.

Here's why: The content is everything and the content of the article is very, very important. I agree with the content. AvWeek agrees with content. The public officials quoted in your article agree with the content. The content quotes a public NTSB official who says that the cause of TWA 800 may have been forward door popping open. It also said the streak seen before TWA 800 crash may have been reflection off the skin of aircraft. I agree with that. It is very important. Let us call it the door pop streak article.

Ms. Warnock, you have done your job well by searching the web for Avweek articles. You found one. You then followed orders and directed it be removed. It was removed. The problem is now above your level of authority. So I direct my comments to your boss: Mary Francis Koerner, the Manager of Bureaus.

Will you please see that this letter goes to her?

Dear Ms. Koerner, I am told several things:

1. Get the door pop streak article off my web site.
2. I should ask permission to put AvWeek articles on web site.
3. Permission will be denied.

I asked permission. It was denied. You were right.

You have done all you can do. The problem is now above your level of authority. I assume you would refer me to 'The Lawyers.' I direct my statements to the lawyers.

Will you please see that this letter goes to them?

Dear AvWeek lawyers:

Ah, copyright, don't you love it?

My name is John Barry Smith. I have a 1200 page, 100 meg website at www.corazon.com mainly devoted to high time Boeing 747 accidents in which the hull ruptures in flight forward of the wing. It contains mostly government scanned in aviation accident reports, AARs, and occasionally copyrighted material from media, such as yours.

Please note, let us stipulate:

1. My site is non profit. I have not made a penny on anything

related to
that website. In fact, much of my money has gone out, nothing
has come in,
a problem as my wife will attest.

2. It is research oriented with airplane crash related comments,
investigations, reports, pictures, and text.

3. I give full and clear credit to the sources I quote. AvWeek was
clearly
stated as the author of the door pop streak 10 Mar 97 article in
question.

In fact, that is very important, that's why I quote clearly and give
credit

to Aviation Week by scanning in the entire article instead of
paraphrasing,

which would be quicker to download but not have the authority
of the best

aviation magazine on the planet, Aviation Week and Space
Technology. And I

omitted the advertising on the pages, too.

Now for argument:

1. I stole nothing from you.

2. It's fair use.

3. I can publish that article without your permission if certain
conditions

are met, and are: Non profit, small parts used, and credit given.

"Fair use and implied licenses.

Fair use is a legal license to use others' work, whether they
approve or

not. It constitutes one of the most important, and least clear cut, limits to copyright. The basic problem is that words like "fair" or "reasonable" cannot be defined with the precision non-lawyers (or many law students) would like. Until 20 years ago, fair use did not appear in U.S. legislation, but it now occupies about half of the copyright statute. In the U.S., partial or limited reproduction of another's work may be permitted under this doctrine. On the one hand, fair use offers an especially liberal defense to uses that advance public interests such as education or scholarship. On the other hand, it is unlikely to be available if one fails to credit the original artist or author. It is not apt to be available to those who profit or interfere with original artists' or authors' ability to derive income from their works."

" 1998 Franklin Pierce Law Center. All rights reserved." (I hope I have fair use to quote the above.)

I believe I advance the public interest in aviation safety, I credit the original speaker, the reporter, and the magazine, and I do not profit from it. I have fair use.

Conclusion: It will take a Judge to order me to remove the 10
March 97

AvWeek article from my website after it is put back up on 1 June 1998 or to permit me to continue to post it.

So, Lawyers, the problem is above your level of authority. I turn my attention to the Managing Editor:

Will you please see that this letter goes to him?

Dear Managing Editor,

What's the beef? You and your reporter, David Fulghum, have done a fine piece of work. You have pinpointed the cause of a mystery crash now under current investigation, TWA 800. It was the door popping open in flight. The NTSB official you quoted was correct. The streak was the skin spinning away reflecting evening red orange sunlight to observers below. The official was correct and he was quoted correctly by your aviation reporter. The implications of the truth you printed are profound. The cause now leads to chafed wiring shorting on cargo door unlatch motor and allowing rupture at aft midspan latch of forward cargo door which opened in flight. Exactly as has happened before with UAL 811 as described in NTSB AAR 92/02. The 300 knot slipstream tore the nose off TWA 800 because the explosive

decompression shatter zone was much bigger on TWA 800 than on UAL 811, as shown by NTSB reconstruction photo of TWA 800 wreckage.

I encourage you to do a follow up story on the wiring/cargo door explanation as described on the website in question, www.corazon.com. Mr.

Fulghum and Mr. McKenna are familiar with the details of TWA 800 and wiring cargo door explanation.

Attached:

1. Correspondence between AvWeek Ms. Warnock and me.
2. Three .jpgs of the images published on website of 10 March door pop streak article.
3. Recent email to Government officials regarding this matter. Please note accurate numbers and sources given.

So, I must publish your copyrighted material, the 10 March 97 article on my website at URL <http://www.corazon.com/800avweekintrigue.html> on June 1, 1998.

I'm at email barry@corazon.com or 408 659 3552 or 551 Country Club Drive, Carmel Valley, CA 93924.

I encourage discussion regarding this matter. It's a hot story even though almost two years old. Wiring is the main culprit, not the door, not the center tank. NSTB is in the right church but the wrong pew. Wiring is the problem and it's in places other than the fuel tank tubes. It's in the cargo door unlatching motor circuits.

Cheers,
John Barry Smith

From: monica_warnock@mcgraw-hill.com
Date: Thu, 14 May 98 10:24:37 -0500
To: <barry@corazon.com>
Subject: Aviation Week
Mime-Version: 1.0

To: barry@corazon.com

Dear Sir,

Your website "<http://www.corazon.com/800avweekintrigue.html>" contains several scanned-in pictures of the Aviation Week & Space Technology article "ANG Pilot: TWA Hit By Object," March 10, 1997. Our records do not show that you requested permission to use these articles on your website.

Aviation Week & Space Technology is covered by copyright

law which

states that permission must be granted before our material is used.

Your website is in violation of this law. You must remove these

articles and any other Aviation Week copyrighted material from your

website immediately, or we will consider legal action.

Sincerely,

Monica Warnock

Washington Bureau

Aviation Week & Space Technology

monica_warnock@mcgraw-hill.com

(202)383-2314

To: monica_warnock@mcgraw-hill.com

From: John Barry Smith <barry@corazon.com>

Subject: Request permission to present article on website.

Cc:

Bcc:

X-Attachments:

To: barry@corazon.com

Dear Sir,

Your website "<http://www.corazon.com/800avweekintrigue.html>" contains

several scanned-in pictures of the Aviation Week & Space Technology

article "ANG Pilot: TWA Hit By Object," March 10, 1997.

Our records

do not show that you requested permission to use these articles
on
your website.

Dear Madam, 14 May 1998

A thousand pardons. I immediately request permission to reprint
Aviation
Week & Space Technology article "ANG Pilot: TWA Hit By
Object," March 10,
1997 on my website, www.corazon.com. (Corazon is my wife's
name.)

The reason I scanned in exact image instead of paraphrasing text
was to be
precise and show source, very important for a research paper.

Should my request be denied, I shall of course, immediately
comply with
your request and remove the article from my web site.

AWST is a fine magazine and one which I have read diligently
for over
thirty years. I have watched AWST's web site mature as time
goes on.
<http://awgnet.com/awgnews.htm> is on my bookmarks list and I
check it first
thing every morning. I'm in your database of subscribers. Keep
up the good
work!

Regarding this life and death matter of a sudden night fiery fatal
jet

plane crash about which I have published a 1200 page website presenting my shorted wiring opening forward cargo door in flight explanation to the general public in a non profit effort:

1. You surely understand I can not alter my website just on an unsolicited email out of the blue from:

Monica Warnock
Washington Bureau
Aviation Week & Space Technology
monica_warnock@mcgraw-hill.com
(202)383-2314

The absence of title indicates your request may be personal in nature and not official. Please confirm your official title which corresponds to your request that I delete an article from AWST from my site. You may be spoofing me and my asking for credentials is prudent and an established protocol.

2. Your response indicates an interest in the subject of TWA 800. Could you refer a reporter to me so I can present my wiring/cargo door explanation to him/her? I would appreciate the opinion of an aviation professional regarding my nine years of amateur research into hull ruptures of

hour high
time Boeing 747s. Your reporter, David Fuhlgum, in the
referenced article,
was able to elicit important material from NTSB officials
regarding TWA
800; the forward door may have popped open in flight, and the
streak may
have been pieces of the aircraft reflecting evening sun. I am able
to
amplify those observations by an anonymous NTSB 'second
official' using
NTSB documents and photographs. It's a good story and one
worthy of AWST's
interest. FAA, NSTB, and Boeing are all saying wiring in older
Boeing
airliners is fraying and shorting causing problems, and so am I,
long
before the officials came to the realization.

3. >or we will consider legal action.

Why, O why did you threaten me? Your first contact, out of the
blue, and it
contains a threat of 'legal action'. What does that mean? I don't
think it
means a good thing. It just sets a wrong tone. Is politeness gone
from even
presentations about a plane crash?

4. >Your website is in violation of this law.

Whoa! You are calling me a criminal? Just like that? I'm breaking
the law?

I'm a lawbreaker? This is very disturbing. Maybe that's the way
AWST works
with the big boys who only respond to threats, not to polite
requests with
explanation attached. I'm not a big boy. I'm a retired military
officer
working out of a converted garage in California. I don't like
anybody
telling me I'm breaking the law unless it's a policeman, judge, or
jury.
And I still don't like it, but I obey. I really can't tell my friends
that
I changed my cherished web site because of a strange
unauthenticated email
from some babe named Monica at McGraw-Hill, now can I? I
mean, am I a man
or a mouse?

See, a threat always turns a pleasant conversation into stressful
one.
Squeek, squeek.

To review:

1. I respectfully request permission to display scanned in
images of
Aviation Week & Space Technology article "ANG Pilot: TWA
Hit By Object,"
March 10, 1997 on my personal website, www.corazon.com.
2. Please to show credentials, madam.
4. Refer reporter to me regarding a subject that you feel strongly

enough

to want to affect with correspondence, TWA 800.

5. Keep up the good work covering aviation subjects around the world.

Cheers,

John Barry Smith
551 Country Club Drive,
Carmel Valley, CA 93924
408 659 3552
barry@corazon.com
www.corazon.com

From: monica_warnock@mcgraw-hill.com
Date: Thu, 14 May 98 13:48:41 -0500
To: <barry@corazon.com>
Subject: Re: Request permission to present article on website.
Mime-Version: 1.0

Dear Mr. Barry,

I am an editorial assistant in the Washington Bureau of Aviation Week & Space Technology. I work for Mary Francis Koerner. She is the Manager of Bureaus and she is the official contact for Reprints & Permission. We will periodically search the web for Aviation Week on outside websites and that is what brought me to your site.

Unfortunately, at present, Aviation Week & Space Technology does not allow its material to be reprinted on any websites other than our own.

We appreciate your interest in Aviation Week & Space Technology;

however, we must ask that you remove the article from your website, as

you have indicated you are willing to do.

My interest in this regard is not related to TWA800 but protecting the

magazine in general. Many people are not aware of the rules regarding

copyright on the internet. You may reference the section "Photocopy

and Rights & Permission" on the Contact Us page of Aviation Week if

you have any future requests for permission.

James McKenna would be the best editor to send your correspondence to

regarding TWA 800. He is located in the Washington bureau: 1200 G

Street, NW Suite 922, Washington, DC 20005. (202) 383-2332.

I will mail you a hard copy of this letter on Aviation Week & Space

Technology letterhead to satisfy any concerns you might have about my

identity. Thank you for your understanding.

Monica Warnock
Editorial Assistant, Washington Bureau
Aviation Week & Space Technology

To: monica_warnock@mcgraw-hill.com
From: John Barry Smith <barry@corazon.com>
Subject: Re: Request permission to present article on website.
Cc:
Bcc:
X-Attachments:

Dear Mr. Barry,

I am an editorial assistant in the Washington Bureau of
Aviation Week
& Space Technology. I work for Mary Francis Koerner. She is
the
Manager of Bureaus and she is the official contact for Reprints
&
Permission. We will periodically search the web for Aviation
Week on
outside websites and that is what brought me to your site.

Dear Ms. Monica,

Thank you for your prompt reply. I am saddened by the denial to
present the
AWST article on my web site. I shall search through it and delete
it. Do I
need permission to post your email in its place to explain why
the article
was deleted? I should explain why the article was removed to
squelch any

conspiracy coverup nonsense that pervades this TWA 800 investigation.

Unfortunately, at present, Aviation Week & Space Technology does not allow its material to be reprinted on any websites other than our own.

So sad.

We appreciate your interest in Aviation Week & Space Technology; however, we must ask that you remove the article from your website, as you have indicated you are willing to do.

As soon as I am finished with this upcoming TV interview about wiring/cargo door explanation, I will. The TV station is KOMO-TV, Channel 4, ABC, in Seattle Washington and the arrive within the hour. I'm preparing for it so am unable now to find page, delete, change links, upload it to server right now. But how long to I have? Is 48 hours OK?

My interest in this regard is not related to TWA800 but protecting the magazine in general. Many people are not aware of the rules regarding copyright on the internet. You may reference the section "Photocopy and Rights & Permission" on the Contact Us page of Aviation

Week if

you have any future requests for permission.

Protecting the magazine? Well, OK, if you say so. I feel that quoting AWST in a non profit website about aviation safety helps AWST, but what do I know.

James McKenna would be the best editor to send your correspondence to regarding TWA 800. He is located in the Washington bureau: 1200 G Street, NW Suite 922, Washington, DC 20005. (202) 383-2332.

Thank you very much, ma'm, and I shall. I shall say you referred me, is that OK?

I will mail you a hard copy of this letter on Aviation Week & Space Technology letterhead to satisfy any concerns you might have about my identity. Thank you for your understanding.

Fine, can I put that on my website?

Let me get back to you on this. I will delete offending article and then send you URL of the new page so you can confirm I have cleansed the dirty deed.

Cheers,
John Barry Smith

Monica Warnock
Editorial Assistant, Washington Bureau
Aviation Week & Space Technology

From: monica_warnock@mcgraw-hill.com
Date: Thu, 14 May 98 14:47:54 -0500
To: <barry@corazon.com>
Subject: Re[2]: Request permission to present article on website.
Mime-Version: 1.0

Mr. Smith,

I will mail your letter today. When it arrives, you are welcome to

place it on your website. We understand that you are busy right now-

as long as you are able to delete the pages by next Friday, that's fine

with us. The complete URL is

<<http://www.corazon.com/800avweekintrigue.html>>

If you do contact Mr. McKenna, you may tell him I referred you. Again,

thank you for your interest in Aviation Week.

Monica Warnock
Editorial Assistant, Washington Bureau
Aviation Week & Space Technology

To: monica_warnock@mcgraw-hill.com

From: John Barry Smith <barry@corazon.com>

Subject: Done

Cc:

Bcc:

X-Attachments:

Dear Ms. Warnock,

You must remove these articles and any other Aviation Week copyrighted material from your website immediately, or we will consider legal action.

Consider it done. And not because you threatened me, but because you may be right.

<http://www.corazon.com/800avweekintrigue.html>

is the URL which now has deleted article. Completed 6:57PM 14 May 97, nine hours after your request. The TV interview went swimmingly. In fact, the interviewer from KOMO TV ABC Seattle, asked that I send him an email of the article in question. He was interested to hear about your request.

I just want you to know that you have made an old man very very sad. I shall have to research the web, as is my wont, to find out for sure if the copyright laws exist to keep non profit websites from fairly using one

article of a magazine to support an aviation safety hypothesis. I make no money from this site, on the contrary, it costs me money to keep it up. The site is 1200 pages deep with on one page assigned to article. The goal of the website is aviation safety, a common goal with Aviation Week. The officials quoted on the article are public officials whose comments are public.

It seems to me that permission should not be necessary for me to put your article on my website as long as I give credit to the author and make no money from it.

It seems to me that when permission was requested to put the article on my website, permission should have been granted.

You said 'protect your magazine,' as motive for requesting I delete the article. Protection from whom? Me? Aviation Week needs protection from me? I am a retired guy working out of a converted garage with a computer and a modem. You have nothing to fear from me, we are on the same side, aviation safety.

Regardless, the excellent article by David Fulghum in the March

10, 1997

issue has been deleted at your request. Should it become apparent that I do have the fair right to use your article under conditions which I fulfill, then, pop! up it goes again. I shall let you know in advance so you may attempt to dissuade me if you wish. It just seems that a guy ought to be able to pull out old magazine articles to quote from when he's trying to persuade visitors of an aviation safety point. In case I'm wrong, and I'm never wrong, I have erred on the side of safety and complied with your request.

Cheers,
John Barry Smith

Mr. Smith,

I will mail your letter today. When it arrives, you are welcome to place it on your website. We understand that you are busy right now- as long you are able to delete the pages by next Friday, that's fine with us. The complete URL is <<http://www.corazon.com/800avweekintrigue.html>> If you do contact Mr. McKenna, you may tell him I referred you. Again, thank you for your interest in Aviation Week.

Monica Warnock
Editorial Assistant, Washington Bureau
Aviation Week & Space Technology

DAVID A. FULGHUM/WASHINGTON

Two New York Air National Guard pilots, with the best view of the crash of TWA Flight 800 last July, are disagreeing about what they saw immediately before destruction of the Boeing 747-131 jetliner.

One believes the airliner was struck by a fast-moving object coming from the east, while the other saw only a fiery trail from the west.

However, both believe a violent explosion ripped the aircraft apart, propelling some of its passengers high enough that they did not hit the water's surface until 3-4 min. after the initial explosion.

Maj. Frederick C. Meyer, pilot of an HH-60 helicopter from the ANG's 106th Rescue Wing, has just been freed from an FBI gag order preventing him from giving interviews about the 1996 disaster off Long Island, N.Y. The copilot, Capt. Christian Baur, remains under FBI restrictions not to speak about the accident. But two officials familiar with his testimony told Aviation Week &

Space Technology in detail what he told investigators.

In the days immediately after the accident, before being ordered not to speak, Meyer discussed his initial impressions with news media (AW&ST July 29, 1996, p. 32). Last week, he chose Aviation Week as the first news organization to hear a detailed account of his recollections and his testimony to federal investigators.

Meyer and Baur were in one of the wing's two aircraft operating north of the crash site. The helicopter was operating over Long Island about 12 mi. north of the TWA crash site. Baur, the copilot, was at the controls practicing instrument approaches. The crew was awaiting darkness so they could begin training with night vision goggles.

The key point on which the two pilots disagree is whether a streak of light appeared from the opposite direction of the flight of TWA 800 (which was flying from west to east after takeoff from Kennedy Airport), a possible indication of an intercepting missile or some other object.

Meyer's attention was first called to the area of the sky where the accident occurred "by a streak of light moving from my right (west) to my

left

(east)," the same direction as the TWA flight, he said.

Baur's account differs on this point. According to the two officials who have heard both pilots' accounts, Baur, on the left side of the cockpit, saw a streak moving from left to right toward the approaching TWA aircraft before the initial explosion.

"Almost due south [of the helicopter], there was a hard white light, like burning pyrotechnics, in level flight," Baur told investigators from the National Transportation Safety Board, FBI and a Federal anti-terrorist task force. "I was trying to figure out what it was. It was the wrong color for flares. It struck an object coming from the right and made it explode."

Baur's first impression was that there had been a midair collision, possibly between two light aircraft that tow banners along the beach.

"They had witnessed these aircraft come very close to each other at that time of day, and that's what they assumed," the second official said.

NTSB investigators have suggested unofficially that the streaks the pilots saw could have been light reflections from the skin of the

aircraft, tongues
of flame from the airliner or the forward door of the aircraft
popping open,
a possibility that still intrigues investigators, the second official
said.

Meyer could not actually see the aircraft, but only the streak, and
he admits
that Baur, a younger man, has better eyesight. Moreover, Meyer
adds,
"Whatever Chris saw on the left side I didn't see because he
blocked my
view." Baur disputes this, saying that the explosions and crash
were
virtually dead ahead of the aircraft.

The helicopter was executing a missed approach and was about
halfway down
Runway 24 at the Francis S. Gabreski International Airport at
Westhampton
Beach, N.Y. It had started a climbing left turn to the south when
the
accident occurred. The Sun had not yet set and the sky was still
bright.

According to Meyer, the streak was about 15-20 deg. above his
line of sight
and perhaps 15 deg. left of the aircraft's centerline.

"I don't know if it was a missile that struck the airliner," Meyer
said.

"Nothing at that moment said 'missile' to me. I spent a number of
years in

Vietnam and had seen missiles fired, some of them at me. But, that was 25-year-old missile technology, which left smoke trails. I understand today that they are made with smokeless rocket fuel and don't leave trails. What I saw was a streak of light, not a smoke trail."

The streak of light that Meyer saw made a very shallow, gradually descending arc. He points out that he never saw the actual airframe of the TWA 747 within the streak or subsequent explosions or smoke trails. It was virtually identical to the trajectory of a meteor, with only a slight curve. But unlike a meteor, the streak was red-orange in color, he said.

Meyer observed the descending streak for 3-5 sec. Then there was what Meyer describes as a hard, very sudden, yellowish-white explosion that looked identical to the detonation of an antiaircraft shell. He did not suggest an antiaircraft weapon was fired at TWA Flight 800, however.

"It left a cloud of smoke just like a flak explosion does," Meyer said. "One to two seconds later, there was a second, hard explosion almost pure white in color. The position of that explosion appeared to be slightly below and behind where one would have anticipated the streak of light to

have gone. The trajectory at that point appeared to be slightly bent down and slowed."

A new detail in Meyer's story was that almost immediately there was a third explosion and fireball. Meyer doesn't remember if there was an explosion and fireball or if the third explosion turned into the fireball.

"That was a soft explosion unlike the first two," Meyer said. "It began as a tiny point and it grew very rapidly into a huge fireball four times the diameter of the Sun. I was dumbstruck."

Baur also saw three explosions. But he contends that they started from left (east) and went to right (west). He said the explosions created a "huge waterfall of flame that cascaded down," the first official said. "The column of flame was being whipped around violently. First it was tumbling, and then it refined itself into a spiral. The explosions were all before the cascade of flame began."

In the helicopter, Baur spoke first, asking if it was pyrotechnics. ANG operations that night were to have included flares dropped by a HC-130 transport aircraft. The crew then called the Gabreski tower.

"We said we'd observed a fireball south of the field and we would like clearance to the beach to investigate," Meyer said. Baur actually made the call and reported a possible midair collision, the second official involved in the investigation said.

The crash time has been variously reported as being from 8:31 to 8:45 p.m., Meyer said. He believes the earlier time is more likely to be correct although he can't be sure.

Baur continued to fly the helicopter during the search while Meyer functioned as copilot and primary communicator. As they approached the crash site, after about 4 min. of flight, debris was still falling so they slowed to avoid being hit.

"As they got closer, within two or three miles, Baur could see the aircraft body, not tumbling, but in a vortex almost like inside a tornado," the second official said.

Meyer made another revelation that was the result of long reflection after the accident.

"I was looking ahead . . . as we approached the crash site," Meyer said. "I saw some debris at 1,200-1,300 ft. falling at terminal velocity and fuselage fragments tumbling at 40-50 mi. per hour. The things falling at high speed were bodies still strapped in their seats. That is logically inconsistent if they came from the same explosion at the same time. On reflection, I have concluded that the bodies must have been blown upward before they came down. That indicates a violent explosion."

On this point, the two pilots' accounts agree, the officials said.

"Debris was falling like snow," according to Baur's testimony. "Among the particulate there was metal and paper, some of it glowing. Through all of that, things would come racing through -- two or three high-speed objects like sacks of potatoes. I believed them to be bodies that had been blown upward."

The pilots' opinion differ from the conclusion of inspectors that all the passengers were in the fuselage when it ripped apart from aerodynamic forces.

In an attempt to debunk the most egregious coverup and conspiracy theories, Meyer and other ANG officials remain adamant that their unit

was not part of any larger, undisclosed, multiservice operation. Operations the night of the crash were standard training flights to maintain currency with night vision goggles, rescue operations and in-air refueling.

The HH-60 flight was to be of about two hours' duration and would not extend more than 2 mi. off the Long Island southern coast. The HC-130 would drop flares, rafts and a para-rescueman and later refuel the helicopter in a communications-out, lights-out operation.

"No other people of other services were on the base at the time," Meyer said. Nor were there indications of the operations of drone aircraft, another theory that has surfaced as the possible cause of the crash. "No, there would have been some kind of notice."

AW&ST 3/10/97

Until the streak is adequately explained, the missile explanation will always be possible. I say missile explanation will always be possible, but wasn't. The evidence refutes every missile explanation suggested event. Likewise for meteor and bomb explanations, they will always be possible

been, but weren't.

The center tank did catch fire and there was a fireball, so center tank explanation will always be could have been and was, the only issue is when.

The wiring/ cargo door explanation explains the streak, refutes the bomb and meteor, and supplements the center tank explanation.

The wiring/cargo door explanation for TWA 800 is the more correct, more complete explanation.

I urge that Boeing 747s with Poly-X wiring be grounded until wiring is checked in cargo door areas known to have been faulty in the past.

I again request to meet with NTSB officials to present my wiring/ cargo door explanation.

Sincerely,

John Barry Smith
551 Country Club Drive
Carmel Valley, CA 93924
408 659 3552
barry@corazon.com

www.corazon.com

Citizen: USA

Major: US Army Retired

Pilot: Commercial, instrument rated, FAA Part 135 certificate.

Navigator: RA5C Vigilante

Owner: Mooney M20C

Survivor: Sudden night fiery fatal jet plane crash.

From: John Barry Smith <barry@corazon.com>

Date: June 12, 1998 2:38:23 PM PDT

To: Ronald.Wojnar@.faa.dot.gov

Subject: Red Paint Transfer Marks TWA 800 Cargo Door Area

Sam Farr

Member of Congress

17th District, California

House of Representatives

Congress of the United States

1117 Longworth Bldg

Washington, DC 20515-2861

John McCain III

Member of Congress

Chairman, Committee on Commerce, Science, and
Transportation

United States Senate

241 Russell Senate Office Bldg

Washington, DC 20510-0303

James Hall

Chairman,

National Transportation Safety Board

490 L'Enfant Plaza East, SW.
Washington, DC 20594

Robert Francis II
Vice Chairman
National Transportation Safety Board
490 L'Enfant Plaza East, SW.
Washington, DC 20594

Bernard Loeb,
Director of Aviation Safety
National Transportation Safety Board
490 L'Enfant Plaza East, SW.
Washington, DC 20594

Thomas E. Haueter
Chief, Major Investigations Division
National Transportation Safety Board
490 L'Enfant Plaza East, SW.
Washington, DC 20594

John B. Drake
Division Chief
Aviation Engineering Division
National Transportation Safety Board
490 L'Enfant Plaza East, SW.
Washington, DC 20594

Al Dickinson,
Lead Investigator, TWA 800
National Transportation Safety Board
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Lyle Streeter
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Renton, WA 98055-4056

Neil Schalekamp
Manager, Propulsion & Mechanical Systems and Cabin Safety
Branch
Transport Standards Staff
Transport Airplane Directorate, ANM-100
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Bob Breneman,
Aerospace Engineer,
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Transport Airplane Directorate, ANM-100
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Renton, WA 98055-4056

Dear Mr. Wojnar and Official Persons who feel responsibility in
explaining TWA 800,

Docket No. SA-516, Exhibit No. 7A, Structures Group Report,
page 34, A section of the structure outboard of H7 exhibited
evidence of red paint transfer marks on the upper skin (H8); only
the remnants of the shattered logo light window remain in the
window frame.

The above details a red paint transfer mark on the right

horizontal tail surface of TWA 800 directly aft of the red painted trim in cargo door area. This area shows missing red paint clearly in NTSB photo displayed at URL <<http://www.corazon.com/redpaintsmearssoloprint.html>>

The NTSB photographs are clear in color and detail. The TWA 800 reconstruction photograph shows abnormal green, white and red paint on the right side forward of the wing.

Normal TWA red trim paint scheme is seen at <<http://www.corazon.com/twapaintpixweb.html>> Only above the forward cargo door of the reconstructed fuselage of TWA 800 is seen the abnormal red paint smears.

The sequence is thus: bare aluminum skin is cleaned, primed, base coat of white applied, then red trim on top of white, then decals. This sequence is basic painting for Boeing 747s and confirmed by aviation professionals.

It is not red paint trim on primer with overspray, mask off, then paint white base coat around the trim.

The red trim is always on top of white base coat and means that the many, red, and large red paint smears between the passenger windows are red paint transfer marks. The red paint marks are not red paint exposed when white above is worn away, it is always red on top of white, not underneath.

This is further proven by skin which has red paint missing and thus exposing white undercoat. This is seen at URL <<http://www.corazon.com/TWA800hullrupture.html>> The white is always underneath the red. The green is always underneath the white.

Additionally, the added red paint between the windows is next to the missing red paint in the trim above the cargo door. Red paint went from one area to another.

The many red and large red paint transfer marks above the forward cargo door of TWA 800 indicate the cargo door opened in flight. The precedent of cargo door paint transfer marks was set by UAL 811 as described in NTSB AAR 92/02, page 41.

The red paint transfer marks indicate the red door below ruptured/opened in flight and slammed into the white paint above, removing the red trim paint and transferring it on top of the white paint. This is clearly seen between the passenger windows.

The red paint evidence coupled with the outward peeled skin on the side, and in the door area, and in the belly proves an explosive event occurred inflight in the cargo door area.

The downward crushed main floor beams confirm the explosive event. Docket No. SA-516, Exhibit No. 18A, Sequencing Study, page 20, "Downward separation directions were noted at STA 900, 880, 840, 820, 800, and 780..." and ""The initial opening of the fuselage lower lobe (e.g. LF6A) would have the expected result of rapid depressurization accompanied by collapse of the main deck floor for some distance forward of STA 1000. The red area recovery of interior components as far forward as STA 600 would not be inconsistent with this floor collapse and associated structural breakup."

The petal shaped outward bulge at the aft midspan latch of the forward cargo door pinpoints the location of the initial rupture of

the hull of TWA 800 as seen at URL <<http://www.corazon.com/petalbulge.html>> The aft latch is missing, the door frame is curved outward, and surrounding skin is shaped circular.

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The cause of the outward cargo door explosion being the center tank is refuted by the lack of soot on the few recovered forward cargo door pieces and other right side fuselage pieces.

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NTSB investigators also are intrigued by the aircraft forward door popping open in flight, an explanation supported by red paint smears, outward peeled skin, downward floor beams, and petal shaped bulge at aft midspan latch. "NTSB investigators have suggested unofficially that the streaks the pilots saw could have been light reflections from the skin of the aircraft, tongues of flame from the airliner or the forward door of the aircraft popping open, a possibility that still intrigues investigators, the second official said." AW&ST 3/10/97

Basic NTSB generated evidence for TWA 800 in photos, text, sooting diagrams, tables, and drawings, a NTSB produced report AAR 92/02, and your visual interpretations of NTSB photograph at <http://www.corazon.com/redpaintsmearssoloprint.html> and on NTSB CD-ROM proves that the forward cargo door of TWA 800 opened in flight.

The evidence above proves the the cargo door was not all latched, all locked, and all intact at water impact, as previously believed based upon examination of only eight of the ten cargo door latches. Docket Number SA-516, Exhibit No. 15C, Report Number 97-82, Section 41/42 Joint, Forward Cargo Door, "Examination of the lower lobe forward cargo door showed that

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The wiring/cargo door explanation for TWA 800 must be thoroughly investigated to rule in or rule out the reasonable conclusions reached by the careful analysis of red paint smears, outward peeled skin, downward floor beams, petal shaped bulge at aft midspan latch, and cracked to bare conductor wires discovered in TWA 800 by NTSB.

The wreckage of TWA 800 is the victim at autopsy. It is the victim saying look at me, I exploded in flight, right there at the aft midspan latch. Just like I did before in 1989 with UAL 811

and left paint smears, outward peeled skin, aft midspan latch rupture, sudden loud sound on the CVR and power cut to the FDR. Don't ignore me; don't deny me; do something about me.

Sincerely,

John Barry Smith
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408 659 3552
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www.corazon.com

Citizen: USA

Major: US Army Retired

Pilot: Commercial, instrument rated, FAA Part 135 certificate.

Navigator: RA5C Vigilante

Owner: Mooney M20C

Survivor: Sudden night fiery fatal jet plane crash.

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18. intact R2 door near shattered cargo door.
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27. first pieces off plane came from forward cargo hold just forward of the wing
28. at least nine missing never recovered bodies, just fragments
29. initially thought to be a bomb
30. wreckage debris shows cargo door shattered in many pieces
31. aft portion of forward door which includes aft midspan latch and locking handle missing from recovery effort
32. no soot on maintenance hatch
33. no soot on front spar of center wing tank
34. no burned bodies forward of the wing and very few burned at

all

35. aft cargo door sill, latches, and locks recovered
36. forward cargo door sill, latches, and locks not recorded in data base
37. no orange zone pieces recorded in database
38. no orange zone discussion in public record other than identification
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50. initial event time was 20:31:12 at 13700 on 17 July 1996 eight miles off coast of Long Island.

Reasonable conclusions derived from facts above:

1. water in forward cargo bay.
2. chafed bare wire touched by water.
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5. aft midspan latch of forward cargo door partially unlatches.
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From: John Barry Smith <barry@corazon.com>

Date: June 12, 1998 2:40:11 PM PDT

To: Ronald.Wojnar@faa.dot.gov

Subject: Red Paint Transfer Marks TWA 800 Cargo Door Area

Sam Farr

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17th District, California

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Congress of the United States

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The above details a red paint transfer mark on the right horizontal tail surface of TWA 800 directly aft of the red painted trim in cargo door area. This area shows missing red paint clearly in NTSB photo displayed at URL <<http://www.corazon.com/redpaintsmearssoloprint.html>>

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From: John Barry Smith <barry@corazon.com>

Date: June 23, 1998 4:45:18 PM PDT

To: Ronald.Wojnar@faa.dot.gov

Subject: My errors corrected

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1601 Lind Ave. S.W.
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Neil Schalekamp
Manager, Propulsion & Mechanical Systems and Cabin Safety
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Bob Breneman,
Aerospace Engineer,
Federal Aviation Administration
Transport Airplane Directorate, ANM-100
1601 Lind Ave. S.W.
Renton, WA 98055-4056

Dear Mr. Wojnar, June 23, 1998

NTSB just sent me a two page letter. It was indirectly from Dr. Bernard Loeb. The first page was a form letter from NTSB reporting that I had used the wrong zip code on my hand addressed letter to Dr. Bernard Loeb. The second page was a copy of the misaddressed letter which was my 13 March 1998 letter to everyone addressed above.

This recent letter from NTSB tells me much. It tells me Dr. Bernard Loeb received the letter all right because the correction came from NTSB which means NTSB received it all right and everyone in NTSB knows Dr. Bernard Loeb as the Director of Aviation Safety and point man for TWA 800. I assume that Director Loeb gives close scrutiny to my letters to catch a one digit zip code error from incorrect 20591 to correct 20594. I assume this is a way for Director Loeb to point out errors in my correspondence.

And he's right. It was an error. It may be trivial in this case but potentially catastrophic when flying. As a navigator I recognize a serious error and the lack of attention to detail in a wrong

number. It is a mistake I shall remember always. Dr. Bernard Loeb has shown me the need to check my numbers. Accuracy is everything in aviation and one digit being wrong is enough to kill. It happened with a Korean flightcrewmember avoiding the digit '4' and putting in a different number into his inertial navigation computer which then led him, his plane and his passengers over enemy territory which led to a shootdown, KAL 007. It happened to me when hand addressing envelopes of hard copy letters to back up the electronic emails. I checked out the error and traced it to a mixup of zip codes between NTSB and FAA. NTSB is 20594 and FAA is 20591 and I mixed them up.

There is an additional error on my address to Dr. Bernard Loeb. I put "490 L'Enfant Plaza East SW" instead of the correct "490 L'Enfant Plaza SW."

The principle is the same: Errors kill and accuracy counts.

I shall follow the example of NTSB and recognize the error and correct it.

I may have made another error recently in regard to TWA 800: I said that the many large red paint marks between the passenger windows above the forward cargo door of TWA 800 wreckage were 'transfer marks'. I stated they were red marks from the red fuselage skin below coming up and smashing into the white and leaving the red paint on top, similar to UAL 811.

There is now serious dissent that states the many large red paint marks are red paint from overspray of the trim below. The red marks are revealed white paint between the passenger windows is peeled back, revealing the red underneath. Several painters of airliners give conflicting opinion. The conclusive evidence is on

the wreckage of TWA 800.

I ask NTSB and Director Loeb, can you confirm the paint sequence for the many large red paint marks between the passenger windows as seen in URL <http://www.corazon.com/redpaintsmearssoloprint.html> and <http://www.corazon.com/TWA800hullrupture.html>? Are they red on top of white paint, or are they red underneath white paint? Is the red underneath or on top?

It's vitally important. If red is underneath white, then I have made another error and wish to correct it. If red on top of white then it appears that the red could have come from skin below opening up and slamming together causing paint transfer marks, thus confirming cargo door opened in flight.

There is no expense involved, only a short time for a metallurgist to climb up on a stepladder with a magnifying glass and look at the TWA 800 red paint marks.

As NTSB pointed out to me, numbers are to be accurate. I believe NTSB also respects numbers.

That's why eight is not ten. And never will be. That's why all ten of the forward cargo door latches must be recovered and examined and determined to have been operating normally before the cargo door is ruled out as culprit. That conclusive examination of all ten has not been done and that's why the forward cargo door can not be ruled out.

As NTSB told me to use the right numbers in my zip code, I ask NTSB to use the right numbers on the forward cargo door. There are ten identical latching pins and cams on that door and

examining only eight is not good, not trivial, and wrong for NTSB.

For me to write NTSB zip code accurately is right for me. To check all ten latches is right for NTSB.

The two missing midspan latches that NTSB have not examined have been shown to carry loads as reported in AAR 92/02 where the aft midspan latch pin showed heat damage from hard contact. All ten latches are vital for proper operation of that door.

Only checking eight of ten is as bad as putting 20591 instead of 20594.

So, I acknowledge an error pointed out to me by NTSB and I remark on another error nearby, and corrected both.

I ask that NTSB do the same for themselves.

There is additional NTSB evidence which is perplexing if the center tank explosion as initial event is to be confirmed:

Docket No. SA-516, Exhibit No. 7A, Structures Group Report, page 33: "5.1 Horizontal Stabilizer, "Some of the items found in the horizontal stabilizer are sections of seat track, a stator blade from turbine section, and glitter." On 5.1.1 Right Horizontal Stabilizer, page 34, "An engine stator blade from turbine section penetrated the upper honeycomb surface near the outboard trailing edge." And same page: "A section of the structure outboard of H7 exhibited evidence of red paint transfer marks on the upper skin (H8); only the remnants of the shattered logo light window remain in the window frame."

Seat track, glitter, stator blade and red paint all had to come from up front because that's where they were. All of these items must have become embedded in the horizontal stabilizer in flight, because it's the only way they could have gotten there based upon the separation of nose and tail long before water impact. The only way for the stuff in front to get to the back in flight is for it to come out of the forward baggage hold. One very good way, a reasonable way, a way that's happened before, is for the forward cargo door to come open inflight and allow glitter contents of cargo bins, a seat track, and red painted door top to be blown aft. It also allows a fodded engine three to cause stator blade to be thrown out and back into right horizontal stabilizer.

A way to rule a repeat door opening event out is to examine the door and determine if it was functioning normally. That can not be done yet because only eight of ten latches have been recovered as well as on 20% of the door structure. Until door totally recovered it can not be totally ruled out. Until cargo door totally ruled out, TWA 800 investigation is not totally complete.

Examining many large red paint markings can assist in that determination. Are the red paint marks on top of the white paint or underneath the white paint between the passenger windows above the forward cargo door?

Sincerely,

John Barry Smith
551 Country Club Drive
Carmel Valley, CA 93924
408 659 3552
barry@corazon.com

www.corazon.com

Citizen: USA

Major: US Army Retired

Pilot: Commercial, instrument rated, FAA Part 135 certificate.

Navigator: RA5C Vigilante

Owner: Mooney M20C

Survivor: Sudden night fiery fatal jet plane crash

From: John Barry Smith <barry@corazon.com>

Date: July 2, 1998 9:34:13 PM PDT

To: Ronald.Wojnar@faa.dot.gov

Subject: Response to Chairman Hall's letter to Congressman Farr.

Sam Farr

Member of Congress

17th District, California

House of Representatives

Congress of the United States

1117 Longworth Bldg

Washington, DC 20515-2861

John McCain III

Member of Congress

Chairman, Committee on Commerce, Science, and
Transportation

United States Senate

241 Russell Senate Office Bldg

Washington, DC 20510-0303

James Hall

Chairman,

National Transportation Safety Board
490 L'Enfant Plaza East, SW.
Washington, DC 20594

Robert Francis II
Vice Chairman
National Transportation Safety Board
490 L'Enfant Plaza East, SW.
Washington, DC 20594

Bernard Loeb,
Director of Aviation Safety
National Transportation Safety Board
490 L'Enfant Plaza East, SW.
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Thomas E. Haueter
Chief, Major Investigations Division
National Transportation Safety Board
490 L'Enfant Plaza East, SW.
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John B. Drake
Division Chief
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Al Dickinson,
Lead Investigator, TWA 800
National Transportation Safety Board
490 L'Enfant Plaza East, SW.

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Ron Schleede,
Investigator, TWA 800
National Transportation Safety Board
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James F. Wildey II
National Resource Specialist
National Transportation Safety Board
490 L'Enfant Plaza East, SW.
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David Mayer
NTSB Wreckage Database Manager
National Transportation Safety Board
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Washington, DC 20594

Thomas McSweeney
Director, Aircraft Certification Service
FAA National Headquarters
800 Independence Avenue, S.W
Washington D.C 20591

Lyle Streeter
FAA AAI
Aircraft Accident Investigator
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Bob Breneman,
Aerospace Engineer,
Federal Aviation Administration
Transport Airplane Directorate, ANM-100
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Renton, WA 98055-4056

Dear Mr. Wojnar,

July 2, 1998

Congressman Sam Farr sent me a letter on June 16th enclosing a letter to him from Chairman Jim Hall on June 8th discussing TWA 800 and cargo door cause. The letter from Chairman Hall to Congressman Hall contains various inaccuracies which require clarification:

Chairman Hall, "...Mr. Smith expressed his belief that the failure of cargo door led to the accident."

Chairman Hall has misstated my 'belief.' My belief is a wiring short led to the accident. As NTSB states a wiring short led to center tank explosion led to the accident, I say a wiring short led to cargo door rupturing in flight leading to the accident. Cargo door did not 'fail'; it did what it was told to do, unlatch.

Chairman Hall, "...numerous letters..."

Yes, that's correct. Three hundred and thirty eight to NTSB officials since July 20, 1996, three days after TWA 800, all with same consistent explanation; hull rupture forward of the wing on the right side at cargo door area. After researching hull ruptures on high time 747s for seven years, it was readily apparent that TWA 800 matched the previous accidents, one of which was confirmed as wiring/cargo door caused, UAL 811.

Chairman Hall, "Examination of the wreckage has not revealed any evidence..."

This is the Chairman of NTSB's opinion about a probable cause and is same as the Chairman of NTSB's opinion in 1990 about the forward cargo door for UAL 811 in AAR 90/01 which was in error and corrected with AAR 92/02. The forward cargo door has opened and fooled before.

Chairman Hall, "The cargo doors were found with their respective fuselage sections..."

Not accurate. Only 60% in pieces of the aft cargo door and only 20% in pieces of the forward cargo door were found, recovered

and examined. Twenty percent of a door is not 'a door.'

Chairman Hall, "...the examination of the cargo door latches found that they were closed at the time of impact."

Not true. There are ten latches on each door and only eight of the forward door were examined because only eight were recovered. Above quote also implies some latches opened but not in flight. What is the status of the forward midspan latches? Found? Open or closed? Damaged? They are not in the wreckage database, they are not hung on wreckage reconstruction, and they are not discussed in the forward cargo door Exhibit 15C.

Chairman Hall, "Safety Board metallurgists and structures engineers have carefully examined the cargo door..."

Not true because it's impossible. Only 60% in pieces of the aft cargo door and only 20% in pieces of the forward cargo door were found so it was impossible to carefully examine the cargo doors. Missing from the forward cargo door recovery are two midspan latches, manual locking handle, eight viewing ports, two overpressure relief doors, and 80% of the door skin. Most of the forward cargo door is not in wreckage recovery database nor hung on wreckage reconstruction. Who is the 'metallurgist'? Mr. Wildey? Who is the 'structures engineer'? Mr. Breneman?

Asking someone who said something once to say it again is not an impartial confirmation of a questioned evaluation.

Chairman Hall, "...carefully examined...the latching mechanisms..."

Not true. Only eight of the ten latching mechanisms were recovered to be examined. Two latches have not been examined

at all.

Chairman Hall, "...carefully examined...the surrounding structure..."

Not accurate. Most of the surrounding structure is missing. Many nearby large red unusual paint markings were not evaluated.

Chairman Hall, "...found no evidence of pre-impact failure..."

Not supported opinion. There is much clear visual evidence of pre-impact failure with petal shaped rupture at aft midspan latch, outward peeled skin on side and belly, unilateral shattered fuselage in cargo door area, downward floor beams, and several large red paint markings between passenger windows only above cargo door.

Chairman Hall, "...no evidence...that the door had opened in flight."

Not true. A FAA structures engineer at one time agreed that paint markings and structural deformation indicated an outward explosion in cargo door area. There is much hard, real, and documented evidence below that forward cargo door ruptured/ opened in flight.

1. right horizontal stab has red paint smear
2. stator blade in right horizontal stab behind engine number 3
3. inward crush top of cargo door
4. top of cargo door attached to hinge
5. petal shape of rupture area around aft midspan latch
6. missing pieces of forward cargo door include locking handle, latching pins, overpressure relief doors, midspan latches

7. rectangle visible of explosive decompression zone of outward peeled skin on right side forward of the wing on right side
8. downward movement of floor beams near cargo door
9. hoop stresses found
10. CVR sudden loud sound
11. FDR abrupt power cut
12. missing turbine blades in engine number 3.
13. soft body impacts on blades in engine number 3.
14. outward peeled skin near top of nose, under belly, and in cargo door area.
15. red paint smears above cargo door on white paint
16. soot on most blades of engine 3.
17. starboard side more damaged than port side
18. intact R2 door near shattered cargo door.
19. poly x is known to be susceptible to chafing and present 20. section 41 is known to be weak
21. history of cargo door openings in past in various airliners
22. EPR problems on aircraft before or during fatal flight.
23. fires in forward cargo hold in the past on Boeing 747s.
24. vertical tears in fuselage skin forward of the wing on the right side
25. singe marks on right side of fuselage show burnt skin, then abruptly at tear line there are no singe marks
26. red paint rubbed off revealing white paint underneath on skin above cargo door area
27. first pieces off plane came from forward cargo hold just forward of the wing
28. at least nine missing never recovered bodies, just fragments
29. initially thought to be a bomb
30. wreckage debris shows cargo door shattered in many pieces
31. TWA 800 matched to AI 182, PA 103, and UAL 811.
32. no soot on maintenance hatch
33. no soot on front spar of center wing tank

34. no burned bodies forward of the wing and very few burned at all
35. aft cargo door sill, latches, and locks recovered
36. forward cargo door sill, latches, and locks not recorded in data base
37. no orange zone pieces recorded in database
38. no orange zone discussion in public record other than identification
39. chafed to bare wires found in cargo door area
40. wiring defects found on Boeing airliners
41. water observed pouring out of forward cargo hold of a Boeing airliner, cargo holds have bilges.
42. no soot on keel beam forward of the wing
43. compression fractures right side forward of the wing
44. tension fractures left side forward of the wing
45. seats in the rows in the explosive shatter zone above cargo door are in red zone and not sooted
46. aft cargo door sill sooted
47. many witnesses said they saw downward streak that was red-orange
48. NTSB official said possibility of forward door popping open was intriguing.
49. FAA official said, then recanted, that paint smears and structural deformation indicated outward explosion.

I again ask for a meeting with an NTSB representative to present my nine years of research for an impartial evaluation of the evidence derived from official governmental aviation agencies.

Sincerely,

John Barry Smith

From: Lyle Streeter <Lyle.Streeter@faa.dot.gov>
Date: November 4, 1997 7:27:16 AM PST
To: barry@corazon.com (IPM Return requested) (Receipt notification requested)
Subject: for Office of Accident Investigation

----- Forwarded with Changes

From: WebmasterAAI
Date: 11/4/97 6:41AM
To: Lyle Streeter
To: Joseph Manno
Subject: for Office of Accident Investigation

----- Forwarded

From: barry@corazon.com at Internet
Date: 11/3/97 7:17PM
To: WebmasterAAI at AAI
Subject: for Office of Accident Investigation

-

Mr. Smith - thank you for your input on the TWA800 investigation. I have passed your information along to our investigators for their consideration.

Lyle Streeter
Office of Accident Investigation

Forward Header

Subject: for Office of Accident Investigation
Author: WebmasterAAI at AAI
Date: 11/4/97 6:41 AM

Dear Webmaster, please forward to Office of Accident Investigation.

Dear Office of Investigation, below is letter in reply to FAA call to me about investigation into TWA 800. Are you involved in this?

Sincerely,
John Barry Smith

Bob Brenerman,
Aerospace Engineer,
Federal Aviation Administration
Transport Airplane Directorate, ANM-100
1601 Lind Ave. S.W.
Renton, WA 98055-4056
(206) 227-2100
Ron Wojnar, Manager
Darrell Pederson, Assistant Manager

Dear Mr. Brenerman,

31 Oct 97

Thank you for your telephone call on Thursday, 30 Oct 1997.
You told me

that a letter had been sent to me from FAA about my concerns about the forward cargo door area in Boeing 747s rupturing in flight.

We were able to chat for a few minutes about the crash of TWA 800 and

others. You were able to tell me that:

1. The bottom sill of the forward cargo door is intact and attached to fuselage skin but in several pieces.
2. The bottom latches are latched around the locking pins.
3. AD 88-12-04 was implemented in TWA 800 including all other ADs.
4. The nose hit the water on the right side and caused inward hydraulic impact damage in door area.
5. The door did not open in flight.
6. The door was found with nose debris and did not come off first.
7. Admiral who said door was found first was wrong because metal piece was misidentified underwater.
8. Nose came off at station 741.
9. You didn't scrutinize the paint smears on TWA 800 reconstruction photo.
10. PA 103 and AI 182 were inflight breakups and would show similar evidence but were proven to be bombs.
11. NTSB has tagged each piece of metal of wreckage and it's plotted.
12. You referred my photos to NTSB for reply.
13. A letter is coming to me from FAA explaining the above.

Well, sir, that was a lot and thank you again for chatting with me. For

the first time in a year and a quarter I was able to hold a scientific conversation about TWA 800 with a government authority. As an engineer and commercial pilot we respect science. I contend fuselage rupture at cargo door area is all science which means it is reproducible and explainable.

Your statement of inward damage to the cargo door area from impact with water took me aback as I have not heard that before. I have had time to digest that information and wish to reply in this letter. I invite you to have a scientific discussion with me about metal and wreckage and air pressure. I'm not an engineer but a pilot with aerodynamic background.

I understand your sequence of events. Essentially it is center tank explosion of unknown origin, nose comes off at station 741, plane falls and later fireball and destruction. The nose falls intact and alone on right side into water which hydraulic impact pushes metal skin into and past the stringers and bulkheads in cargo door area while leaving port side smooth and intact. Forward cargo door is in pieces from this impact and is in debris field of nose. The lower part of door has latches which are latched and attached to bottom sill of frame indicating door did not open in

flight.

Do you understand my sequence? Did you go to my extensive web site which documents my explanation? To present such a complex sequence concisely is difficult but I will try.

Fuselage ruptures at forward cargo door area for unknown reason. Nose comes off at station 741, plane falls and later fireball and destruction.

The nose falls intact and alone on right side onto water which gives

hydraulic impact damage to nose gear doors which drives them inward. When

fuselage ruptures at 13700 feet the skin is burst outward and the red

painted metal on door is slammed against white painted area between windows

above the door and red paint is transferred leaving red smears only above

rupture area. Fireball is ignited by flaming fodded engine number three at

7500 feet. Sudden loud sound is explosive decompression when fuselage

ruptures. Streak is shiny metal piece of door spinning away reflecting

evening sunlight to ground observers. Missing bodies were ingested into

number three engine. Abrupt power cut when cargo hold floor is severely

disrupted. Nose comes off when huge hole appears in side of nose and 300

knot wind tears it off.

I offer that the fuselage rupture explanation explains all the evidence of streak, sudden loud sound, abrupt power cut, debris pattern, and many other observed events. I will be glad to go over them one by one with you.

Center tank explosion as initial event leaves too many contradictory conclusions such as autopsies with no burns, abrupt singed areas on fuselage skin, soundless explosion, no ignition source, etc.

As an engineer and pilot we understand the enormous internal forces of 4

pounds per square inch on a nine foot by ten foot outward opening door and

the incredible power of 300 knots of slipstream on a weakened airframe. I

trust you respect reality which means things you can see, touch, hear, and

feel. In that regard, let me attempt to rebut the inward impact damage at

cargo door area conclusion with the following reality which can be checked

out:

If we look closely at NTSB TWA 800 reconstruction photograph there are red

paint smears on the white paint between windows alongside the fuselage.

These red paint smears are only above and slightly aft of the forward door.

The cargo door normally has red paint on it. The space between the windows

normally had white paint. The between window spaces now have

red paint
smears on them in the reconstruction. This indicates the red
colored metal
below expanded upward and struck the white painted area and
transferred the
red to the white. If the damage had been caused by inward action
of water
impact there would be no red paint smears on the white paint
between the
windows. But there are many smears and that is consistent with
rupture
outward, not inward.

Let us assume that the forward cargo door was latched and rode
nose down
to the water. That rules out FBI innocently altering latches
searching for
explosive residue in their lab, or a mistaken identity with the
identical
aft cargo door, and confusion with any other of the twelve doors
on the 747.

Because the door was latched does not mean there was not a
fuselage
rupture at the cargo door area. In fact, I believe the picture shows
such a
rupture in the shattered right side forward of the wing. I don't
have three
dimensions but it appears to be a round outward rupture hole at
lower left
of cargo door. Doors can open at places other than where they are
supposed
to.

The damage on the right side is consistent with an outward
opening

rupture. It does not look like impact damage because it is located only around the cargo door and not far above it or aft. Of course the entire nose is not reconstructed nor is the NTSB photo complete with part of the extreme forward part missing so it is difficult to make definite conclusions based on observations of pictures, as you said in your call.

Hands on examination is needed and you have that opportunity.

I am very familiar with AI 182 and PA 103 and 'they' did not 'prove' a bomb was the cause. On the contrary the evidence is very flimsy and could

have gone either way of structural failure or bomb. AI 182 had structural

failure as cause but said it was bomb that blew out the forward cargo hold

on the right side without naming the door. AI 182 door description on the

bottom of the ocean matches TWA 800 door area NTSB photo.

PA 103

reconstruction drawing matches UAL 811 after landing with huge hole in

side.

The importance of including other similar accidents is to group them and

then draw conclusions based upon deductions. I did not choose the flight

numbers; they were included only because of the evidence of sudden loud

sound on CVR, inflight damage, abrupt power cut, and many more significant

similarities. If you know of any more high time Boeing 747s that have a fatal accident centered near the forward cargo hold that left a sudden loud sound, an abrupt power cut, foddred engines, missing bodies, and forward door in pieces, and I'll include them in the group. So far it's only AI 182, PA 103, UAL 811, and TWA 800. As an aerospace engineer do you not welcome a possible scientific explanation for an aviation event rather than shadowy conspiracy Sikh terrorists or evil foreign secret agents? But to talk of AI 182 and PA 103 is fraught with emotion and difficult without the reports to point to specific items. But let us at least agree that AI 182 and PA 103 and UAL 811 and TWA 800 all had inflight structural problem starting forward of the leading edge of the wing, with three of them pinpointing to forward cargo hold.

I checked TWA 800 station 741 nose separation point on PA 103 and it matches too. Both noses came off at same point on fuselage give or take a few inches.

To be specific about TWA 800 cargo door:

1. Is it confirmed it is forward and not aft or other latches?
2. Are all latches accounted for? There are eight below and one on each side for total of ten.
3. Are all latches latched around locking pins? If only one

unlatches that
may be sufficient for internal pressure to bulge out door into
slipstream
when ultimate destructive force of 300 knots tears door away
and nose off.

4. Mid span latches are particularly critical as rupture appears to
be in
middle of door.

5. Where are the missing pieces of the door? Only about 20
percent of the
door is in reconstruction. The missing portions may be the pieces
that fell
first and closest to event site and still unfound.

To say forward cargo door was latched is not sufficient to rule
out

rupture at cargo door area as initial event for TWA 800 because:

1. Not all latches are accounted for.
2. Most of door still missing.
3. Rupture can occur with a latched door but failure at corners or
middle.

4. Description of TWA 800 door area matches AI 182 door area
which had door

attached to fuselage skin which was explained as fuselage
rupture at

forward cargo hold (caused by bomb). TWA 800 was thought to
be bomb also

based upon early evidence which NTSB computer simulation
showed baggage

spewed forth from forward cargo hold as first event.

I understand the problem NTSB has with that unilateral damage
on right

side because a center tank explosion should give bilateral
damage and

doesn't. So the water impact explanation is offered. If damage at cargo door area is inward then no rupture and if latches latched then no door opening.

What can be done to persuade you that rupture occurred? What evidence is

there to examine? Can you confirm the direction of the metal in the

forward cargo door area of TWA 800? Is that scientifically possible? If it

is outward will you reconsider your conclusion of not door failure? I point

to the red paint smears as evidence to warrant such an effort at confirmation of metal direction, in or out.

If you should find that the right side damage is outward and not inward,

or not all of the latches or pieces of door are accounted for, please

reconsider your conclusion that the door area did not fail in flight and

rupture.

Please establish a dialogue with me. My email is

barry@corazon.com and I

can send and receive high resolution color photographs via email. My web

site has accident reports from DC-10 to B747 and others to support cargo

door fuselage rupture. I've attached some of the web page analysis for your

consideration.

I apologize for any name misspellings; my hearing is shot from thousands

of hours in recips and jets and I may have heard names wrong on the phone.

I may have heard other statements wrong too and that is why I prefer writing to talking such as this letter and email. Please correct any misstatements I may have made.

Sincerely,

John Barry Smith

Email: barry@corazon.com

Page: <http://www.corazon.com/crashcontentspagelinks.html>

<http://www.corazon.com/811bigholephotobetter.html>

From: John Barry Smith <barry@corazon.com>

Date: November 5, 1997 11:21:52 AM PST

To: FAAOAI

Subject: **Cargo door rupture amplification explanation**

Lyle Streeter

Office of Accident Investigation

Federal Aviation Administration

From: Lyle Streeter <Lyle.Streeter@faa.dot.gov>

To: barry@corazon.com (IPM Return requested) (Receipt notification requested)

Dear Mr. Streeter,

5 Nov 97

Thank you very much for your prompt reply to my email regarding my response to Mr. Brenerman of the FAA Northwest region. He had called me in response to a directive from Mr. McSweeney to Mr. Wojnar of Transport Airplane Directorate to 'investigate Mr. Smiths' concerns' about the forward cargo door as asked by my congressman, Mr. Sam Farr, 17th District, CA.

I have received the letter that Mr. Brenerman referred to in his telephone call to me. I have responded in detail to it and it is attached. Your office is mentioned in it.

Cargo door: UAL 811 and NTSB AAR 92/02 is my model and explanation for what happened to TWA 800 and others; chafing wires turn on door motor which unlatches midspan latches and door ruptures at that point if locking sectors hold back lower cams or door opens completely if they don't. After rupture the sequence is top of door slamming upwards and away leaving large hole that the ultimate destructive force of 300 knots now crumples and tears off weakened nose leaving sudden loud sound of explosive decompression on CVR and abrupt power cut to the FDR as main equipment compartment lines are severed. All other specific evidence for each accident is explained on web site corazon.com.

I welcome discussion with you and your investigators. I assume that since the Northwest Region has been invited to investigate TWA 800 by a senior FAA official, Mr. McSweeney, the Office of Accident Investigation has permission to have a go at it too. My enclosed letter to FAA lays it all out as best as I can; I would appreciate your opinion about the content.

Here is my current communication dilemma. I have email with photo receive and send capability. Mr. Brenerman and FAA Northwest did not give me their email addresses and Mr. Pederson said they don't have internet access so I have to send everything snail mail to them which I have and will again. You at Office of Accident Investigation have email and are internet savvy as shown by your prompt email response to my request for FAA webmaster to forward my letter to you. However, sad to say, government servers do not process photographs so I shall have to refer you via URLs to my extensive web site at www.corazon.com with color photographs and scanned in text of government accident reports used for reference.

Let's do everything via the internet. I'll email text to you and refer to a URL when a photograph is needed. (<http://www.corazon.com/TWA800hullrupture.html> is annotated NTSB photo of rupture area.) I shall also enclose my detailed response to Mr. Brenerman's letter to me. If you could email that to him I would be grateful. I shall send it snail mail to him also but that will take a few extra days and to be direct, this is a life and death matter and time is urgent. Please contact me at 408 659 3552 for voice discussion.

Sincerely,

John Barry Smith
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Bob Brenerman,
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Ron Wojnar, Manager
Darrell Pederson, Assistant Manager
Tom McSweeney, Director ACS

Dear Mr. Brenerman,

5 Nov 97

Thank you for your 29 Oct 97 letter reference 97-120S-699. It was signed by Mr. Pederson for Mr. Wojnar but I'm assuming you wrote it and you are the "FAA structural engineer who assisted the NTSB at the hangar in Calverton, New York..."

I would prefer to discuss with you, an airplane person with the hands on experience of TWA 800, the details of your letter.

First, the politics...why is the Northwest Region of the FAA given the task by Mr. McSweeney through my congressman to 'investigate Mr. Smith's concerns'? Would not the Office of Accident Investigation of the FAA be more appropriate?

Especially since the Northwest Region of the FAA is the only FAA authority to go on record as supporting the center tank as initial event with its own ignition theory?

"Worn Wiring May Have Had
Role In TWA Disaster

Chafing in

Fuel Tank Conduits Found

in Study of Early 747s

By Don

Phillips

Washington Post Staff Writer
Wednesday, July 2, 1997; Page

A16

The Washington Post

Northwest

A theory, developed by the FAA's

unlikely chain of

Region in Seattle, involves an

problem causes a

events in which an electrical

tank to the

fire to burn outward from the wing

designed

wing tip through a vent tube that is

tank. At the

to allow vapors to escape from the

reverses

wing tip, the flame front then

another vent

direction and travels back down

tube into the center tank.

800

The NTSB, conducting the TWA

theory as only

investigation, played down the

one of many."

So, you see, Mr. Brenerman, my cargo door explanation was sent

for evaluation to a group who already have their own contrary explanation for TWA 800, not exactly an open mind to an impartial forum for investigation. It's like asking someone to prove they're wrong. Few will attempt to overcome that set bias. I hope you can.

By the way, we are as one on chafed wiring as a problem. NTSB AAR 92/02 for UAL 811 had chafed wiring which shorted to turn on door motor which unlatched door. This explanation of why door ruptured/opened may well explain why fuselage ruptured at cargo door area for AI 182, PA 103, and TWA 800 also.

One last thing on politics: We are the good guys, we seek to prevent airplane crashes, we are open, we discuss the possibilities relying of real evidence that we can see, touch, and hear. If my style 'chafes' when I rebut or attempt to refute your line of thinking, please don't take it personally. We are not indifferent; we care. We are on the same side with the same goal, as you state in your letter to me, "...the first priority of the ... (FAA) is ensuring the continued operational safety of aircraft."

In that regard let me dissect your letter of 29 Oct 97 very carefully and reply to each observation and conclusion you have made about TWA 800 and others.

Assumptions:

1. You are a FAA structural engineer and understand the Boeing 747 airframe.
2. I am a FAA licensed commercial pilot, instrument rated and previous FAA Part 135 certificate holder.
3. NTSB published documents such as AAR 92/02 shall be assumed to be correct unless otherwise noted.

4. UK AAIB and Canadian/Indian published government aircraft accident reports shall be assumed to be correct unless otherwise noted.
5. You have had hands on experience with TWA 800 and can confirm or refute deductions based upon personal experience lacking a published NTSB AAR for referral.
6. The color photograph of the reconstruction of TWA 800 is complete and accurate. (Photo included in letter and at www.corazon.com/800foreafthorreconweb.html.)
7. You may soon have internet access and can examine my web site at www.corazon.com which has scanned text of accident reports for referral. Email is available to you and you can correspond to me at barry@corazon.com
8. Hindsight is great and everybody makes mistakes once in a while.

29 Oct 97 letter to me from you:

Paragraph four, sentence two:

"However, when the wreckage of the nose section was recovered it became evident that the forward cargo door had not opened in flight or separated from the nose section prior to impact with water."

Well, sir, let's be picky. A door means a door and not pieces or segments or sections. The forward cargo door of TWA 800 is in tatters, it's shattered, it's in pieces; it's everything but a 'door'. It is so shattered that only 20% is recovered and reconstructed. What is the weight of a normal door? What is the weight of the recovered pieces? For the purposes of discussion I use 20%. If wrong, provide a more accurate number please. To base the conclusion, "...forward cargo door had not opened in flight or separated from the nose section..." based upon only 20% of the evidence is not valid.

Especially since I have pinpointed the location of door failure/rupture to the aft midspan latch of the forward cargo door and that latch is not connected to the frame, as seen in reconstruction photo. The identification of the aft midspan latch as the point of failure is deduced by a. observing the large round hole in reconstruction photo of TWA 800, b. reading descriptive text about the AI 182 door rupture, and c. viewing the recovered door of UAL 811. The UAL 811 door shows a small door rupture at aft midspan latch area. The forward midspan latch pin was not damaged while the aft latch pin was. The UAL 811 door had a rupture hole straight through the door. That was an opening in the door. The door opened inside the door itself as well as at the latches.

(<http://www.corazon.com/811page35analydoor.html>
<http://www.corazon.com/811doorhalves.html> and
<http://www.corazon.com/811doorhalvesphoto.html> give URLs of pictures and text of UAL 811 and <http://www.corazon.com/182pixtext1web.html> gives text about forward cargo door area of AI 182.)

UAL 811 is the model for the three other accidents, AI 182, PA 103, and TWA 800. It always comes back to NTSB AAR 92/02. (Not the first UAL 811 NTSB AAR which was NTSB/AAR-90/01 and then superseded by NTSB AAR 92/02, written after door was recovered and conclusions changed. Everybody makes mistakes once in a while.)

The TWA 800 reconstruction photo shows other similarities to UAL 811 which will be discussed as we go along.

Paragraph five, sentence one:

"The FAA structural engineer who assisted the NTSB at the hangar in Calverton, New York, verified that the forward cargo door was recovered at the same location as the rest of the nose section."

Well sir, again, not door recovered but pieces were. Let us assume the bottom 5% of the door pieces with the bottom eight latches was found with the nose section and attached to the sill and fuselage of TWA 800 as seen in NTSB photo. (That matches the description of AI 182 from video film 6700 feet underwater also, corazon.com/182pixtext1web.html.) Because 5% of the door of TWA 800 was found with the nose does not rule out door rupture at aft mid span latch. It does not rule out fuselage rupture caused by door failure. What it does do is say that bottom piece of door stayed with nose until water impact. Rupture at midspan latch still possible.

Paragraph five, sentence two:

"A further examination of the recovered wreckage showed that the upper hinge was still attached to the both the fuselage and the door."

Exactly! That is what the model shows too! UAL 811 had the door tear away with the top piece taking upper flange of the door and all the hinge and attachment bolts with it. The hinges of UAL 811 were in the same condition and attached to the door as TWA 800. (corazon.com/811page35analydoor.html) NTSB AAR 92/02 page 35 and 41: "The hinge pins and all hinge sections from N4713U's forward cargo door were intact; all hinge sections rotated relatively easily. All attach bolts from the hinge sections of the door remained attached..." The TWA 800 reconstruction photo shows a piece of fuselage skin attached to hinge. The fuselage skin that left with the door of UAL 811 was not

recovered from ocean floor for examination.

Paragraph five, sentence four and five:

"In addition, the door latches at the bottom of the door were still attached to the fuselage lower sill structure. This indicates that the door was in the 'latched and locked' position at the time of impact with the water."

Well, sir, there are two latches unaccounted for out of ten, the mid span latches. The door may have been in the almost all latched and locked position when it hit the water but not totally. And it is in that area, specifically, the aft midspan latch area, where the evidence points to rupture.

It was an understandable conclusion to make that door did not rupture/open in flight when bottom latches were found latched and attached. It is an understandable conclusion to make that the door did not rupture/detach when the hinge stayed attached to the door. However, both conclusions can be adjusted by viewing more of the door and relying on past precedent.

The answer to refute aft midspan latch rupture is to locate and identify the aft mid span latch and confirm it is latched around its pin, an impossibility when looking at the TWA 800 reconstruction photo with sharp, clean line at door frame where aft mid span latch is supposed to be latched and isn't.

Paragraph six, sentence one:

"The nose section of the airplane impacted the water on the right side, causing severe hydraulic damage with the result that the door structure did not remain completely intact."

Well, sir, is this an explanation of why the starboard side cargo

door area is so shattered and the port side of fuselage is so smooth? You mentioned in our phone call that the skin appeared to be pushed inwards also. On page 41 of AAR 92/02 for UAL 811 it reads, "Examination of the outer skin contour of the upper door piece revealed that it had been crushed inward." So the cargo door of UAL 811 does give an appearance of inward crush on the door when top piece struck fuselage on its way up after explosive decompression. You may have noticed the same effect on the TWA 800 top piece of door. Regarding the rest of the nose having inward crushing, the TWA 800 reconstruction shows otherwise with large pieces of skin clearly showing an outward force with the skin peeled outwards. Regarding the many pieces of the cargo door area, that is to be expected when the fuselage ruptured in flight and the weakened nose tore off subjecting that now exposed and jagged area to 300 knots of slipstream.

Paragraph six, sentence two:

"However, wreckage for the entire door was recovered at the same location as the nose section and had the same impact damage as the surrounding fuselage structure on the right side."

Well, sir, I have to contest the use of the adjective, "entire." My online dictionary states; en'tire \in-'tr\ adj : complete, whole synonym: sound, perfect, intact, undamaged ~ en'tirely adv

No way was that entire door recovered period, anywhere, according to that TWA 800 reconstruction photo. I estimate 20% recovered and let us assume that was in the nose section debris field. That leaves most of door missing and in particular the accused aft midspan latch section of the door. In addition, the 20% recovered pieces shown in the reconstruction have all types of damage revealed; inward, outward, crushed, twisted, crumpled, torn, and frayed, which is dissimilar to damage only

ten feet above cargo door area of the nose. (I am unable to comment on the forward part of the cargo door or the area forward as the only released photograph by NTSB is cropped short of the entire reconstruction.)

The many pieces of the door would explain the discrepancy in the newspapers, a computer simulation, and a Coast Guard Rear Admiral stating on the record that the forward cargo door was found closest to the event site, yet contradicted by your above statement. All may be correct, it depends upon which piece is talked about. The categorical statement by the officer in charge of recovery that the door was found closest to Kennedy Airport is probably true and implies that the critical midspan latches may in the piece of the door he is referring to. The statement by you that the door was found with nose section is true because you are referring to the pieces that stayed with the nose.

Please reconsider your appraisal of 'entire' and 'same impact damage' based upon close analysis of TWA 800 reconstruction photo.

Paragraph six, sentence three:

"This is additional verification that the forward cargo door had not opened in flight or separated from the airplane."

Well, sir, my explanation of TWA 800 is rupture in forward cargo door at aft mid span latch. A door can open at places other than the latches, some parts can separate and some can stay attached and yet door can still be said to have 'opened.' But 'open' implies turning doorknob and door opens. That's why I changed 'inadvertently opened' to 'ruptured'.

Now to paint smears. The red paint smears are real, there are a

lot of them, and solid conclusions can be reached by that very real evidence. Their location is important, only above and slightly aft of the forward cargo door. Using NTSB AAR 92/02 as a model again, page, 41, "There were also many areas on the outer skin where blue and red paint transfer marks could be seen." The paint transfers for UAL 811 were from fuselage to door using blue and red paint of United Airlines. TWA 800 was the red of TWA from the door to the fuselage above. This indicates an outward expansion of the area below forcing the red colored door to slam upwards against the fuselage transferring red paint onto the white painted areas between the passenger windows. NTSB AAR 92/02 again, page, 41, "The forward cargo door can rotate open 143 degrees before the hinge would deform, permitting the door to contact the fuselage above."

The splotchy red painted skin above the door matches the splotchy red painted smears between windows, indicating the top of the door slammed up, transferred paint and tore away. The red paint smears above cargo door indicated outward force not inward. The peeled open skin indicates outward movement. The outward means the unilateral starboard damage is not water impact. Not water impact means that center tank explosion is not viable as initial event since that would give bilateral damage and didn't. Outward unilateral damage strengthens rupture at cargo door area explanation as that is what would happen and did.

Paragraph seven, sentence two and three:

"There is even more compelling evidence resulting from the TWA flight 800 accident investigation that indicates that the forward cargo door did not cause the accident. However, it is up to the NTSB to share this information with you."

Well, sir, that hurts. NTSB sharing information with me? I think

not. Secret information that cargo door didn't burst? I think not also.

Paragraph eight, sentence two and three:

"However, the accidents to which your refer, in particular the Pan Am flight 103 and the Air India flight 182 accidents, each had strong evidence of an internal explosion caused by high explosive materials (terrorist bomb). In each case there has been no evidence that the forward cargo door opened in flight causing the accident."

Well, sir, let me polite in disagreement. Not 'strong' evidence of bomb. Very weak is what the evidence shows and I have reviewed the evidence as described in UK, Canadian, and India accident reports over and over again. AI 182 and PA 103 as cargo door rupture is quite clear once the premise is made of fuselage rupture in flight in cargo door area. AI 182 said the fuselage ruptured in flight at cargo door area and for want of a better explanation, said bomb did it. PA 103 also had fuselage rupture on left side of forward cargo hold while wreckage evidence shows much more damage and sooner on starboard side, at cargo door area. The evidence is in the reports and they are on web site www.corazon.com under the flight numbers.

Briefly, AI 182 summation leading to cargo door rupture is on web page <http://www.corazon.com/AI182essentials.html>. I will quote from only two of twenty statements about AI 182 here:

"As described earlier, the sudden nature of the occurrence indicates the possibility of a massive airframe structural failure or the detonation of an explosive device." Page 49. And then:

"The AIB report concluded that the analysis of the CVR and ATC recordings showed no evidence of a high-explosive device having been detonated on AI 182. It further states there is strong

evidence to suggest a sudden explosive decompression of undetermined origin occurred." Page 24.

So, Mr. Brenerman, the official report actually gives 'strong evidence' to cargo door rupture and 'no evidence' to bomb.

PA 103 is similar; rupture at cargo door area is supported by factual evidence including the reconstruction of PA 103 on starboard side which matches the photograph of UAL 811 after landing. The essentials for cargo door for PA 103 are on page <http://www.corazon.com/PA103essentials.html>. The premise of bomb is based upon evidence which shows that a '...rather large shotgun had been fired at the inner surface of the fuselage at close range.' Pages 19 and 20 of AAIB report. The resulting hole was about 15 inches in diameter, not a bomb hole and not big enough to bring down a 747. There was a blast in PA 103 but after the rupture at cargo door, just as center tank explosion was after cargo door rupture for TWA 800. One last thing on PA 103, the AAIB report never said bomb, only 'improvised explosive device.' The British are precise with language and they are right to be so. A door rupturing in flight becomes a device which wasn't meant to be but became an explosive causing agent, an explosive decompression. And residue that could be high explosive is now shown to be possibly benign with TWA 800 and the dog sniffing test. Bomb explanation for PA 103 is tenuous at best and will not stand up to scrutiny. I would love to go over every point of AI 182 and PA 103 with you but first become very familiar with the government accident reports as I have, they give the evidence. I encourage you to do so.

The bomb conclusions were political. As an engineer and pilot let us leave shadowy Sikh terrorists and secret Libyan agents putting bombs aboard planes to the politicians and let us examine evidence such as CVR, FDR, FOD, bodies, metal, and statistics. I full well know the immense claim of PA 103 not being a bomb.

It is a myth airplane like the ship Titanic, the airship Hindenberg, and the ship Maine, all three of which had original accident causes modified over time, brittle steel, flammable skin, and coal dust.

Four high time Boeing 747s took off at night running late and suffered a fuselage rupture at forward cargo hold which left similar evidence of sudden loud sound on CVR, similar abrupt power cut to the FDR, similar Fodded engines, similar paint smears, similar wreckage pattern, similar in flight damage, similar destruction sequence, similar missing never recovered bodies, similar reconstruction patterns, and similar red herring of bomb.

All four, Mr. Brenerman, all four; and only those four of all 747 accidents. Only one came back to reveal the cause, inadvertent opening of the forward cargo door in flight, rupture at aft midspan latch area, UAL 811 as described in text and pictures in NTSB AAR 92/02.

Paragraph nine, sentence two:

"A repetition of the events that caused the UAL flight 811 forward cargo door to open in flight is not likely to occur again because of modifications required by Airworthiness Directive (AD) T89-04-54."

Well sir, the cargo door was not supposed to open:

1. after certification.
2. After the first AD when lower sill damage was noticed.
3. After the second AD after door opened on PA 125.
4. After the third AD after UAL 811 cargo door opened.
5. After the fourth AD after the UAL preflight uncommanded opening.
6. After the fifth AD you mention.

And they are still opening, leaking and malfunctioning. Here's just one of ten non fatal openings, leakings and loss of pressurizations over the past three years. SDR: 27 November 1994 Discrepancy/Corrective Action: On rotation, aft cargo door opened. Replaced spring on lock pin and adj per MM52-34-12.

The cargo door is known to be dangerous, has failed in the past, is still failing, and I'm saying it's failed/ruptured on three previously undetected events, AI 182, PA 103, and TWA 800.

The modification you refer to is to replace the aluminium locking sectors with steel to prevent the lower eight latching cams from being back driven past the soft metal and unlatch the door. It's like making the barn door stronger against a horse when it may be a bull inside trying to get out.

And more important, the midspan latches have no locking sectors at all so the modification does not apply to them at all. Is it not strange that the risk of latch cams becoming unlatched, and they have several times, is so great as to warrant locking sectors yet the two side midspan latches have none? And each of them holds in more door sill than the lower latches. That is an astonishing discovery: no locking sectors on all Boeing 747 forward cargo door latches which have rupture evidence at that midspan latch as shown on UAL 811 recovered door.

The absence of locking sectors for the midspan latches and the AD to strengthen the eight locking sectors for the lower eight latch cams explains much.

It probably solves how the forward cargo door of AI 182 and TWA 800 ruptured at aft midspan latch while the bottom latches remained latched in place: that is the locking sectors did their job

on those two doors and prevented the eight lower latch cams from being driven into the unlatched position when chafed wires shorted and turned door motor on. Unfortunately the midspan latches had no such protection and were driven into the unlatched position enough for the internal pressure to rupture at that now weakened area leaving similar shattered door pieces and bottom latches still attached to lower sill for AI 182 and TWA 800.

For UAL 811 and Pan Am 103, the soft, pre-AD, locking sectors were overridden by door motor and all ten latches were driven into the unlatched position allowing the door to open completely and slam upward, breaking in two and tearing away, leaving the identical pattern of torn away fuselage skin and door broken in half longitudinally at midspan latches for each door.

Four aircraft, four door motors to unlocked position, two locking sectors held and two didn't; two partial openings/ruptures and two total openings as reflected in the reconstructions and photographs of wreckage. AI 182 and TWA 800 had locking sectors hold so ruptures. PA 103 and UAL 811 had locking sectors overridden so entire door opened and came off.

Paragraph ten, sentence one:

"I hope that this information assures you that the tragedy of TWA flight 800 was not caused by the in-flight opening of the forward cargo door and that the FAA has taken measures to ensure that another occurrence similar to that of UAL flight 811 will not be repeated."

Well, sir, I am not assured that the tragedy of TWA 800 was not caused by the inflight opening of the forward cargo door and I am not assured that the actions of the FAA ensures another UAL 811 will not be repeated. On the contrary, I strongly believe that

the tragedy of TWA 800 was caused by the inflight rupture of the fuselage at the forward cargo door at the aft midspan latch area and the actions of the FAA will not prevent such a reoccurrence.

Now, what to do about it. Eventually Boeing will have to fix the door again.

But first, FAA and NTSB are doing what they can prior to TWA 800 based upon the best evidence at the time. If the real cause of a failure is unknown, then the fault can't be fixed. If foreign governments insist on saying a bomb caused a crash, then it is a security matter, not a structural engineers' or accident investigators'.

Second, if the cause of a national aviation tragedy is unclear and ambiguous, then it is understandable for politicians to turn the cause to advantage, even if later proved wrong.

Third, accident investigating teams only had precedent to rely on up to their crash. Hindsight and the subsequent similar crashes were not available to them for their analysis. They are for mine and now they are for yours. We are all doing the best we can with what we have.

Fourth, the internet with its research and communication abilities have sped up the citizen analysis of national accidents.

Fifth, I am the one to have discovered the cargo door cause because of circumstances:

1. Aircraft modeler.
2. Aircraft owner doing routine maintenance. Mooney M20C
3. Commercial pilot, instrument rated.
4. FAA Part 135 certificate holder, single pilot, single aircraft.
5. Enlisted aircrewman in SP-2E with 2000 hours in patrol aircraft maintaining and operating all electronic anti-submarine equipment with specialty of radar.
6. Officer as reconnaissance attack navigator in RA-5C going

supersonic in combat during wartime flying off carriers.

7. Retired military officer with time, money, and motivation to devote to research into cargo door of Boeing 747s.

8. Survivor of sudden, night, fatal, fiery, jet airplane crash. June 14th, 1967.

I am qualified to give worthy explanation into other sudden, night, fatal, fiery jet airplane crashes, AI 182, PA 103, UAL 811, and TWA 800: inadvertent opening/rupture of forward cargo door in flight at aft midspan latch area on high time Boeing 747s.

What I'm personally doing to prevent a reoccurrence of those accidents is mailing my analysis to you, talking on the telephone, emailing government officials and media, and being open and sharing all information I find that is relevant as soon as I can. Only through fast, open, and accurate communications can we stop these fuselages of high time Boeing 747s rupturing in flight at forward cargo door.

What you can do, Mr. Brenerman, is up to you, as you see fit based upon the evidence that you have seen with your own eyes at Calverton, my analysis, NTSB and other government accident reports, and your own conscience. You have contacts with Boeing, NTSB, and FAA aircraft accident related groups. I encourage you to pass along my concerns and analysis for discussion and possible rebuttal. Please give me scientific rebuttal to this letter today, I'm sure there must be some inaccuracies, everybody makes mistakes once in a while.

And everybody gets it right once in a while, too.

Sincerely,

John Barry Smith
551 Country Club Drive,
Carmel Valley, CA 93924
408 659 3552
barry@corazon.com

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From: Lyle Streeter <Lyle.Streeter@faa.dot.gov>
Date: November 6, 1997 7:49:19 AM PST
To: barry@corazon.com (IPM Return requested) (Receipt notification requested)
Cc: dickina@ntsb.gov (IPM Return requested)
Subject: **Re: Cargo door rupture amplification explanation**

Mr. Smith - Thank you for your letter and your interest in this accident. I must point out to you that there are some limitations under which we must operate.

The accident is being investigated by the NTSB. The FAA, by law, is a party to the NTSB investigation. As such, the FAA is limited by NTSB regulations as to what we can say publicly during the investigation. The bottom line is that we are allowed to say very little, and almost nothing about the facts of the investigation itself. We are not allowed to analyze or speculate before the public. It is important that you understand this - no one at the FAA is attempting to stymie anything you are doing, we simply have procedures and regulations we must adhere to.

Mr. McSweeney asked his engineering staff to look into your

points, which they have done. They will continue to examine issues raised by you or anybody else in the light of the FAA's responsibility to insure the continuing airworthiness of aircraft we have certificated. Please be assured that even though we are not able to engage in a completely open dialogue with someone outside the investigation, the points you raise are being provided to all the pertinent investigators and they are being considered.

I will continue to pass along information you provide to the NTSB and FAA investigators working the issues. All of the issues you have raised have been or are being considered in the investigation, based on my personal awareness of the status of the efforts.

The NTSB will hold a public hearing into the accident in Baltimore, MD, the week of December 8, 1997. At that time, they will open the investigation to the public, and you will have a much better understanding of the extent of the work that has been accomplished.

Lyle Streeter
FAA Office of Accident Investigation

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68@=&AE>2!D;VXG
M="X@069T97(-"G)U<'1U<F4@=&AE('E<75E;F-E(&ES
('1O<"!O9B!D;V]R
M('L86UM:6YG('5P=V%R9',@86YD(&
%W87D@;&5A=FEN9R!L87)G90T*:&]L

M92!T:&%T('1H92!U;'1I;6%T92!D97-T<G5C=&EV92!F;W)
C92!O9B S,# @
M:VYO=',@;F]W(&-R=6UP;&5S(&%N9 T*=&5A<G,@;V9F
('=E86ME;F5D(&YO
M<V4@;&5A=FEN9R!S=61D96X@;&]U9"!S;W5N9"!O9B!
E>'!L;W-I=F4-"F1E
M8V]M<')E<W-I;VX@;VX@0U92(&%N9"!A8G)U<'0@<&]
W97(@8W5T('1O('1H
M92!&1%(@87,@;6%I;B!E<75I<&UE;G0-"F-O;7!
A<G1M96YT(&QI;F5S(&%R
M92!S979E<F5D+B!!;&P@;W1H97(@<W!E8VEF:
6,@979I9&5N8V4@9F]R(&5A
M8V@-"F%C8VED96YT(&ES(&5X<&QA:6YE9"!O;B!W96
(@<VET92!C;W)A>F]N
M+F-O;2X-"@T*22!W96QC;VUE(&1I<V-U<W-
I;VX@=VET:"!Y;W4@86YD('EO
M=7(@:6YV97-T:6=A=&]R<RX@22!A<W-U;64@=&AA="!
S:6YC90T*=&AE(\$YO
M<G1H=V5S="!296=I;VX@:&%S(&)E96X@:6YV:71E9"!
T;R!I;G9E<W1I9V%T
M92!45T\$@.# P(&)Y(&\$@<V5N:6]R#0I&04\$@;V9F:6-I86PL
(\$UR+B!-8U-W
M965N97DL('1H92!/9F9I8V4@;V8@06-C:61E;G0@26YV97-
T:6=A=&EO;B!H
M87,-"G!E<FUI<W-I;VX@=&\@:&%V92!A(&=O(&%T(&ET
('1O;RX@37D@96YC
M;&]S960@;&5T=&5R('1O(\$9!02!L87ES(&ET(&%L;
T*;W5T(&%S(&)E<W0@
M87,@22!C86X[(\$D@=V]U;&0@87!P<F5C:6%T92!Y;W5R
(&]P:6YI;VX@86)O
M=70@=&AE(&-O;G1E;G0N#0H-"DAE<F4@:7,@;
7D@8W5R<F5N="!C;VUM=6YI
M8V%T:6]N(&1I;&5M;6\$N(\$D@:&%V92!E;6%I;"!W:71H(!

H;W1O(')E8V5I
M=F4-"F%N9"!S96YD(&-A<&%B:6QI='DN(\$UR
+B!"<F5N97)M86X@86YD(\$9!
M02!.;W)T:'=E<W0@9&ED(&YO="!G:79E(&UE
(1H96ER#0IE;6%I;"!A9&1R
M97-S97,@86YD(\$UR+B!0961E<G-O;B!S86ED
(1H97D@9&]N)W0@:&%V92!
M;G1E<FYE="!A8V-E<W,@<V\@20T*:&%V92!T;R!S96YD
(&5V97)Y=&AI;F<@
M<VYA:6P@;6%I;"!T;R!T:&5M('=H:6-H(\$D@:&%V92!
A;F0@=VEL;"!A9V%I
M;BX@66]U#0IA="!/9F9I8V4@;V8@06-C:61E;G0@26YV97-
T:6=A=&EO;B!H
M879E(&5M86EL(&%N9"!A<F4@:6YT97)N970@<V
%V=GD@87,-"G-H;W=N(&)Y
M('EO=7(@<')O;7!T(&5M86EL(')E<W!O;G-E('1O(&UY(')
E<75E<W0@9F]R
M(\$9!02!W96)M87-T97(@=&\-"F9O<G=A<F0@;
7D@;&5T=&5R('1O('EO=2X@
M2&]W979E<BP@<V%D('1O('A>2P@9V]V97)N;65N="!
S97)V97)S(&1O(&YO
M= T*(<')O8V5S<R!P:&]T;V=R87!H<R!S;R!)('-H86QL
(&AA=F4@=&\@<F5F
M97(@>6]U('9I82!54DQS('1O(&UY
(&5X=&5N<VEV90T*=V5B('-I=&4@870@
M=W=W+F-O<F%Z;VXN8V]M('=I=&@@8V]L;W
(@<&AO=&]G<F%P:'!@86YD('C
M86YN960@:6X@=&5X="!O9@T*9V]V97)N;65N="!A8V-
I9&5N="!R97!O<G1S
M('5S960@9F]R(')E9F5R96YC92X-"@T*3&5T)W,@9&
\@979E<GET:&EN9R!V
M:6\$@=&AE(&EN=&5R;F5T+B!))VQL(&5M86EL
(1E>'0@=&\@>6]U(&%N9"!R

M969E<B!T;R!A#0I54DP@=VAE;B!A(!H;W1O9W)A<&@@@:
7,@;F5E9&5D+@T*
M*&AT=' Z+RJW=W<N8V]R87IO;BYC;VTO5%=!.# P:'5L;')
U<'1U<F4N:'1M
M;!"I<R!A;FYO=&%T960@3E130B!P:&]T;R!
O9@T*<G5P='5R92!A<F5A+BD@
M22!S:&%L;"!A;'-O(&5N8VQO<V4@;
7D@9&5T86EL960@<F5S<&]N<V4@=&\@
M37(N(\$R96YE<FUA;B<-"G,@;&5T=&5R('1O(&UE+B!)9B!
Y;W4@8V]U;&0@
M96UA:6P@=&AA="!T;R!H:6T@22!W;W5L9"!B92!G<F
%T969U;"X@22!S:&%L
M; T*<V5N9"!I="!S;F%I;"!M86EL('1O(&AI;2!A;'-O(&)U="!
T:&%T('=I
M;&P@=&%K92!A(&9E=R!E>'1R82!D87ES(&%N9"!
T;PT*8F4@9&ER96-T+"!T
M:&ES(&ES(&\$@;&EF92!A;F0@9&5A=&@@@;6%T=&5R(&
%N9"!T:6UE(&ES('5R
M9V5N="X@4&QE87-E#0IC;VYT86-T(&UE(&%T(#0P."
V-3D@,S4U,B!F;W(@
M=F]I8V4@9&ES8W5S<VEO;BX-"@T*4VEN8V5R96QY+
T*#0H-"DIO:&X@0F%R
M<GD@4VUI=&@-"C4U,2!#;W5N=')Y(\$-L=6(@1')
I=F4L#0I#87)M96P@5F%L
M;&5Y+"!#02 Y,SDR- T*# X(#8U.2 S-34R#0IB87)R>4!C;W)
A>F]N+F-O
M;0T*#0H-"D)O8B!"<F5N97)M86XL#0I&04\$@4W1R=6-
T=7)A;"!!97)O<W!A
M8V4@16YG:6YE97(L#0I&961E<F%L(\$%V:6%T:6]N(\$%D;
6EN:7-T<F%T:6]N
M#0I4<F%N<W!O<G0@06ER<&QA;F4@1&ER96-T;W)
A=&4L(\$%.32TQ,# -"C\$V
M,#\$@3&EN9"!!=F4N(%N5RX-"E)E;G1O;BP@5T\$@.

3@P-34M-# U-@T**#(P
M-BD@,C(W+3(Q,# -"E)O;B!7;VIN87(L(\$UA;F%G97
(-"D1A<G)E;&P@4&5D
M97)S;VXL(\$%S<VES=&
%N="!-86YA9V5R#0I4;VT@36-3=V5E;F5Y+"!\$:7)E
M8W1O<B!!0U,-"@T*1&5A<B!-<BX@0G)E;F5R;6%N+
T*#0H@(" @(" @(" @
M(" @(" @(" @(" @(" @-2!.;W8@.3<-"@T*("!4:&%N:R!
Y;W4@9F]R('EO
M=7(@,CD@3V-T(#DW(&QE='1E<B!R969E<F5N8V4@.
3<M,3(P4RTV.3DN(\$ET
M('=A<R!S:6=N960-"F)Y(\$UR+B!0961E<G-O;B!F;W(@37(N
(%=O:FYA<B!B
M=70@22=M(&%S<W5M:6YG('EO=2!W<F]T92!I="!
A;F0@>6]U(&%R90T*=&AE
M(")&04\$@<W1R=6-T=7)A;"!E;F=I;F5E<B!W:&\@87-S:7-
T960@=&AE(\$Y4
M4T(@870@=&AE(&AA;F=A<B!I;@T*0V%L=F5R=&]N+"!.
97<@66]R:RXN+B(-
M"B @22!W;W5L9"!P<F5F97(@=&\@9&ES8W5S<R!W:71H
('EO=2P@86X@86ER
M<&QA;F4@<&5R<V]N('=I=&@ @=&AE(&AA;F1S(&]
N#0IE>'!E<FEE;F-E(&]F
M(%1702 X,# L('1H92!D971A:6QS(&]F('EO=7(@;&5T=&5R
+@T*("!&:7)S
M="P@=&AE('!O;&ET:6-S+BXN=VAY(&ES('1H92!.;W)
T:'=E<W0@4F5G:6]N
M(&]F('1H92!&04\$@9VEV96X@=&AE#0IT87-K(&)Y(\$UR
+B!-8U-W965N97D@
M=&AR;W5G:"!M>2!C;VYG<F5S<VUA;B!T;R G:6YV97-T:
6=A=&4@37(N(%-M
M:71H)W,-"F-O;F-E<FYS)S\@5V]U;&0@;F]T('1H92 @3V9F:
6-E(&]F(\$%C

(%1H92!787-H
M:6YG=&]N(%!O<W0-"@T*(" @(" @(" @(" @(" @(" @(" @
(" @(" @(" @
M(" @(" @(" @(" @(" @(" @(" @("!!('1H96]
R>2P@9&5V96QO<&5D(&)Y#0IT
M:&4@1D%!W,@3F]R=&AW97-T#0H@(" @(" @(" @(" @(" @(
@(" @(" @(" @
M(" @(" @(" @(" @(" @(" @(" @(" @(" @(%E9VEO;B!I;B!
396%T=&QE+ T*
M:6YV;VQV97,@86X@=6YL:6ME;'D@8VAA:6X@;V8-"B @
(" @(" @(" @(" @
M(" @(" @(" @(" @(" @(" @(" @(" @(" @(" @(" @(" @(" @(" @(
@979E;G1S(&EN
M('=H:6-H(&%N#0IE;&5C=')I8V%L('!R;V)L96T@8V
%U<V5S(&\$-"B @(" @
M(" @(" @(" @(" @(" @(" @(" @(" @(" @(" @(" @(" @(" @(
(" @(" @
M9FER92!T;R!B=7)N(&]U='=A<F0@9G)O;0T*=&AE
(='I;F<@=&%N:R!T;R!T
M:&4-"B @(" @(" @(" @(" @(" @(" @(" @(" @(" @(" @(" @(" @(
(" @(" @
M(" @(" @(" @(" @(" @(" @(" @(" @(" @(" @(" @(" @(" @(" @(
(9E;G0-"G1U8F4@=&AA="!I
M<R!D97-I9VYE9 T*(" @(" @(" @(" @(" @(" @(" @(" @(" @(" @(
@(" @(" @
M(" @(" @(" @(" @(" @(" @("!!T;R!A;&QO=R!V87!O<G,@=&
\@97-C87!E#0IF
M<F]M('1H92!T86YK+B!!="!T:&4-"B @(" @(" @(" @(" @(" @(
@(" @(" @
M(" @(" @(" @(" @(" @(" @(" @(" @(" @(" @(" @(" @(" @(" @(
(1H92!F;&%M
M92!F<F]N= T*=&AE;B!R979E<G-E<PT*(" @(" @(" @(" @(
(" @(" @(" @

W92!A<F4@87,@;VYE
M(&]N(&-H869E9"!W:7)I;F<@87,@82!P<F]B;&5M+B!
5%-("\$%!4B Y,B\p
M,B!F;W(-"E5!3" X,3\$@:&%D(&-H869E9"!W:7)
I;F<@=VAI8V@@<VAO<G1E
M9"!T;R!T=7)N(&]N(&1O;W(@;6]T;W(@=VAI8V@-"G5N;&
%T8VAE9"!D;V]R
M+B!4:&ES(&5X<&QA;F%T:6]N(&]F(=H>2!D;V]R()
U<'1U<F5D+V]P96YE
M9"!M87D@=V5L; T*97AP;&%I;B!
W:'D@9G5S96QA9V4@<G5P='5R960@870@
M8V%R9V\@9&]O<B!A<F5A(&9O<B!!22 Q.#(L(%!!(#
\$P,RP@86YD#0I45T\$@
M.# P(&%L<V\N#0H-"D]N92!L87-T('1H:6YG(&]N('!O;&ET:
6-S.B!792!A
M<F4@=&AE(&=O;V0@9W5Y<RP@=V4@<V5E:R!T;R!
P<F5V96YT#0IA:7)P;&%N
M92!C<F%S:&5S+"!W92!A<F4@;W!
E;BP@=V4@9&ES8W5S<R!T:&4@<&]S<VEB
M:6QI=&EE<R!R96QY:6YG(&]F(')E86P-"F5V:61E;F-E
(1H870@=V4@8V%N
M('E92P@=&]U8V@L(&%N9"!H96%R+B!)9B!M>2!
S='EL92 G8VAA9F5S)R!W
M:&5N(\$D-"G)E8G5T(&]R(&%T=&5M<'0@=&\@<F5F=71E
(EO=7(@;&EN92!O
M9B!T:&EN:VEN9RP@<&QE87-E(&1O;B=T('1A:V4@:
70-"G!E<G-O;F%L;'DN
M(%=E(&%R92!N;W0@:6YD:69F97)E;G0[(=E(&-A<F4N
(%=E(&%R92!O;B!T
M:&4@<V%M92!S:61E(=I=&@-"G1H92!S86UE(&=O86PL
(&%S('EO=2!S=&%T
M92!I;B!Y;W5R(&QE='1E<B!T;R!M92P@(BXN+G1H92!F:7)
S="!P<FEO<FET

M>2!O9@T*=&AE("XN+BA&04\$I(&ES(&5N<W5R:6YG
(1H92!C;VYT:6YU960@
M;W!E<F%T:6]N86P@<V%F971Y(&]F(&%I<F-R869T+B
(-"@T*26X@=&AA="!R
M96=A<F0@;&5T(&UE(&1I<W-E8W0@>6]U<B!L971T97
(@;V8@,CD@3V-T(#DW
M('9E<GD@8V%R969U;&QY(&%N9 T*<F5P;'D@=&
\@96%C:"!O8G-E<G9A=&EO
M;B!A;F0@8V]N8VQU<VEO;B!Y;W4@:&%V92!M861E(&
%B;W5T(%1702 X,# @
M86YD#0IO=&AE<G,N#0H-"D%S<W5M<'1I;VYS.@T*,
2X@66]U(&%R92!A(\$9!
M02!S=')U8W1U<F%L(&5N9VEN965R(&%N9"!U;F1E<G-
T86YD('1H92!";V5I
M;F<@-S0W(&%I<F9R86UE+@T*,BX@22!A;2!A(\$9!02!L:6-
E;G-E9"!C;VUM
M97)C:6%L('!I;&]T+"!I;G-T<G5M96YT(')A=&5D(&%N9"!
P<F5V:6]U<R!&
M04\$-"E!A<G0@,3,U(&-E<G1I9FEC871E
(&AO;&1E<BX-"C,N(\$Y44T(@<'5B
M;&ES:&5D(&1O8W5M96YT<R!S=6-H(&%S(\$%!4B Y,B
\P,B!S:&%L;"!B92!A
M<W-U;65D('1O(&)E#0IC;W)R96-T('5N;&5S<R!
O=&AE<G=I<V4@;F]T960N
M#0HT+B!52R!!04E"(&%N9"!
#86YA9&EA;B]);F1I86X@<'5B;&ES:&5D(&=O
M=F5R;FUE;G0@86ER8W)A9G0@86-C:61E;G0-"G)E<&]
R=',@<VAA;&P@8F4@
M87-S=6UE9"!T;R!B92!C;W)R96-T('5N;&5S<R!
O=&AE<G=I<V4@;F]T960N
M#0HU+B!9;W4@:&%V92!H860@:&%N9',@;VX@97AP97)
I96YC92!W:71H(%17
M02 X,# @86YD(&-A;B!C;VYF:7)M(&]R(')

E9G5T90T*9&5D=6-T:6]N<R!B
M87-E9"!U<&]N(!E<G-O;F%L(&5X<&5R:65N8V4@;&
%C:VEN9R!A(!U8FQI
M<VAE9"!5%-("\$%!4B!F;W(-"G)E9F5R<F%L+@T*-
BX@5&AE(&-O;&]R(!H
M;W1O9W)A<&@@;V8@=&AE(!)E8V]N<W1R=6-T:6]N(&]
F(%1702 X,# @:7,@
M8V]M<&QE=&4@86YD#0IA8V-U<F%T92X@*%!H;W1O
(&EN8VQU9&5D(&EN(&QE
M='1E<B!A;F0@870-"G=W=RYP;W)A>F]N+F-O;2\X,#!F;W)
E869T:&]R<F5C
M;VYW96(N:'1M;"XI#0HW+B!9;W4@;6%Y('-O;VX@:&
%V92!I;G1E<FYE="!A
M8V-E<W,@86YD(&-A;B!E>&%M:6YE(&UY('=E8B!S:71E
(&%T#0IW=W<N8V]R
M87IO;BYC;VT@=VAI8V@@:&%S('-C86YN960@=&5X="!
O9B!A8V-I9&5N="!R
M97!O<G1S(&9O<B!R969E<G)A;"X-"D5M86EL(&ES(&
%V86EL86)L92!T;R!Y
M;W4@86YD('EO=2!C86X@8V]R<F5S<&]N9"!T;R!M92!
A="!B87)R>4!C;W)A
M>F]N+F-O;0T*."X@2&EN9'-I9VAT(&ES(&=R96%T(&
%N9"!E=F5R>6)O9'D@
M;6%K97,@;6ES=&%K97,@;VYC92!I;B!A('=H:6QE
+@T*#0HR.2!/8W0@.3<@
M;&5T=&5R('1O(&UE(&9R;VT@>6]U.@T*4&%R86=R87!H
(&9O=7(L('-E;G1E
M;F-E('1W;SH-"B)(;W=E=F5R+"!W:&5N('1H92!W<F5C:V
%G92!O9B!T:&4@
M;F]S92!S96-T:6]N('=A<R!R96-O=F5R960@:
70@8F5C86UE#0IE=FED96YT
M('1H870@=&AE(&9O<G=A<F0@8V%R9V\@9&]O<B!
H860@;F]T(&]P96YE9"!I

M;B!F;&EG:'0@;W(@<V5P87)A=&5D#0IF<F]M('1H92!N;W-
E('-E8W1I;VX@
M<')I;W(@=&\@:6UP86-T('=I=&@@=V%T97(N
(@T*#0I796QL+"!S:7(L(&QE
M="=S(&)E('!I8VMY+B!(!&1O;W(@;65A;G,@82!D;V]R(&
%N9"!N;W0@<&EE
M8V5S(&]R('-E9VUE;G1S#0IO<B!S96-T:6]N<RX@5&AE
(&9O<G=A<F0@8V%R
M9V\@9&]O<B!O9B!45T\$@.# P(&ES(&EN('1A='1E<G,L
(&ET)W,-"G-H871T
M97)E9"P@:70G<R!;B!P:65C97,[(&ET)
W,@979E<GET:&EN9R!B=70@82 G
M9&]O<B<N(\$ET(&ES('-O('H871T97)E9 T*=&AA="!O;FQY
(#(P)2!I<R!R
M96-O=F5R960@86YD(')E8V]N<W1R=6-T960N(%=H870@:
7,@=&AE('=E:6=H
M="!O9B!A#0IN;W)M86P@9&]O<C\@5VAA="!I<R!
T:&4@=V5I9VAT(&]F('1H
M92!R96-O=F5R960@<&EE8V5S/R!&;W(@=&AE('!U<G!
O<V5S#0IO9B!D:7-C
M=7-S:6]N(\$D@=7-E(#(P)2X@268@=W)O;F<L('!
R;W9I9&4@82!M;W)E(&%C
M8W5R871E(&YU;6)E<B!P;&5A<V4N#0I4;R!B87-E('1H92!
C;VYC;'5S:6]N
M+" B+BXN9F]R=V%R9"!C87)G;R!D;V]R(&AA9"!
N;W0@;W!E;F5D(&EN(&9L
M:6=H="!O<@T*<V5P87)A=&5D(&9R;VT@=&AE
(&YO<V4@<V5C=&EO;BXN+B(@
M8F%S960@=7!O;B!O;FQY(#(P)2!O9B!
T:&4@979I9&5N8V4@:7,-"FYO="!V
M86QI9"X-"@T*17-P96-I86QL>2!S:6YC92!)
(&AA=F4@<&EN<&]I;G1E9"!T
M:&4@;&]C871I;VX@;V8@9&]O<B!F86EL=7)E+W)

U<'1U<F4@=&\-"G1H92!A
M9G0@;6ED<W!A;B!L871C:"!O9B!T:&4@9F]R=V%R9"!
C87)G;R!D;V]R(&%N
M9"!T:&%T(&QA=&-H(&ES(&YO= T*8V]N;F5C=&5D('1O
(1H92!F<F%M92P@
M87,@<V5E;B!I;B!R96-O;G-T<G5C=&EO;B!P:&]
T;RX@5&AE(&ED96YT:69I
M8V%T:6]N#0IO9B!T:&4@869T(&UI9'-P86X@;&
%T8V@@87,@=&AE('!O:6YT
M(&]F(&9A:6QU<F4@:7,@9&5D=6-E9"!B>2!A+B!O8G-
E<G9I;F<-"G1H92!L
M87)G92!R;W5N9"!H;VQE(&EN(')E8V]N<W1R=6-T:6]N('!
H;W1O(&]F(%17
M02 X,# L(&(N(')E861I;F<-"F1E<V-R:7!T:79E('1E>'0@86)
O=70@=&AE
M(\$%)(#\$X,B!D;V]R(')U<'1U<F4L(&%N9"!C+B!V:65W:6YG
(1H90T*<F5C
M;W9E<F5D(&1O;W(@;V8@54%,(#@Q,2X@(%1H92!
504P@.#\$Q(&1O;W(@<VAO
M=W,@82!S;6%L;"!D;V]R(')U<'1U<F4@870-"F%F="!M:
61S<&%N(&QA=&-H
M(&%R96\$N(%1H92!F;W)W87)D(&UI9'-P86X@;&
%T8V@@<&EN('=A<R!N;W0@
M9&%M86=E9"!W:&EL90T*=&AE(&%F="!L871C:"!P:
6X@=V%S+B!4:&4@54%,
M(#@Q,2!D;V]R(&AA9"!A(')U<'1U<F4@:&]L92!S=')A:
6=H="!T:')O=6=H
M#0IT:&4@9&]O<BX@5&AA="!W87,@86X@;W!E;FEN9R!
I;B!T:&4@9&]O<BX@
M5&AE(&1O;W(@;W!E;F5D(&EN<VED92!T:&4@9&]
O<@T*:71S96QF(&%S('=E
M;&P@87,@870@=&AE(&QA=&-H97,N#0H-"BAH='1P.B
\O=W=W+F-O<F%Z;VXN

M8VJM+S@Q,7!A9V4S-6%N86QY9&]
O<BYH=&UL#0IH='1P.B\O=W=W+F-O<F%Z
M;VXN8VJM+S@Q,61O;W)H86QV97,N:'1M;'!A;F0-"FAT=' Z
+RJW=W<N8VJR
M87IO;BYC;VTO.#\$Q9&]O<FAA;'9E<W!H;W1O+FAT;
6P@9VEV92!54DQS(&]F
M('!I8W1U<F5S(&%N9 T*=&5X="!O9B!504P@.#\$Q(&
%N9"!H='1P.B\O=W=W
M+F-O<F%Z;VXN8VJM+S\$X,G!I>'1E>'0Q=V5B+FAM;'!G:
79E<R!T97AT#0IA
M8F]U="!F;W)W87)D(&-A<F=O(&1O;W(@87)E82!O9B!!22
Q.#(N*0T*#0I5
M04P@.#\$Q(&ES('1H92!M;V1E;"!F;W(@=&AE('1H<F5E(&]
T:&5R(&%C8VED
M96YT<RP@04D@,3@R+"!002 Q,#,L(&%N9"!45T
\$-"C@P,"X@270@86QW87ES
M(&-O;65S(&)A8VL@=&\@3E130B!!05(@.3(O,#(N
("A.;W0@=&AE(&9I<G-T
M(%5!3" X,3\$@3E130@T*04%2('=H:6-H('=A<R!.5%-" +T%!
4BTY,"P,2!A
M;F0@=&AE;B!S=7!E<G-E9&5D(&)Y(\$Y44T(@04%2(#DR
+S R+"!W<FET=&5N
M#0IA9G1E<B!D;V]R('=A<R!R96-O=F5R960@86YD(&-O;F-
L=7-I;VYS(&-H
M86YG960N(\$5V97)Y8F]D>2!M86ME<R!M:7-
T86ME<PT*;VYC92!I;B!A('=H
M:6QE+BD-"@T*5&AE(%1702 X,# @<F5C;VYS=')
U8W1I;VX@<&AO=&\@<VAO
M=W,@;W1H97(@<VEM:6QA<FET:65S('1O(%5!3" X,
3\$@=VAI8V@-"G=I;&P@
M8F4@9&ES8W5S<V5D(&%S('=E(&=O(&%L;VYG
+@T*#0I087)A9W)A<&@@@9FEV
M92P@<V5N=&5N8V4@;VYE.@T*(E1H92!

&04\$@<W1R=6-T=7)A;"!E;F=I;F5E
M<B!W:&\@87-S:7-T960@=&AE(\$Y44T(@870@=&AE
(&AA;F=A<B!I;@T*0V%L
M=F5R=&]N+"!.97<@66]R:RP@=F5R:69I960@=&AA="!
T:&4@9F]R=V%R9"!C
M87)G;R!D;V]R('=A<R!R96-O=F5R960@870-"G1H92!S86UE
(&QO8V%T:6]N
M(&%S('1H92!R97-T(&]F('1H92!N;W-E('E8W1I;VXN
(@T*#0I796QL('I
M<BP@86=A:6XL(&YO="!D;V]R(')E8V]V97)E9"!
B=70@<&EE8V5S('=E<F4N
M(\$QE="!U<R!A<W-U;
64@=&AE#0IB;W1T;VT@-24@;V8@=&AE(&1O;W(@<&EE
M8V5S('=I=&@@=&AE(&)O='1O;2!E:6=H="!L871C:&5S
(='A<R!F;W5N9"!W
M:71H#0IT:&4@;F]S92!S96-T:6]N(&%N9"!A='1A8VAE9"!
T;R!T:&4@<VEL
M;"!A;F0@9G5S96QA9V4@;V8@5%=!(#@P;"!A<R!
S965N#0II;B!.5%-"('!H
M;W1O+B H5&AA="!M871C:&5S('1H92!D97-
C<FEP=&EO;B!O9B!!22 Q.#(@
M9G)O;2!V:61E;R!F:6QM(#8W,# -"F9E970@=6YD97)
W871E<B!A;'!-O+"!C
M;W)A>F]N+F-O;2\Q.#)P:7AT97AT,7=E8BYH;6PN*2!"96-
A=7-E(#4E(&]F
M('1H90T*9&]O<B!O9B!45T\$@.# P('=A<R!F;W5N9"!W:71H
(('1H92!N;W-E
M(&1O97,@;F]T(')U;&4@;W5T(&1O;W(@<G5P='5R92!A=
T*869T(&UI9"!S
M<&%N(&QA=&-H+B!)"!D;V5S(&YO="!R=6QE(&]U="!
F=7-E;&%G92!R=7!T
M=7)E(&-A=7-E9"!B>2!D;V]R#0IF86EL=7)E+B!7:&%T(&ET
(&1O97,@9&\@

M:7,@<V%Y('1H870@8F]T=&]M('!I96-E(&]F(&1O;W
(@<W1A>65D('=I=&@@
M;F]S90T*=6YT:6P@=V%T97(@:6UP86-T+B!2=7!T=7)E(&
%T(&UI9'-P86X@
M;&%T8V@@<W1I;&P@<&]S<VEB;&4N#0H-"E!A<F
%G<F%P:"!F:79E+"!S96YT
M96YC92!T=V\Z#0HB02!F=7)T:&5R(&5X86UI;F%T:6]N(&]
F('1H92!R96-O
M=F5R960@=W)E8VMA9V4@<VAO=V5D('1H870@=&AE
(5P<&5R#0IH:6YG92!W
M87,@<W1I;&P@871T86-H960@=&\@=&AE(&)
O=&@@=&AE(&9U<V5L86=E(&%N
M9"!T:&4@9&]O<BxB#0H-"D5X86-T;DA(%1H870@:
7,@=VAA="!T:&4@;6]D
M96P@<VAO=W,@=&]O(2!504P@.#\$Q(&AA9"!T:&4@9&]
O<B!T96%R(&%W87D-
M"G=I=&@@=&AE('1O<"!P:65C92!T86MI;F<@=7!P97
(@9FQA;F=E(&]F('1H
M92!D;V]R(&%N9"!A;&P@=&AE(&AI;F=E(&%N9
T*871T86-H;65N="!B;VQT
M<R!W:71H(&ET+B!4:&4@:&EN9V5S(&]F(%5!3" X,
3\$@=V5R92!I;B!T:&4@
M<V%M92!C;VYD:71I;VX-"F%N9"!A='1A8VAE9"!T;R!
T:&4@9&]O<B @87,@
M5%=(#@P,"X@*&-O<F%Z;VXN8V]M+S@Q,7!
A9V4S-6%N86QY9&]O<BYH=&UL
M*0T*3E130B!!05(@.3(O,#(@<&%G92 S-2!A;F0@-#\$Z(")
4:&4@:&EN9V4@
M<&EN<R!A;F0@86QL(&AI;F=E('-E8W1I;VYS
(&9R;VT-"DXT-S\$\$52=S(&9O
M<G=A<F0@8V%R9V\@9&]O<B!W97)E(&EN=&
%C=#L@86QL(&AI;F=E('-E8W1I
M;VYS()O=&%T960-"G)E;&%T:79E;'D@96%S:6QY

+B!;!&P@871T86-H(&)O
M;'1S(&9R;VT@=&AE(&AI;F=E('-E8W1I;VYS(&]F('1H92!
D;V]R#0IR96UA
M:6YE9"!A='1A8VAE9"XN+B(@5&AE(%1702 X,#
@<F5C;VYS=')U8W1I;VX@
M<&AO=&\@<VAO=W,@82!P:65C92!
O9@T*9G5S96QA9V4@<VMI;B!A='1A8VAE
M9"!T;R!H:6YG92X@5&AE(&9U<V5L86=E('-K:
6X@=&AA="!L969T('=I=&@@
M=&AE(&1O;W(-"F]F(%5!3" X,3\$@=V%S(&YO="!R96-
O=F5R960@9G)O;2!O
M8V5A;B!F;&]O<B!F;W(@97AA;6EN871I;VXN#0H-"E!A<F
%G<F%P:"!F:79E
M+"!S96YT96YC92!F;W5R(&%N9"!F:79E.@T*(DEN(&
%D9&ET:6]N+"!T:&4@
M9&]O<B!L871C:&5S(&%T('1H92!B;W1T;VT@;V8@=&AE
(&1O;W(@=V5R92!S
M=&EL; T*871T86-H960@=&\@=&AE(&9U<V5L86=E
(&QO=V5R('-I;&P@<W1R
M=6-T=7)E+B!4:&ES(&EN9&EC871E<R!T:&%T('1H92!D;V]
R#0IW87,@:6X@
M=&AE("=L871C:&5D(&%N9"!L;V-K960G('!O<VET:6]N(&
%T('1H92!T:6UE
M(&]F(&EM<&%C="!W:71H('1H90T*=&V%T97(N
(@T*#0I796QL+"!S:7(L('1H
M97)E(&%R92!T=V\@;&%T8VAE<R!U;F%C8V]U;G1E9"!
F;W(@;W5T(&]F('1E
M;BP@=&AE(&UI9"!S<&%N#0IL871C:&5S+B!4:&4@9&]
O<B!M87D@:&%V92!B
M965N(&EN('1H92!A;&UO<W0@86QL(&QA=&-
H960@86YD(&QO8VME9 T*<&]S
M:71I;VX@=VAE;B!I="!H:70@=&AE('=A=&5R(&)U="!
N;W0@=&]T86QL>2X@

M06YD(&ET(&ES(&EN('1H870@87)E82P-"G-P96-
I9FEC86QL>2P@=&AE(&%F
M="!M:61S<&%N(&QA=&-H(&%R96\$L('=H97)E('1H92!
E=FED96YC92!P;VEN
M=',@=&\-"G)U<'1U<F4N#0H-"DET('=A<R!A;B!U;F1E<G-
T86YD86)L92!C
M;VYC;'5S:6]N('1O(&UA:V4@=&AA="!D;V]R(&1I9"!
N;W0@<G5P='5R92]O
M<&5N#0II;B!F;&EG:'0@=VAE;B!B;W1T;VT@; &
&%T8VAE<R!W97)E(&9O=6YD
M(&QA=&-H960@86YD(&%T=&%C:&5D+B!)"!I<R!
A;@T*='6YD97)S=&%N9&%B
M;&4@8V]N8VQU<VEO;B!T;R!M86ME('1H870@=&AE
(&1O;W(@9&ED(&YO="!R
M=7!T=7)E+V1E=&%C:"!
W:&5N#0IT:&4@:&EN9V4@<W1A>65D('-T87EE9"!A
M='1A8VAE9"!T;R!T:&4@9&]O<BX@2&]W979E<BP@8F]
T:"!C;VYC;'5S:6]N
M<R!C86X-"F)E(&%D:G5S=&5D(&)Y('9I97=I;F<@;6]R92!
O9B!T:&4@9&]O
M<B!A;F0@<F5L>6EN9R!O;B!P87-T('!R96-
E9&5N="X-"@T*5&AE(&%N<W=E
M<B!T;R!R969U=&4@869T(&UI9'-P86X@; &
&%T8V@@<G5P='5R92!I<R!T;R!L
M;V-A=&4@86YD(&ED96YT:69Y#0IT:&4@869T(&UI9"!
S<&%N(&QA=&-H(&%N
M9"!C;VYF:7)M(&ET(&ES(&QA=&-H960@87)O=6YD
(&ET<R!P:6XL(&%N#0II
M;7!O<W-I8FEL:71Y('=H96X@; &]O:VEN9R!A="!
T:&4@5%=(#@P,"!R96-O
M;G-T<G5C=&EO;B!P:&]T;R!W:71H('-H87)P+
T*8VQE86X@; &EN92!A="!D
M;V]R(&9R86UE('=H97)E(&%F="!M:60@<W!A;B!L871C:"!

I<R!S=7!P;W-E
M9"!T;R!B92!L871C:&5D#0IA;F0@:7-N)W0N#0H-"E!A<F
%G<F%P:"!S:7@L
M('E;G1E;F-E(&]N93H-"B)4:&4@;F]S92!S96-T:6]N(&]F
(!H92!A:7)P
M;&%N92!I;7!A8W1E9"!T:&4@=V%T97(@;VX@=&AE()
I9VAT('I9&4L#0IC
M875S:6YG('E=F5R92!H>61R875L:6,@9&%M86=E
(=I=&@@=&AE())E<W5L
M="!T:&%T('!H92!D;V]R('T<G5C='5R92!D:60-"FYO="!
R96UA:6X@8V]M
M<&QE=&5L>2!I;G1A8W0N(@T*#0I796QL+"!S:7(L(&ES
(!H:7,@86X@97AP
M;&%N871I;VX@;V8@=VAY('!H92!S=&%R8F]
A<F0@<VED92!C87)G;R!D;V]R
M(&%R96\$-"FES('O('H871T97)E9"!A;F0@=&AE(!
O<G0@<VED92!O9B!F
M=7-E;&%G92!I<R!S;R!S;6]O=&@_(%EO=2!M96YT:6]
N960-"FEN(&]U<B!P
M:&]N92!C86QL('!H870@=&AE('K:6X@87!
P96%R960@=&\@8F4@<'5S:&5D
M(&EN=V%R9',@86QS;RX@3VX@<&%G90T* -#
\$@;V8@04%2(#DR+S R(&9O<B!5
M04P@.#\$Q(&ET(')E861S+" B17AA;
6EN871I;VX@;V8@=&AE(&]U=&5R('K
M:6X-"F-O;G1O=7(@;V8@=&AE('5P<&5R(&1O;W
(@<&EE8V4@<F5V96%L960@
M=&AA="!I="!H860@8F5E;B!C<G5S:&5D(&EN=V
%R9"XB#0I3;R!T:&4@8V%R
M9V\@9&]O<B!O9B!504P@.#\$Q(&1O97,@9VEV92!A;B!
A<'!E87)A;F-E(&]F
M(&EN=V%R9"!C<G5S:"!O;B!T:&4-"F1O;W(@=VAE;B!T;W
@<&EE8V4@<W1R

M=6-K(&9U<V5L86=E(&JN(&ET<R!W87D@=7 @869T97
(@97AP;&]S:79E#0ID
M96-O;7!R97-S:6JN+B!9;W4@;6%Y(&AA=F4@;F]T:6-E9"!
T:&4@<V%M92!E
M9F9E8W0@;VX@=&AE(%1702 X,# @=&]P#0IP:65C92!
O9B!D;V]R+B!296=A
M<F1I;F<@=&AE(')E<W0@;V8@=&AE(&YO<V4@:&%V:
6YG(&EN=V%R9"!C<G5S
M:&EN9RP@=&AE#0I45T\$@.# P(')E8V]N<W1R=6-T:6]N('-
H;W=S(&]T:&5R
M=VES92!W:71H(&QA<F=E('!I96-E<R!O9B!S:VEN(&-
L96%R;'D-"G-H;W=I
M;F<@86X@;W5T=V%R9"!F;W)C92!W:71H('1H92!S:VEN('!
E96QE9"!O=71W
M87)D<RX@4F5G87)D:6YG('1H92!M86YY#0IP:
65C97,@;V8@=&AE(&-A<F=O
M(&1O;W(@87)E82P@=&AA="!I<R!T;R!B92!E>'!E8W1E9"!
W:&5N('1H92!F
M=7-E;&%G90T*<G5P='5R960@:6X@9FQI9VAT(&%N9"!
T:&4@=V5A:V5N960@
M;F]S92!T;W)E(&]F9B!S=6)J96-T:6YG('1H870@;F]W#0IE>'!
O<V5D(&%N
M9"!J86=G960@87)E82!T;R S,# @:VYO=',@;V8@<VQI<'!
T<F5A;2X-"@T*
M4&%R86=R87!H('I>"P@<V5N=&5N8V4@='=O.@T*
(DAO=V5V97(L('=R96-K
M86=E(&9O<B!T:&4@96YT:7)E(&1O;W(@=V%S(')E8V]
V97)E9"!A="!T:&4@
M<V%M92!L;V-A=&EO;@T*87,@=&AE
(&YO<V4@<V5C=&EO;B!A;F0@:&%D('1H
M92!S86UE(&EM<&%C="!D86UA9V4@87,@=&AE('U<G)
O=6YD:6YG#0IF=7-E
M;&%G92!S=')U8W1U<F4@;VX@=&AE(')I9VAT('I9&4N

(@T*#0I796QL+"!S
M:7(L(\$D@:&%V92!T;R!C;VYT97-T('1H92!
U<V4@;V8@=&AE(&%D:F5C=&EV
M92P@(F5N=&ER92XB(\$UY(&]N;&EN90T*9&EC=&EO;F
%R>2!S=&%T97,[(&5N
M*G1I<F4@7&EN+2)T<EP@861J(#H@8V]M<&QE=&4L
(='H;VQE('-Y;F]N>6TZ
M('-O=6YD+ T*<&5R9F5C="P@:6YT86-T+"!U;F1A;
6%G960@HB!E;BIT:7)E
M*FQY(&%D=@T*#0I.;R!W87D@=V%S('1H870@96YT:7)E
(&1O;W(@<F5C;W9E
M<F5D('!E<FEO9"P@86YY=VAE<F4L(&%C8V]R9&EN9R!
T;R!T:&%T#0I45T\$@
M.# P(')E8V]N<W1R=6-T:6]N('!H;W1O+B!)(&5S=&EM871E
(#(P)2!R96-O
M=F5R960@86YD(&QE="!U<R!A<W-U;64-"G1H870@=V
%S(&EN('1H92!N;W-E
M('-E8W1I;VX@9&5B<FES(&9I96QD+B!4:&%T
(&QE879E<R!M;W-T(&]F(&1O
M;W(@;6ES<VEN9PT*86YD(&EN('!A<G1I8W5L87(@=&AE
(&%C8W5S960@869T
M(&UI9'-P86X@;&%T8V@@<V5C=&EO;B!O9B!T:&4@9&]
O<BX@26X-"F%D9&ET
M:6]N+"!T:&4@,C E(')E8V]V97)E9"!P:65C97,@<VAO=VX@:
6X@=&AE(')E
M8V]N<W1R=6-T:6]N(&AA=F4@86QL#0IT>7!E<R!O9B!
D86UA9V4@<F5V96%L
M960[(&EN=V%R9"P@;W5T=V%R9"P@8W)
U<VAE9"P@='=I<W1E9"P@8W)U;7!L
M960L#0IT;W)N+"!A;F0@9G)A>65D+"!W:&EC:"!I<R!D:7-S:
6UI;&%R('1O
M(&1A;6%G92!O;FQY('1E;B!F965T(&%B;W9E(&-
A<F=O#0ID;V]R(&%R96\$@

M;V8@=&AE(&YO<V4N("A)(&%M('5N86)L92!T;R!
C;VUM96YT(&]N('1H92!F
M;W)W87)D('!A<G0@;V8@=&AE#0IC87)G;R!D;V]R(&]R
(('1H92!A<F5A(&9O
M<G=A<F0@87,@=&AE(&]
N;'D@<F5L96%S960@<&AO=&]G<F%P:"!B>2!.5%-"
M(&ES#0IC<F]P<&5D('H;W)T(&]F('1H92!
E;G1I<F4@<F5C;VYS=')U8W1I
M;VXN*0T*#0I4:&4@;6%N>2!P:65C97,@;V8@=&AE
(&1O;W(@=V]U;&0@97AP
M;&%I;B!T:&4@9&ES8W)E<&%N8WD@:
6X@=&AE#0IN97=S<&%P97)S+"!A(&-O
M;7!U=&5R('I;75L871I;VXL(&%N9"!A(\$-O87-T(\$=U87)D
(%)E87(@061M
M:7)A;"!S=&%T:6YG#0IO;B!T:&4@<F5C;W)D
(('1H870@=&AE(&9O<G=A<F0@
M8V%R9V\@9&]O<B!W87,@9F]U;F0@8VQO<V5S="!T;R!
T:&4@979E;G0-"G-I
M=&4L('EE="!C;VYT<F%D:6-T960@8GD@>6]U<B!A8F]
V92!S=&%T96UE;G0N
M(\$%L;"!M87D@8F4@8V]R<F5C="P@:
70-"F1E<&5N9',@=7!O;B!W:&EC:"!P
M:65C92!I<R!T86QK960@86)O=70N(%1H92!C871E9V]R:6-
A;"!S=&%T96UE
M;G0@8GD@=&AE#0IO9F9I8V5R(&EN(&-H87)G92!O9B!
R96-O=F5R>2!T:&%T
M('1H92!D;V]R('=A<R!F;W5N9"!C;&]S97-T('1O
(\$ME;FYE9'D-"D%i<G!O
M<G0@:7,@<')O8F%B;'D@=')U92!A;F0@:6UP;&EE<R!T:&
%T('1H92!C<FET
M:6-A;"!M:61S<&%N(&QA=&-H97,@;6%Y#0II;B!
T:&4@<&EE8V4@;V8@=&AE
M(&1O;W(@:&4@:7,@<F5F97)R:6YG('1O+B!

4:&4@<W1A=&5M96YT(&)Y('EO
M=2!T:&%T('1H90T*9&]O<B!W87,@9F]U;F0@=VET:"!
N;W-E('-E8W1I;VX@
M:7,@=')U92!B96-A=7-E('EO=2!A<F4@<F5F97)R:6YG('1O
('1H90T*<&EE
M8V5S('1H870@<W1A>65D('=I=&@@=&AE
(&YO<V4N#0H-"E!L96%S92!R96-O
M;G-I9&5R('EO=7(@87!P<F%I<V%L(&]F("=E;G1I<F4G(&
%N9" G<V%M92!I
M;7!A8W0@9&%M86=E)R!B87-E9 T*=7!O;B!C;&]S92!A;F
%L>7-I<R!O9B!4
M5T\$@.# P(')E8V]N<W1R=6-T:6]N('!H;W1O+@T*#0I087)
A9W)A<&@@<VEX
M+"!S96YT96YC92!T:')E93H-"B)4:&ES(&ES(&%D9&ET:6]
N86P@=F5R:69I
M8V%T:6]N('1H870@=&AE(&9O<G=A<F0@8V%R9V
\@9&]O<B!H860@;F]T(&]P
M96YE9 T*:6X@9FQI9VAT(&]R('E<&%R871E9"!F<F]M
('1H92!A:7)P;&%N
M92XB#0H-"E=E;&PL('I<BP@;7D@97AP;&
%N871I;VX@;V8@5%=!(#@P,"!I
M<R!R=7!T=7)E(&EN(&9O<G=A<F0@8V%R9V\@9&]O<B!
A= T*869T(&UI9"!S
M<&%N(&QA=&-H+B @02!D;V]R(&-A;B!O<&5N(&%T('!
L86-E<R!O=&AE<B!T
M:&%N('1H92!L871C:&5S+"!S;VUE#0IP87)T<R!
C86X@<V5P87)A=&4@86YD
M('O;64@8V%N('T87D@871T86-H960@86YD('EE="!D;V]
R(&-A;B!S=&EL
M;"!B90T*<V%I9"!T;R!H879E("=O<&5N960N)R!"=70@)V]
P96XG(&EM<&QI
M97,@='5R;FEN9R!D;V]R:VYO8B!A;F0@9&]O<B!
O<&5N<RX-"E1H870G<R!W

M:'D@22!C:&%N9V5D("=I;F%D=F5R=&5N=&QY(&]
P96YE9"<@=&\@)W)U<'1U
M<F5D)RX-"@T*3F]W('1O(!A:6YT('-M96%R<RX@5&AE()
E9"!P86EN="!S
M;65A<G,@87)E(')E86PL('1H97)E(&%R92!A(&QO="!
O9@T*=&AE;2P@86YD
M('O;&ED(&-O;F-L=7-I;VYS(&-A;B!B92!R96%C:&5D(&)Y
('1H870@=F5R
M>2!R96%L(&5V:61E;F-E+@T*5&AE:7(@;&]C871I;VX@:
7,@:6UP;W)T86YT
M+"!O;FQY(&%B;W9E(&%N9"!S;&EG:'1L>2!
A9G0@;V8@=&AE(&9O<G=A<F0-
M"F-A<F=O(&1O;W(N(%5S:6YG(\$Y44T(@04%2(#DR+S R
(&%S(&\$@;6]D96P@
M86=A:6XL('!A9V4L(#0Q+"
B5&AE<F4@=V5R90T*86QS;R!M86YY(&%R96%S
M(&]N('1H92!O=71E<B!S:VEN('=H97)E(&)L=64@86YD()
E9"!P86EN="!T
M<F%N<V9E<B!M87)K<PT*8V]U;&0@8F4@<V5E;BxB
(%1H92!P86EN="!T<F%N
M<V9E<G,@9F]R(%5!3" X,3\$@=V5R92!F<F]M
(&9U<V5L86=E('1O(&1O;W(-
M"G5S:6YG(&)L=64@86YD(')E9"!P86EN="!O9B!
5;FET960@06ER;&EN97,N
M(%1702 X,# @=V%S('1H92!R960@;V8@5%=#0IF<F]M
('1H92!D;V]R('1O
M('1H92!F=7-E;&%G92!A8F]V92X@5&AI<R!I;F1I8V
%T97,@86X@;W5T=V%R
M9"!E>'!A;G-I;VX@;V8-"G1H92!A<F5A(&)E;&]W(&9O<F-
I;F<@=&AE(')E
M9"!C;VQO<F5D(&1O;W(@=&\@<VQA;2!U<'=A<F1S(&
%G86EN<W0@=&AE#0IF
M=7-E;&%G92!T<F%N<V9E<G)I;F<@<F5D('!A:6YT(&]

N=&\@=&AE('=H:71E
M('!A:6YT960@87)E87,@8F5T=V5E;B!T:&4-"G!A<W-
E;F=E<B!W:6YD;W=S
M+B!.5%-("\$%!4B Y,B\B!A9V%I;BP@<&%G92P@-#\$L(")
4:&4@9F]R=V%R
M9"!C87)G;R!D;V]R#0IC86X@<F]T871E(&]P96X@,30S
(&1E9W)E97,@8F5F
M;W)E('1H92!H:6YG92!W;W5L9"!D969O<FTL(!
E<FUI='1I;F<@=&AE#0ID
M;V]R('1O(&-O;G1A8W0@=&AE(&9U<V5L86=E(&
%B;W9E+B(-"@T*5&AE('P
M;&]T8VAY(')E9"!P86EN=&5D('K:6X@86)O=F4@=&AE
(&1O;W(@;6%T8VAE
M<R!T:&4@<W!L;W1C:'D@<F5D#0IP86EN=&5D('-
M96%R<R!B971W965N('=I
M;F1O=W,L(&EN9&EC871I;F<@=&AE('1O<"!O9B!
T:&4@9&]O<B!S;&%M;65D
M('5P+ T*=')A;G-F97)R960@<&%I;G0@86YD
('1O<F4@87=A>2X-"E1H92!R
M960@<&%I;G0@<VUE87)S(&%B;W9E(&-A<F=O(&1O;W
(@:6YD:6-A=&5D(&]U
M='=A<F0@9F]R8V4@;F]T(&EN=V%R9"X-"E1H92!
P965L960@;W!E;B!S:VEN
M(&EN9&EC871E<R!O=71W87)D(&UO=F5M96YT+B!
4:&4@;W5T=V%R9"!M96%N
M<R!T:&4-"G5N:6QA=&5R86P@<W1A<F)O87)D(&1A;
6%G92!I<R!N;W0@=V%T
M97(@:6UP86-T+B!.;W0@=V%T97(@:6UP86-T
(&UE86YS#0IT:&%T(&-E;G1E
M<B!T86YK(&5X<&QO<VEO;B!I<R!N;W0@=FEA8FQE(&
%S(&EN:71I86P@979E
M;G0@<VEN8V4@=&AA="!W;W5L9 T*9VEV92!B:
6QA=&5R86P@9&%M86=E(&%N

M9"!D:61N)W0N(\$JU='=A<F0@=6YI;&%T97)A;"!
D86UA9V4@<W1R96YG=&AE
M;G,-"G)U<'1U<F4@870@8V%R9V\@9&]O<B!A<F5A
(&5X<&QA;F%T:6]N(&%S
M('1H870@:7,@=VAA="!W;W5L9"!H87!P96X@86YD
(&1I9"X-"@T*4&%R86=R
M87!H('E=F5N+"!S96YT96YC92!T=V\@86YD
(1H<F5E.@T*(E1H97)E(&ES
M(&5V96X@;6]R92!C;VUP96QL:6YG(&5V:61E;F-E()
E<W5L=&EN9R!F<F]M
M('1H92!45T\$@9FQI9VAT(#@P, T*86-C:61E;G0@:6YV97-T:
6=A=&EO;B!T
M:&%T(&EN9&EC871E<R!T:&%T('1H92!F;W)W87)D(&-
A<F=O(&1O;W(@9&ED
M(&YO= T*8V%U<V4@=&AE(&%C8VED96YT+B!
(;W=E=F5R+"!I="!I<R!U<"!T
M;R!T:&4@3E130B!T;R!S:&%R92!T:&ES(&EN9F]R;6%T:6]
N#0IW:71H('EO
M=2XB#0H-"E=E;&PL('I<BP@=&AA="!H=7)
T<RX@3E130B!S:&%R:6YG(&EN
M9F]R;6%T:6]N('=I=&@@;64_(\$D@=&AI;FL@;F]T
+@T*4V5C<F5T(&EN9F]R
M;6%T:6]N('1H870@8V%R9V\@9&]O<B!D:61N)
W0@8G5R<W0_(\$D@=&AI;FL@
M;F]T(&%L<V\N#0H-"E!A<F%G<F%P:"!E:
6=H="P@<V5N=&5N8V4@='=O(&%N
M9"!T:')E93H-"B)(;W=E=F5R+"!T:&4@86-C:61E;G1S('1O
(='H:6-H('EO
M=7(@<F5F97(L(&EN('!A<G1I8W5L87(@=&AE(%!A;B!!;
0T*9FQI9VAT(#\$P
M,R!A;F0@=&AE(\$%I<B!);F1I82!F;&EG:'0@,3@R(&
%C8VED96YT<RP@96%C
M:"!H860@<W1R;VYG(&5V:61E;F-E#0IO9B!A;B!

I;G1E<FYA;"!E>!L;W-I
M;VX@8V%U<V5D(&)Y(&AI9V@@@97AP;&]S:79E
(&UA=&5R:6%L<R H=&5R<F]R
M:7-T#0IB;VUB*2X@26X@96%C:"!C87-E('1H97)E(&AA<R!
B965N(&YO(&5V
M:61E;F-E('1H870@=&AE(&9O<G=A<F0@8V%R9V\@9&]
O<@T*;W!E;F5D(&EN
M(&9L:6=H="!C875S:6YG('1H92!A8V-
I9&5N="XB#0H-"E=E;&PL('-I<BP@
M;&5T(&UE('!O;&ET92!I;B!D:7-A9W)E96UE;G0N(\$YO="G<W1R;VYG)R!E
M=FED96YC92!O9B!B;VUB+@T*5F5R>2!W96%K(&ES
(='H870@=&AE(&5V:61E
M;F-E('-H;W=S(&%N9"!)(&AA=F4@<F5V:65W960@=&AE
(&5V:61E;F-E(&%S
M#0ID97-C<FEB960@:6X@54LL(\$-A;F%D:6%N+"!
A;F0@26YD:6\$@86-C:61E
M;G0@<F5P;W)T<R!O=F5R(&%N9"!O=F5R(&%G86EN
+@T*04D@,3@R(&%N9"!0
M02 Q,#,@87,@8V%R9V\@9&]O<B!R=7!T=7)E(&ES('%U:
71E(&-L96%R(&]N
M8V4@=&AE('!R96UI<V4@:
7,-"FUA9&4@;V8@9G5S96QA9V4@<G5P='5R92!I
M;B!F;&EG:'0@:6X@8V%R9V\@9&]O<B!A<F5A+B!!22 Q.#
(@<V%I9"!T:&4-
M"F9U<V5L86=E(')U<'1U<F5D(&EN(&9L:6=H="!A="!C87)
G;R!D;V]R(&%R
M96\$@86YD(&9O<B!W86YT(&]F(&\$@8F5T=&5R#0IE>'!
L86YA=&EO;BP@<V%I
M9"!B;VUB(&1I9"!I="X@4\$\$@,3 S(&%L<V\@:&%D
(&9U<V5L86=E(')U<'1U
M<F4@;VX@;&5F= T*<VED92!O9B!F;W)W87)D(&-A<F=O
(&AO;&0@=VAI;&4@

M=W)E8VMA9V4@979I9&5N8V4@<VAO=W,@;75C:!"
M;W)E(&1A;6%G90T*86YD
M('O;VYE<B!O;B!S=&%R8F]A<F0@<VED92P@870@8V
%R9V\@9&]O<B!A<F5A
M+B!4:&4@979I9&5N8V4@:7,@:6X@=&AE#0IR97!O<G1S
(&%N9"!T:&5Y(&%R
M92!O;B!W96(@<VET92!W=W<N8V]
R87IO;BYC;VT@=6YD97(@=&AE(&9L:6=H
M="!N=6UB97)S+@T*#0I"<FEE9FQY+"!!22 Q.#(@<W5M;
6%T:6]N(&QE861I
M;F<@=&\@8V%R9V\@9&]O<B!R=7!T=7)E(&ES(&]N
('=E8B!P86=E#0IH='1P
M.B\O=W=W+F-O<F%Z;VXN8V]M+T%),3@R97-S96YT:
6%L<RYH=&UL+B!)(='I
M;&P@<75O=&4@9G)O;2!O;FQY('1W;R!O9@T*='=E;G1Y
('-T871E;65N=',@
M86)O=70@04D@,3@R(&AE<F4Z(" B07,@9&5S8W)I8F5D
(&5A<FQI97(L('1H
M92!S=61D96X-"FYA='5R92!O9B!T:&4@;V-C=7)R96YC92!
I;F1I8V%T97,@
M=&AE('!O<W-I8FEL:71Y(&]F(&\$@;6%S<VEV92!A:7)F<F
%M90T*<W1R=6-T
M=7)A;"!F86EL=7)E(&]R('1H92!D971O;F%T:6]N(&]F(&%N
(&5X<&QO<VEV
M92!D979I8V4N(B!086=E(#0Y+B!!;F0-"G1H96XZ(")
4:&4@04E"(')E<&]R
M="!C;VYC;'5D960@=&AA="!T:&4@86YA;'ES:
7,@;V8@=&AE(\$-64B!A;F0@
M051##0IR96-O<F1I;F=S('H;W=E9"!N;R!E=FED96YC92!
O9B!A(&AI9V@M
M97AP;&]S:79E(&1E=FEC92!
H879I;F<@8F5E;@T*9&5T;VYA=&5D(&]N(\$%)
M(#\$X,BX@270@9G5R=&AE<B!S=&%T97,@=&AE<F4@:

7,@<W1R;VYG(&5V:61E
M;F-E('1O('-U9V=E<W0-"F\$@<W5D9&5N
(&5X<&QO<VEV92!D96-O;7!R97-S
M:6]N(&]F('5N9&5T97)M:6YE9"!O<FEG:6X@;V-C=7)R960N
(B!086=E(#(T
M+@T*4V\L(\$UR+B!"<F5N97)M86XL('1H92!O9F9I8VEA;"!
R97!O<G0@86-T
M=6%L;'D@9VEV97,@)W-T<F]N9R!E=FED96YC92<@=&
\-"F-A<F=O(&1O;W(@
M<G5P='5R92!A;F0@)VYO(&5V:61E;F-E)R!T;R!B;VUB
+@T*#0I002 Q,#,@
M:7,@<VEM:6QA<CL@<G5P='5R92!A="!C87)G;R!D;V]R(&
%R96\$@:7,@<W5P
M<&]R=&5D(&)Y(&9A8W1U86P-"F5V:61E;F-E
(&EN8VQU9&EN9R!T:&4@<F5C
M;VYS=')U8W1I;VX@;V8@4\$\$@,3 S(&]N('-T87)B;V%R9!"
S:61E('=H:6-H
M#0IM871C:&5S('1H92!P:&]T;V=R87!H(&]F(%5!3" X,
3\$@869T97(@;&%N
M9&EN9RX@5&AE(&5S<V5N=&EA;','@9F]R(&-
A<F=O#0ID;V]R(&9O<B!002 Q
M,#,@87)E(&]N('!A9V4@:'1T<#HO+W=W=RYC;W)A>F]N
+F-O;2]003\$P,V5S
M<V5N=&EA;','N:'1M;"X-"E1H92!P<F5M:7-E(&]F(&)O;6(@:
7,@8F%S960@
M=7!O;B!E=FED96YC92!W:&EC:"!S:&]W<R!T:&%T(&\$@)
RXN+G)A=&AE<@T*
M;&%R9V4@<VAO=&=U;B!H860@8F5E;B!F:7)E9"!A="!
T:&4@:6YN97(@<W5R
M9F%C92!O9B!T:&4@9G5S96QA9V4@870@8VQO<V4-"G)
A;F=E+B<@4&%G97,@
M,3D@86YD(#(P(&]F(\$%!24(@<F5P;W)T+B!
4:&4@<F5S=6QT:6YG(&AO;&4@

M=V%S(&%B;W5T(#\$U#0II;F-H97,@:6X@9&EA;65T97(L
(&YO="!A(&)O;6(@
M:&]L92!A;F0@;F]T(&)I9R!E;F]U9V@@=@&\@8G)I;F<@9&]
W;B!A(#<T-RX-
M"E1H97)E('=A<R!A(&)L87-T(&EN(%!!(#\$P,R!
B=70@869T97(@=&AE(')U
M<'1U<F4@870@8V%R9V\@9&]O<BP@:G5S="!
A<PT*8V5N=&5R('1A;FL@97AP
M;&]S:6]N('=A<R!A9G1E<B!C87)G;R!D;V]R(')
U<'1U<F4@9F]R(%1702 X
M,# N(\$]N92!L87-T#0IT:&EN9R!O;B!002 Q,#,L('1H92!!
04E"(')E<&]R
M="!N979E<B!S86ED(&)O;6(L(&]N;'D@)VEM<')
O=FES960-"F5X<&QO<VEV
M92!D979I8V4N)R!4:&4@0G)I=&ES:"!A<F4@<')E8VES92!
W:71H(&QA;F=U
M86=E(&%N9"!T:&5Y(&%R92!R:6=H= T*=&\@8F4@<V\N
(\$\$@9&]O<B!R=7!T
M=7)I;F<@:6X@9FQI9VAT(&)E8V]M97,@82!
D979I8V4@=VAI8V@@=V%S;B=T
M(&UE86YT('1O#0IB92!B=70@8F5C86UE(&%N
(&5X<&QO<VEV92!C875S:6YG
M(&%G96YT+"!A;B!E>'!L;W-
I=F4@9&5C;VUP<F5S<VEO;BX@06YD#0IR97-I
M9'5E('1H870@8V]U;&0@:&4@:&EG:"!E>'!L;W-I=F4@:
7,@;F]W('H;W=N
M('1O(&)E('!O<W-I8FQY(&)E;FEG;@T*=VET:"!45T\$@.# P
(&%N9"!T:&4@
M9&]G('N:69F:6YG('1E<W0N(\$)O;6(@97AP;&
%N871I;VX@9F]R(%!!(#\$P
M,R!I<PT*=&5N=6]U<R!A="!B97-T(&%N9"!W:6QL
(&YO="!S=&%N9"!U<"!T
M;R!S8W)U=&EN>2X@22!W;W5L9"!L;W9E('1O(&=O(&]

V97(-"F5V97)Y(!O
M:6YT(&]F(\$%)(#\$X,B!A;F0@4\$\$@,3 S('=I=&@@>6]U(&
U="!F:7)S="!B
M96-O;64@=F5R>2!F86UI;&EA<@T*=VET:"!T:&4@9V]
V97)N;65N="!A8V-I
M9&5N="!R97!O<G1S(&%S(\$D@:&%V92P@=&AE>2!G:
79E('1H92!E=FED96YC
M92X@20T*96YC;W5R86=E('EO=2!T;R!D;R!S;RX-"B
@5&AE(&)O;6(@8V]N
M8VQU<VEO;G,@=V5R92!P;VQI=&EC86PN("!!<R!A;B!
E;F=I;F5E<B!A;F0@
M<&EL;W0@;&5T('5S#0IL96%V92!S:&%D;W=Y(%-
I:V@@=&5R<F]R:7-T<R!A
M;F0@<V5C<F5T(\$QI8GEA;B!A9V5N=',@<'5T=&EN9R!
B;VUB<R!A8F]A<F0-
M"G!L86YE<R!T;R!T:&4@<&]L:71I8VEA;G,@86YD
(&QE="!U<R!E>&%M:6YE
M(&5V:61E;F-E('U8V@@@87,@0U92+"!&1%(L#0I&3T0L(&
O9&EE<RP@;65T
M86PL(&%N9"!S=&%T:7-T:6-S+@T*(\$D@9G5L;"!W96QL
(&MN;W<@=&AE(&EM
M;65N<V4@8VQA:6T@;V8@4\$\$@,3 S(&YO="!B96EN9R!A
(&)O;6(N(\$ET(&ES
M(&\$-"FUY=&@@@86ER<&QA;F4@;&EK92!T:&4@<VAI<"!
4:71A;FEC+"!T:&4@
M86ER<VAI<"!:(6YD96YB97)G+"!A;F0@=&AE('H:7
-"DUA:6YE+"!A;&P@
M=&AR964@;V8@=VAI8V@@@:&%D(&]R:6=I;F%L(&
%C8VED96YT(&-A=7-E<R!M
M;V1I9FEE9"!O=F5R('1I;64L#0IB<FET=&QE('T965L+"!F;&
%M;6%B;&4@
M<VMI;BP@86YD(&-O86P@9'5S="X-"B @1F]U<B!H:6=H
('1I;64@0F]E:6YG

M(#<T-W,@=&]O:R!O9F8@870@;FEG:'0@<G5N;FEN9R!
L871E(&%N9"!S=69F
M97)E9"!A#0IF=7-E;&%G92!R=7!T=7)E(&%T
(&9O<G=A<F0@8V%R9V\@:&]L
M9"!W:&EC:"!L969T('-I;6EL87(@979I9&5N8V4@;V8-"G-
U9&1E;B!L;W5D
M('-O=6YD(&]N(\$-64BP@<VEM:6QA<B!A8G)U<'0@<&]
W97(@8W5T('1O('1H
M92!&1%(L('-I;6EL87("-D9O9&1E9"!E;F=I;F5S+"!S:6UI;&
%R('!A:6YT
M('-M96%R<RP@<VEM:6QA<B!W<F5C:V%G92!P871T97)N
+"!S:6UI;&%R(&EN
M#0IF;&EG:'0@9&%M86=E+"!S:6UI;&%R(&1E<W1R=6-T:
6]N('-E<75E;F-E
M+"!S:6UI;&%R(&UI<W-I;F<@;F5V97("-G)E8V]V97)E9!"
B;V1I97,L('-I
M;6EL87(@<F5C;VYS=')U8W1I;VX@<&%T=&5R;G,L(&
%N9"!S:6UI;&%R(')E
M9"!H97)R:6YG#0IO9B!B;VUB+@T*("!!;&P@9F]U<BP@37
(N(\$)R96YE<FUA
M;BP@86QL(&9O=7([(&%N9"!O;FQY('1H;W-E(&9O=7
(@;V8@86QL(#<T-PT*
M86-C:61E;G1S+B!;/FQY(&]N92!C86UE(&)A8VL@=&
\@<F5V96%L('1H92!C
M875S92P@:6YA9'9E<G1E;G0@;W!E;FEN9R!O9@T*=&AE
(&9O<G=A<F0@8V%R
M9V\@9&]O<B!I;B!F;&EG:'0L(')U<'1U<F4@870@869T
(&UI9'-P86X@;&%T
M8V@@@87)E82P@54%#0HX,3\$@87,@9&5S8W)I8F5D
(&EN('1E>'0@86YD('!I
M8W1U<F5S(&EN(\$Y44T(@04%2(#DR+S R+@T*#0I087)
A9W)A<&@@@;FEN92P@
M<V5N=&5N8V4@='=O.@T*(D\$@<F5P971I=&EO;B!O9B!

T:&4@979E;G1S('1H
M870@8V%U<V5D('1H92!504P@9FQI9VAT(#@Q,2!F;W)
W87)D(&-A<F=O#0ID
M;V]R('1O(&]P96X@:6X@9FQI9VAT(&ES(&YO="!L:
6ME;'D@=&\@;V-C=7(@
M86=A:6X@8F5C875S92!O9@T*;6]D:69I8V%T:6]N<R!
R97%U:7)E9"!B>2!!
M:7)W;W)T:&EN97-S(\$1I<F5C=&EV92 H040I(%0X.
2TP-"TU-"XB#0H-"E=E
M;&P@<VER+"!T:&4@8V%R9V\@9&]O<B!W87,@;F]T('-
U<!O<V5D('1O(&]P
M96XZ#0HQ+B!A9G1E<B!C97)T:69I8V%T:6]N
+@T*,BX@069T97(@=&AE(&9I
M<G-T(\$%\$('=H96X@;&]W97(@<VEL;"!D86UA9V4@=V
%S(&YO=&EC960N#0HS
M+B!!9G1E<B!T:&4@<V5C;VYD(\$%\$(&%F=&5R(&1O;W
(@;W!E;F5D(&]N(%!!
M(#\$R-2X-"C0N(\$%F=&5R('1H92!T:&ER9"!!1"!A9G1E<B!
504P@.#\$Q(&-A
M<F=O(&1O;W(@;W!E;F5D+@T*-2X@069T97(@=&AE
(&9O=7)T:"!!1"!A9G1E
M<B!T:&4@54%,('!R969L:6=H="!U;F-O;6UA;F1E9"!O<&5N:
6YG+@T*-BX@
M069T97(@=&AE(&9I9G1H(\$%\$('EO=2!M96YT:6]N
+@T*#0I!;F0@=&AE>2!A
M<F4@<W1I;&P@;W!E;FEN9RP@;&5A:VEN9R!A;F0@;
6%L9G5N8W1I;VYI;F<N
M(\$AE<F4G<R!J=7-T(&]N92!O9@T*=&5N(&YO;B!
F871A;"!O<&5N:6YG<RP@
M;&5A:VEN9W,@86YD(&QO<W,@;V8@<')E<W-
U<FEZ871I;VYS(&]V97(@=&AE
M('!A<W0-"G1H<F5E('EE87)S+B!31%(Z(#(W
(\$YO=F5M8F5R(#\$Y.30@1&ES

M8W)E<&%N8WDO0V]R<F5C=&EV92!!8W1I;VXZ(\$]
N#0IR;W1A=&EO;BP@869T
M(&-A<F=O(&1O;W(@;W!E;F5D+B!297!L86-E9"!S<')
I;F<@;VX@;&]C:R!P
M:6X@86YD(&%D:B!P97(-"DU--3(M,S0M,3(N#0H-"E1H92!
C87)G;R!D;V]R
M(&ES(&MN;W=N('1O(&)E(&1A;F=E<F]U<RP@:&%S
(&9A:6QE9"!I;B!T:&4@
M<&%S="P@:7,@<W1I;&P-"F9A:6QI;F<L(&%N9"!))
VT@<V%Y:6YG(&ET)W,@
M9F%i;&5D+W)U<'1U<F5D(&]N('1H<F5E('!
R979I;W5S;'D@=6YD971E8W1E
M9 T*979E;G1S+"!!22 Q.#(L(%!!(#\$P,RP@86YD(%1702 X,#
N#0H-"E1H
M92!M;V1I9FEC871I;VX@>6]U(')E9F5R('1O(&ES('1O(')
E<&QA8V4@=&AE
M(&%L=6UI;FEU;2!L;V-K:6YG('-
E8W1O<G,-"G=I=&@@<W1E96P@=&\@<')E
M=F5N="!T:&4@;&]W97(@96EG:'0@;&%T8VAI;F<@8V
%M<R!F<F]M(&)E:6YG
M(&)A8VL@9')I=F5N#0IP87-T('1H92!S;V9T(&UE=&%L(&
%N9"!U;FQA=&-H
M('1H92!D;V]R+B!)"=S(&QI;V4@;6%K:6YG('1H92!B87)N
(&1O;W(-"G-T
M<F]N9V5R(&%G86EN<W0@82!H;W)S92!W:&5N(&ET
(&UA>2!B92!A(&)U;&P@
M:6YS:61E('1R>6EN9R!T;R!G970@;W5T+@T*#0I!;F0@;6]
R92!I;7!O<G1A
M;G0L('1H92!M:61S<&%N(&QA=&-H97,@:&%V92!N;R!
L;V-K:6YG('-E8W1O
M<G,@870@86QL('-O#0IT:&4@;6]D:69I8V%T:6]N
(&1O97,@;F]T(&%P<&QY
M('1O('1H96T@870@86QL+B!)<R!I="!

N;W0@<W1R86YG92!T:&%T('1H90T*
M<FES:R!O9B!L871C:"!C86US(&)E8V]M:6YG('5N;&
%T8VAE9"P@86YD('1H
M97D@:&%V92!S979E<F%L('1I;65S+"!I<R!S;PT*9W)
E870@87,@=&\@=V%R
M<F%N="!L;V-K:6YG('-E8W1O<G,@>65T('1H92!T=V
\@<VED92!M:61S<&%N
M(&QA=&-H97,@:&%V90T*;F]N93\@06YD
(&5A8V@@;V8@=&AE;2!H;VQD<R!I
M;B!M;W)E(&1O;W(@<VEL;"!T:&%N('1H92!L;W=E<B!
L871C:&5S+B!4:&%T
M#0II<R!A;B!A<W1O;FES:&EN9R!D:7-C;W9E<GDZ(&YO
(&QO8VMI;F<@<V5C
M=&]R<R!O;B @86QL(\$)O96EN9R W-#<@9F]R=V%R9
T*8V%R9V\@9&]O<B!L
M871C:&5S('=H:6-H(&AA=F4@<G5P='5R92!
E=FED96YC92!A="!T:&%T(&UI
M9'-P86X@;&%T8V@@87,-"G-H;W=N(&]N(%5!3" X,
3\$@<F5C;W9E<F5D(&1O
M;W(N#0H-"E1H92!A8G-E;F-E(&]F
(&QO8VMI;F<@<V5C=&]R<R!F;W(@=&AE
M(&UI9'-P86X@;&%T8VAE<R!A;F0@=&AE(\$%\$
(!O#0IS=')E;F=T:&5N('1H
M92!E:6=H="!L;V-K:6YG('-E8W1O<G,@9F]R('1H92!
L;W=E<B!E:6=H="!L
M871C:"!C86US#0IE>'!L86EN<R!M=6-H+@T*#0I)="!P<F]
B86)L>2!S;VQV
M97,@:&]W('1H92!F;W)W87)D(&-A<F=O(&1O;W
(@;V8@04D@,3@R(&%N9"!4
M5T\$@.# P#0IR=7!T=7)E9"!A="!A9G0@;6ED<W!A;B!
L871C:"!W:&EL92!T
M:&4@8F]T=&]M(&QA=&-H97,@<F5M86EN960@;&
%T8VAE9"!I;@T*<&QA8V4Z

M('1H870@:7,@=&AE(&QO8VMI;F<@<V5C=&]R<R!D:
60@=&AE:7(@:F]B(&]N
M('1H;W-E('1W;R!D;V]R<R!A;F0-"G!R979E;G1E9"
T:&4@96EG:'0@;&]W
M97(@;&%T8V@@8V%M<R!F<F]M(&)E:6YG(&1R:79E;B!
I;G1O('1H92!U;FQA
M=&-H960-"G!O<VET:6]N('=H96X@8VAA9F5D('=I<F5S('=
H;W)T960@86YD
M('1U<FYE9"!D;V]R(&UO=&]R(&]N+B!5;F9O<G1U;F
%T96QY#0IT:&4@;6ED
M<W!A;B!L871C:&5S(&AA9"!N;R!S=6-H('!
R;W1E8W1I;VX@86YD('=E<F4@
M9')I=F5N(&EN=&\@=&AE#0IU;FQA=&-H960@<&]S:
71I;VX@96YO=6=H(&9O
M<B!T:&4@:6YT97)N86P@<')E<W-U<F4@=&
\@<G5P='5R92!A="!T:&%T(&YO
M=PT*=V5A:V5N960@87)E82!L96%V:6YG('=I;6EL87
(@<VAA='1E<F5D(&1O
M;W(@<&EE8V5S(&%N9"!B;W1T;VT@;&
%T8VAE<PT*<W1I;&P@871T86-H960@
M=&\@;&]W97(@<VEL;"!F;W(@04D@,3@R(&%N9"!45T
\$@.#P+@T*#0I&;W(@
M54%,(#@Q,2!A;F0@4&%N(\$%M(#\$P,RP@=&AE('=O9GOL
('!R92U!1"P@;&]C
M:VEN9R!S96-T;W)S('=E<F4-"F]V97)R:61D96X@8GD@9&]
O<B!M;W1O<B!A
M;F0@86QL('1E;B!L871C:&5S('=E<F4@9')I=F5N(&EN=&
\@=&AE('5N;&%T
M8VAE9 T*<&]S:71I;VX@86QL;W=I;F<@=&AE(&1O;W
(@=&\@;W!E;B!C;VUP
M;&5T96QY(&%N9"!S;&%M('5P=V%R9"P@8G)
E86MI;F<@:6X-"G1W;R!A;F0@
M=&5A<FEN9R!A=V%Y+"!L96%V:6YG('1H92!

I9&5N=&EC86P@<&%T=&5R;B!O
M9B!T;W)N(&%W87D@9G5S96QA9V4-"G-K:6X@86YD
(&1O;W(@8G)O:V5N(&EN
M(&AA;&8@;&]N9VET=61I;F%L;'D@870@;6ED<W!A;B!
L871C:&5S(&9O<B!E
M86-H#0ID;V]R+@T*#0I&;W5R(&%I<F-R869T+"!F;W5R
(&1O;W(@;6]T;W)S
M('1O('5N;&]C:V5D('!O<VET:6]N+"!T=V\@;&]C:VEN9R!
S96-T;W)S#0IH
M96QD(&%N9"!T=V\@9&ED;B=T.R!T=V\@<&%R=&EA;"!
O<&5N:6YG<R]R=7!T
M=7)E<R!A;F0@='=O('1O=&%L(&]P96YI;F=S#0IA<R!
R969L96-T960@:6X@
M=&AE(')E8V]N<W1R=6-T:6]N<R!A;F0@<&AO=&]G<F
%P:','@;V8@=W)E8VMA
M9V4N(\$%)(#\$X,B!A;F0-"E1702 X,# @:&%D
(&QO8VMI;F<@<V5C=&]R<R!H
M;VQD('-O(')U<'1U<F5S+B!002 Q,#,@86YD(%5!3" X,3\$@:&
%D#0IL;V-K
M:6YG('-E8W1O<G,@;W9E<G)I9&1E;B!S;R!E;G1I<F4@9&]
O<B!O<&5N960@
M86YD(&-A;64@;V9F+@T*#0I087)A9W)A<&@@=&5N+"!
S96YT96YC92!O;F4Z
M#0HB22!H;W!E('1H870@=&AI<R!I;F9O<FUA=&EO;B!
A<W-U<F5S('EO=2!T
M:&%T('1H92!T<F%G961Y(&]F(%1702!F;&EG:'0-"C@P,"!
W87,@;F]T(&-A
M=7-E9"!B>2!T:&4@:6XM9FQI9VAT(&]
P96YI;F<@;V8@=&AE(&9O<G=A<F0@
M8V%R9V\@9&]O<B!A;F0-"G1H870@=&AE(\$9!02!
H87,@=&%K96X@;65A<W5R
M97,@=&\@96YS=7)E('1H870@86YO=&AE<B!O8V-U<G)
E;F-E('I;6EL87(-

M"G1O('1H870@;V8@54%,(&9L:6=H=" X,3\$@=VEL;!"
N;W0@8F4@<F5P96%T
M960N(@T*#0I796QL+"!S:7(L(\$D@86T@;F]T(&
%S<W5R960@=&AA="!T:&4@
M=')A9V5D>2!O9B!45T\$@.# P('=A<R!N;W0@8V%U<V5D
(&)Y#0IT:&4@:6YF
M;&EG:'0@;W!E;FEN9R!O9B!T:&4@9F]R=V%R9"!C87)
G;R!D;V]R(&%N9"!)
M(&%M(&YO="!A<W-U<F5D('1H870-"G1H92!A8W1I;VYS
(&]F('1H92!&04\$@
M96YS=7)E<R!A;F]T:&5R(%5!3" X,3\$@=VEL;!"
N;W0@8F4@<F5P96%T960N
M(\$]N('1H90T*8V]N=')A<GDL(\$D@<W1R;VYG;'D@8F5L:
65V92!T:&%T('1H
M92!T<F%G961Y(&]F(%1702 X,# @=V%S(&-A=7-E9"!B>2!
T:&4-"FEN9FQI
M9VAT(')U<'1U<F4@;V8@=&AE(&9U<V5L86=E(&%T
(1H92!F;W)W87)D(&-A
M<F=O(&1O;W(@870@=&AE(&%F= T*;6ED<W!A;B!
L871C:"!A<F5A(&%N9"!T
M:&4@86-T:6]N<R!O9B!T:&4@1D%!(='I;&P@;F]T(!
R979E;G0@<W5C:"!A
M#0IR96]C8W5R<F5N8V4N#0H-"DYO=RP@=VAA="!T;R!
D;R!A8F]U="!I="X@
M179E;G1U86QL>2!";V5I;F<@=VEL;!"H879E('1O(&9I>!"
T:&4@9&]O<B!A
M9V%i;BX-"@T*0G5T(&9I<G-T+"!&04\$@86YD(\$Y44T
(@87)E(&1O:6YG('=H
M870@=&AE>2!C86X@<')I;W(@=&\@5%=!(#@P,"!B87-
E9"!U<&]N#0IT:&4@
M8F5S="!E=FED96YC92!A="!
T:&4@=&EM92X@268@=&AE(')E86P@8V%U<V4@
M;V8@82!F86EL=7)E(&ES('5N:VYO=VXL#0IT:&5N('1H92!

F875L="!C86XG
M="!B92!F:7AE9"X@268@9F]R96EG;B!
G;W9E<FYM96YT<R!I;G-I<W0@;VX@
M<V%Y:6YG(&\$-"F)O;6(@8V%U<V5D(&\$@8W)A<V@L
(!1H96X@:70@:7,@82!S
M96-U<FET>2!M871T97(L(&YO="!A('-
T<G5C='5R86P-"F5N9VEN965R<R<@
M;W(@86-C:61E;G0@:6YV97-T:6=A=&]R<R<N#0I396-
O;F0L(&EF(!1H92!C
M875S92!O9B!A(&YA=&EO;F%L(&%V:6%T:6]N
(!1R86=E9'D@:7,@=6YC;&5A
M<B!A;F0-"F%M8FEG=6]U<RP@=&AE;B!I="!I<R!
U;F1E<G-T86YD86)L92!F
M;W(@<&]L:71I8VEA;G,@=&\@='5R;B!T:&4@8V
%U<V4@=&\-"F%D=F%N=&%G
M92P@979E;B!I9B!L871E<B!P<F]V960@=W)
O;F<N#0I4:&ER9"P@86-C:61E
M;G0@:6YV97-T:6=A=&EN9R!T96%M<R!O;FQY(&AA9"!
P<F5C961E;G0@=&\@
M<F5L>2!O;B!U<"!T;PT*=&AE:7(@8W)A<V@N(\$AI;F1S:
6=H="!A;F0@=&AE
M('U8G-E<75E;G0@<VEM:6QA<B!C<F%S:&5S
(='E<F4@;F]T#0IA=F%I;&%B
M;&4@=&\@=&AE;2!F;W(@=&AE:7(@86YA;'ES:7,N
(%1H97D@87)E(&9O<B!M
M:6YE(&%N9"!N;W<@=&AE>2!A<F4-"F9O<B!
Y;W5R<RX@5V4@87)E(&%L;"!D
M;VEN9R!T:&4@8F5S="!W92!C86X@=VET:"!W:&%T('=E
(&AA=F4N#0I&;W5R
M=&@L(!1H92!I;G1E<FYE="!W:71H(&ET<R!R97-E87)C:"!
A;F0@8V]M;75N
M:6-A=&EO;B!A8FEL:71I97,@:&%V90T*<W!E9"!U<"!
T:&4@8VET:7IE;B!A

M;F%L>7-I<R!O9B!N871I;VYA;"!A8V-I9&5N=',N#0I&:
69T:"P@22!A;2!T
M:&4@;VYE('1O(&AA=F4@9&ES8V]V97)E9"!T:&4@8V
%R9V\@9&]O<B!C875S
M92!B96-A=7-E(&]F#0IC:7)C=6US=&%N8V5S.@T*,
2X@06ER8W)A9G0@;6]D
M96QE<BX-"C(N(\$%I<F-R869T(&]W;F5R(&1O:6YG()
O=71I;F4@;6%i;G1E
M;F%N8V4N(\$UO;VYE>2!-,C!##0HS+B!#;VUM97)C:6%L(!
I;&]T+"!I;G-T
M<G5M96YT()A=&5D+@T*-"X@1D%!(%!A<G0@,3,U(&-
E<G1I9FEC871E(&AO
M;&1E<BP@<VEN9VQE('!I;&]T+"!S:6YG;&4@86ER8W)
A9G0N#0HU+B!%;FQI
M<W1E9"!A:7)C<F5W;6%N(&EN(%-0+3)%('=I=&@@,C P,"!
H;W5R<R!I;B!P
M871R;VP@86ER8W)A9G0-"FUA:6YT86EN:6YG(&%N9"!
O<&5R871I;F<@86QL
M(&5L96-T<F]N:6,@86YT:2US=6)M87)I;F4@97%U:7!
M96YT('=I=&@-"G-P
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(&]F9B!C87)R:65R
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end

From: John Barry Smith <barry@corazon.com>
Date: November 6, 1997 10:58:30 PM PST
To: Lyle Streeter <Lyle.Streeter@faa.dot.gov>
Subject: Hinge inspection for overtravel impressions

Mr. Smith - Thank you for your letter and your interest in this accident. I must point out to you that there are some limitations under which we must operate.

Mr. Streeter, I understand. Thank you for your reply.

The bottom line is that we are allowed to say very little, and almost nothing about the facts of the investigation itself.

Understand.

We are not allowed to analyze or speculate

before the public.

Understand.

It is important that you understand this - no one at the FAA is attempting to stymie anything you are doing, we simply have procedures and regulations we must adhere to.

Understand. No stymie. I was in government for 24 years. I worked in Environmental studies for the Army for years and every report were worked on was not to comment on until signed off from above.

Please be assured that even though we are not able to engage in a completely open dialogue with someone outside the investigation, the points you raise are being provided to all the pertinent investigators and they are being considered.

Well, 'considered' good; evaluated, better; accepted, great, but only if the evidence warrants.

I will continue to pass along information you provide to the NTSB and FAA investigators working the issues.

Thank you, very important and thanks. If I can't receive, at least I can send. There should be some wheat in my chaff.

All of the issues you have raised have been or are being considered in the investigation, based on my personal awareness of the status of the efforts.

Great, essentially, cargo door rupture is a reasonable mechanical alternative to the flimsy center tank explanation as initial event cause.

The NTSB will hold a public hearing into the accident in Baltimore, MD, the week of December 8, 1997. At that time, they will open the investigation to the public, and you will have a much better understanding of the extent of the work that has been accomplished.

When you say 'public hearing' what does that mean. I can't get any information and the NTSB web page on the upcoming event is 404 URL not found. Is it a 'officials hear the public" or is it 'public hears the officials" public hearing? If the officials hear the public, me, then I will travel from California to Maryland for my fifteen minutes in front of the board to present cargo door case. If it is public, me, hears the officials, I can stay in California and listen on the internet. How do the officials get public input? How do the officials ever have discussion with the public? Only until after it's over? By reading the newspapers? Cargo door is a subtle problem that mimics other causes and needs to be explained not just passively presented. Passively presented it is rejected as preposterous that several governments would miss such an obvious cause and be wrong about the official cause.

See, I've been through this before TWA 800. I was pressing for a

hearing on this cargo door by the connection between 103 and 811 for years. When 800 happened I knew right away what it was because it followed the cargo door pattern. Then I learned about AI 182 because it fit the pattern also.

Anyway, I understand the polite tone and content of your message today and I thank you for it. It is a hot potato and at least you are holding it for as long as you can officially. And if can't hold it, you are at least looking at it.

My trepidation is the letter from Northwest region that tells me the entire door was found with all latches latched and I'm looking at twenty pieces of 20% of a door with a great big hole in the middle and emptiness where the accused aft midspan latch is supposed to be. To read their 'reassuring letter' one would visualize a solid big square door in place in the fuselage. Only by the photograph is the reality shown, bits and pieces and most of door missing. But then again, they are not accident investigators but engineers.

So let's say you can't comment, no problem. You have said you will listen. Fine. I'll talk. I'm assuming you are a professional accident investigator and follow basic techniques. Evidence first. Center tank as initial event is so easy to debunk it's as weird as missile explanation. Where to start? Well, first the theory is it can't happen. The fuel was the not the right kind, the temperatures were wrong, there is no ignition source, it hasn't happened before in a 747, (and skip lightning Madrid 747,) and nobody on the planet, including fuel experts, Boeing and TWA, agrees with center tank exploding as initial event except Dr. Loeb. Second, the evidence of TWA 800 reconstruction, radar scans, CVR and FDR refute center tank as initial event. The paint singe marks show nose off first and then far away, center tank

fire. The bodies show no fire burns. The damage is unilateral, not bilateral. The debris pattern shows nose off first, then rest of plane flying along headless for a while then exploding. And plane climbing upwards after nose comes off? Please. Only a non pilot would say that. And leaking fuel as streak? Only a lawyer would suggest such a thing, and did. Certain things would happen with center tank as initial event and they didn't happen.

And there is a reasonable alternative explanation that fits the theory and the evidence, rupture/open cargo door. First, it's happened before with UAL 811 so theory of door opening in flight is sound. Second, the evidence on reconstruction of 800 shows the shattered area and the absent door parts. Certain things happen when forward cargo door ruptures/opens in flight and they did happen: the certain things come from UAL 811 and they match 800: sudden loud sound on the CVR, abrupt power cut on the FDR, at least nine missing bodies, (not bone fragments), flogged engines, inflight damage on right side, and fuselage vertical tear patterns. Certain things would happen with cargo door rupture/open as initial event and they did happen right up to the streak as shiny metal object such as piece of door spinning away in evening sunlight and light reflection off fast moving object being perceived as streak to observers on the ground. All other accidents were in pitch darkness and far away from ground observers. Only TWA 800 was close in to shore with evening sun shining bright on fuselage giving that flash of reflection.

There is one specific piece of evidence that can tie 811 to 800 not yet mentioned. The hinge of 800 exists because it can be seen in reconstruction photo. The hinge closeup of door is also in a photo for UAL 811 in NTSB 92/02, page 40. Let's match up those two hinges. Let me make a prediction. There will be overextension damage on 800 hinge that matches 811. When the

door slams upward and transfers paint above, the hinge gets bent too far and causes visible damage on the opposite hinge pieces. The closeup of the damage is in the photo of UAL 811 door, page 40, AAR 92/02 and on my web site www.corazon. The caption for 811 hinge reads, "Figure 14.--Close-up view of cargo door hinge section. Arrows show impressions caused by contact with opposite hinge section." The explaining text on page 35 reads, "Several areas on the hinge sections, such as the fuselage hinge sections, showed evidence of contact from the door during overtravel, (see Figure 14)."

So, Mr. Streeter, an opportunity to match UAL 811 with TWA 800, and with the absence of accused aft midspan latch area of door to examine and the previously mentioned red paint smears, a prediction is made that the actual hinge of 800 will show impressions caused by contact with opposite hinge sections during overtravel when door slammed upward after door ruptured/opened.

A center tank explosion as initial event would not cause door to fly open and investigators are so adamant door was latched and locked when it impacted water.

Overtravel on hinges rules in door rupture/open. Overtravel on hinges rules against door latched and locked at impact with water. Overtravel on hinges matches UAL 811, a cargo door rupture/open event. Overtravel on hinges rules against center tank explosion as initial event.

The goal is to determine if the top piece of the forward cargo door of 800 went upward so much as to make contact with the opposite hinge, making an impression, gouge, or other marks. Normally, the top piece of the door never touches the opposite

hinge in its usual extension of opening up; only were it to slam all the way up enough to smear paint onto the upper fuselage would the top of door make contact with opposite hinge leaving impressions.

So, Mr. Streeter, there you have it. Good science, good investigative techniques, good examination of real evidence, and closely reasoned conclusions based on results. Can you suggest strongly to NTSB and persuade them as one accident investigator to another of the worthiness of the effort to closely examine that forward door hinge now hanging on the 800 reconstruction for overtravel impressions? It will require an eyeball about five inches away with a magnifying glass, like Sherlock Holmes, to match the picture in NTSB AAR 92/02 page 40 to the actual red painted 800 hinge.

Well, I believe the experiment suggestion will get through to Mr. Dickinson by your referral and that's the main thing.

Thank you again, Mr. Streeter, for your prompt reply, thoughtful comments on why FAA Office of Accident Investigation has to be reticent yet aware, and assurance that my concerns and suggestions are getting through to the people on site with the authority and ability to either rule in or rule out aft midspan rupture in forward cargo door.

Sincerely,

John Barry Smith

From: John Barry Smith <barry@corazon.com>
Date: November 7, 1997 5:02:56 PM PST
To: Lyle Streeter <Lyle.Streeter@faa.dot.gov>
Subject: **Input**

As usual, I will continue forwarding the materials you provide.

Lyle Streeter

Thank you, sir.

Cheers,
Barry Smith

From: Lyle Streeter <Lyle.Streeter@faa.dot.gov>
Date: November 7, 1997 6:32:39 AM PST
To: barry@corazon.com (IPM Return requested) (Receipt notification requested)
Subject: **Re: Hinge inspection for overtravel impressions**

Mr. Smith - the public hearing is open to the public, but not a public forum. The NTSB is in the process of deciding at this time what witnesses will be interviewed. If you were to show up, you would be able to sit in on

the entire week's proceedings, but there is not an opportunity to address issues to the NTSB except by designated witnesses. The hearing is normally covered by the media, with the most extensive coverage being afforded by the trade press and public television. Much of the popular press coverage will be of the "sound byte" variety.

Parties to the investigation can make submissions to the NTSB for the purpose of getting their views on the record. I am not sure of the exact procedure to be followed by members of the public, but I assume the NTSB has some means of considering public input. For example, we forward along to them any and all public input that calls for technical review. We do that whether we receive it by mail, e-mail, or phone. We also provide that material to our engineering folks for their review.

I have had the same trouble getting into the NTSB Web site that you are apparently experiencing. You may want to utilize the mail, and provide your input to the at this address:

National Transportation Safety Board
Major Investigations Division, AS-10
490 L'Enfant Plaza, S.W.

Washington, DC 20594-2000

As usual, I will continue forwarding the materials you provide.

Lyle Streeter

Reply Separator

Subject: Hinge inspection for overtravel impressions

Author: barry@corazon.com at Internet

Date: 11/7/97 3:24 AM

Mr. Smith - Thank you for your letter and your interest in this accident. I must point out to you that there are some limitations under which we must operate.

Mr. Streeter, I understand. Thank you for your reply.

The bottom line is that we are allowed to say very little, and almost nothing about the facts of the investigation itself.

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aft midspan rupture in forward cargo door.

Sincerely,

John Barry Smith

barry@corazon.com

<http://www.corazon.com/>

<http://www.corazon.com/presskit.html>

From: John Barry Smith <barry@corazon.com>

Date: November 15, 1997 7:19:47 PM PST

To: FAAOAI

Subject: Mr. Streeter for Chairman Hall, part one Chairman

Lyle Streeter

Lyle.Streeter@faa.dot.gov

Office of Accident Investigation

Federal Aviation Administration

Dear Mr. Streeter,

15 Nov 97

Enclosed is my reply to Chairman Hall's 24 Oct letter to my Congressman, Sam Farr, in which Chairman Hall mentions my name several times. My letter is a polite, factual rebuttal of his conclusions which conflict with the evidence presented by the reconstruction of TWA 800. I consider this one of the most important letters I have ever written in my life.

I will send them snail mail but would appreciate your forwarding this email and the two separate attached reference emails to NSTB as time is short before the 8 Dec 97 hearing in Baltimore. I will be there and would like to meet you if that fits your schedule. Holiday Inn Express Baltimore 1401 Bloomfield Avenue Baltimore MD 21227

We'll call this part one Chairman with part two Chairman and part three Chairman to follow immediately. Part one and two are the FAA Mr. Brenerman letters I sent and I refer to them in my letter to Chairman Hall so thought I should include them. They are 28K each and I hope they get through. If not I'll break them up into smaller pieces. I wish you could receive pictures; is there any way for you to receive pictures? I can encode them in binary, can you decode binary? I have a Mac clone too and you have a Wintel machine. Compatibility is difficult but possible.

Sincerely,

John Barry Smith
551 Country Club Drive,
Carmel Valley, CA 93924
408 659 3552
barry@corazon.com

National Transportation Safety Board
Office of the Chairman
Jim Hall
Major Investigations Division, AS-10
490 L'Enfant Plaza, S.W.
Washington, DC 20594-2000

Dear Chairman Hall,

14 November 1997

We are on the same side. We have the same goal. We care about TWA 800 and are not indifferent. We try to explain crashes so they will not be repeated. We are the good guys. We both have mechanical explanation. My explanation of door rupture/open at aft midspan latch of forward cargo door incorporates the center tank fire/explosion as happening just seconds later and lower. I am not refuting center tank fire/explosion. I am agreeing with it. The fire/explosion happened. My explanation is mechanical also and has door rupture just slightly earlier. Why door ruptured at aft latch is a good question requiring professional investigators.

Mr. Hall, my reference is the excellent accident report NTSB AAR 92/02. My research and conclusions always come back to AAR 92/02. NTSB has solved TWA 800 seven years ago with

AAR 92/02. NTSB has shown that even if first report, AAR 90/01, was not totally correct, upon new evidence, (retrieval of door) minds and conclusions can change.

Cargo door rupture is internal mechanical explanation, similar to center fuel tank. We are on the same side. Missile is external terrorists, that is the opposite side. Our mechanical explanations complement each other and are not antagonistic. Please reconsider such a similar cause to center tank explosion as door explosive decompression for initial event.

Congressman Sam Farr has forwarded to me your 24 Oct 97 letter to him regarding my cargo door rupture/open explanation for TWA 800 and others. Thank you for your firm and comprehensive statement regarding the cargo doors of TWA 800. Unfortunately, I believe the conclusions in your letter are not supported by the facts shown in the NTSB reconstruction of TWA 800 now in Calverton hangar and by comments by NTSB and FAA members of your team. With respect I will attempt to clarify my exact points.

Specifically:

1. All of the cargo door mechanisms have probably not been examined by your team. The aft and forward doors have ten latches each, eight locking sectors each, ten latch pins each, and various viewing ports and pressure relief doors. Mr. Bob Brenerman of FAA Northwest Region recently reported bottom latches of the forward cargo door have been examined but unsure about the status of the two midspan latches. The reconstruction of TWA 800 reveals at best only 20% of the forward door recovered and most of the viewing ports and pressure relief doors missing. All twenty door latches, sixteen locking sectors, twenty latch

pins and several viewing ports and relief doors were probably not examined by your team. The reconstruction shows that to be highly unlikely.

2. All of the structure of the cargo doors has probably not been examined by your team. The reconstruction shows such shattered damage, twisted metal, and frayed door parts that many small, medium, and large parts of door structure remain to be recovered and examined. At best only 20% of the forward door structure has been recovered and examined by your team.

3. Early in your investigation your team could not determine conclusively that the cargo doors were latched. In an interview in March of 1997 with an Aviation Week & Space Technology correspondent, one of your NTSB investigators stated he was still intrigued by the possibility of the forward door popping open. Early in your investigation the reconstruction of TWA 800 was not completed on which to base a conclusive decision. Early in the investigation all attention was on bomb in forward cargo hold, missile striking near forward cargo hold, or center tank explosion near forward cargo hold. Determining conclusively cargo doors were not implicated was impossible early in the investigation when start of damage was considered to be near that forward cargo door.

Early in the investigation the eight lower latches of the forward door may have been determined to be latched at water impact but that in no way supports conclusion entire door was latched, in particular the aft midspan latch which continues to be shown to be missing in the reconstruction. Doors can rupture/open when most latches are latched. A door can rupture/open when all latches are latched. The forward door area of TWA 800 in fact shows such a rupture/opening of fuselage skin at the aft midspan

latch area. The aft midspan latch as well as most of the aft ten foot edge of the door is missing. Because some of a door is latched at bottom does not conclusively determine that all of the door is latched. Because all of a door is latched does not conclusively determine the door did not rupture/burst open.

4. There was evidence of failure of some of the latching mechanisms on the doors. A failure of the aft midspan latch is evident because it is missing. Failure of the aft midspan latch is evident because the aft vertical edge of the door the latch was supposed to seal is missing. Evidence of failure of the latching mechanisms is shown by the mostly shattered, twisted, torn, and frayed fuselage structure which shows inflight outward rupture destruction. The outward force is shown in the reconstruction by outward peeling of fuselage skin between the upper row of passenger windows and the lower row. The outward force is shown by the direction of curve of door frame at aft edge. The outward force is shown by red paint smears only above the forward cargo door which indicates the red painted door below slammed upward after door rupture and transferred red paint to the white paint above and between the passenger windows. The outward force of the door rupture will be shown by the overtravel impressions damage on the upper forward door hinges similar to the damage shown on the door hinges of UAL 811, as shown in photograph in Figure 14 on page 40 of NTSB AAR 92/02 and on my web site, www.corazon.com. Outward force damage means all damage in cargo door area is not water impact damage.

Stating that doors latched at impact with water implies they are now unlatched after water impact. You imply that latches were normal but now failed because of water impact.

Unilateral damage starboard side only and smooth fuselage on

port side indicates damage started at cargo door and mitigates against center tank as initial event which would give bilateral damage and didn't.

5. The information about the doors has not been forwarded to me by your investigators on previous occasions. Only three short ambiguous statements about the doors have been sent to me. None said all of the door latches were recovered and examined, none said a conclusive determination had been made, and none said there was no evidence of failure of all the latching mechanisms. And I appreciate the few notes I did receive. Thank you. Really, they invigorated me.

6. Mr. Farr may be assured of the normal status of doors before water impact, but I am not based upon close examination of the factual reconstruction of TWA 800 as revealed by the official NTSB photograph, on web site at www.corazon.com/800foreafthorreconweb.html and annotated at corazon.com/TWA800hullrupture.html. The picture reveals extensive center tank fire damage and extensive outward shattered cargo door area damage. Both areas deserve intense investigation.

Summary of my reply to your door latching statements of 24 Oct 97:

1. All door mechanisms probably not examined. Photo shows aft midspan latch, manual locking handle, and pressure relief doors missing.

2. All structures probably not examined. Photo shows 80% of forward door structure with viewing ports and aft vertical edge missing.

3. Early conclusive determination of latched cargo door not possible. NTSB investigator stated door popping still possible. Reconstruction not completed. Destruction start location near

forward cargo door.

4. Evidence of failure of latches exists. Aft midspan latch missing and unexamined. Edge of door frame at aft latch curved. Outward peeling of fuselage skin. Red paint smears between windows. Rupture hole discerned centered at aft midspan latch.
5. Information about doors in letter not forwarded to me from investigators previously.

Your letter to Congressman Farr mentions my name several times, with implications of exasperation at receiving several (actually hundreds) emails from me and pique at having to repeat yourself. Well, sir, as a survivor of a sudden, night, fiery, fatal jet airplane crash coming within one second of death, I know that death eats exasperation for breakfast and snacks on pique ten minutes later.

I know what I'm talking about when I talk about fuselage ruptures in high time Boeing 747s, I've been tracking forward cargo door for over eight years. I know what I'm talking about with sudden night fiery fatal jet crashes, I've been in one. I know what I'm talking about when I talk about sudden loud sounds on CVRs, I was an audiologist. I know what I'm talking about with interpreting photographs, I was a photo interpreter/US Navy air intelligence officer for years. I know what I'm talking about when understanding government reports, I've written a hundred for the US Army. I know what I'm talking about with aerodynamics and aircraft behavior in flight, I was a modeler, aircraft owner, still a FAA commercial licensed pilot, instrument rated, was a FAA FAR Part 135 certificate holder, and was a reconnaissance attack navigator flying supersonic in combat off carriers during wartime.

My door rupture explanation deserves intense investigation, not

cursory rejection based upon quick examination of a few parts. Rupture at forward cargo door at aft midspan latch is worthy of extensive investigation and evaluation based upon many more facts than just listed in this reply letter. The larger picture is a forest of four high time Boeing 747 accidents of which TWA 800 is but one tree. The other three have many significant similarities that need to be considered by professional aircraft accident investigators. These similarities are real things that can be listened to, seen, and touched. I refer to CVR sudden loud sound, abrupt power cut to FDR, radar data, never recovered bodies, inflight damage on airframe, FOD, debris pattern, and sequence of destruction. All four accidents have those unique events, all match; all four are probably caused by the same initial event.

NTSB is working on the solution of TWA 800 by working on the bottom up, by examining the object very carefully. Fine. There is a also time to work from the top down, by determining other types of accidents and making deductions based upon their confirmed conclusions. It is no coincidence when TWA 800 is discussed, Air India 182, UAL 811, and PA 103 always come up. They all have the same official cause: fuselage rupture in forward cargo hold. I am more specific, fuselage rupture at the aft midspan latch of the forward cargo door. I have much official government documented support for the claim and it is on web site www.corazon.com, available for perusal by your investigators.

Let me present my cargo door case at the fact finding hearing. I have found some facts that relate to TWA 800 not yet discovered by your team and wish to present them. By calling only witnesses that offer already known facts you are presenting not finding.

I officially request to be assigned a designated witness to present the aft midspan latch rupture in forward cargo door explanation to the NTSB panel at the public fact finding hearing in Baltimore December 8-12. I request fifteen minutes and require no visual aids, just an attentive panel of listeners.

I also look forward at the hearing to examining all the reports of examination by your team of the cargo doors, door structures, door mechanisms, latches, pins, locking sectors, door frame, hinges, unusual paint marks above door, floor panels and beams, manual locking handles, and any chafed wiring. They are noncriminal evidence, should be made public and are important reports. Historical documents such as previous NTSB AARs, photos of reconstruction of wreckage, reports of CVR and FDR data, engine breakdown reports, wreckage plots, radar images, inflight damage evaluations, and examination reports of the door, the latches, and structures of both doors, as your letter states, are all important and will be used to rule in or rule out cargo door rupture/open as cause for TWA 800.

Mister Chairman, It's never too late to check out that forward door area. The criminal investigation just ended yesterday. With missile and bomb eliminated that leaves mechanical. Cargo door is a mechanical complement to center tank fire/explosion. For all the ducks to be in a row for the public hearing, various loose ends as listed in this reply should be tied up. Now that the police are out of the way, a different mind set may enter into the aircraft accident investigators' minds and a broader net may again be cast looking for the cause of TWA 800.

Center tank explosion as initial event will have tough acceptance at the hearing; it will be doubted by some; it's best to rule out now any alternative mechanical explanation for initial event.

One will be sought by the curious. Now that missile and bomb are ruled out, (thank goodness, finally) inadvertent rupture/opening of the forward cargo door at aft midspan latch in flight is such an alternative mechanical explanation for initial event and supported by NTSB itself, AAR 92/02, UAL 811, which matches in many ways TWA 800.

I suggest tying up these loose ends on a few seconds earlier mechanical event before the public hearing a few weeks from now:

1. Confirm NTSB has recovered and examined all twenty cargo latches; nineteen or less is a problem.
2. Have explanation ready for red paint smears found only above forward cargo door which indicate outward door movement; out, up, and away from internal rupture.
3. Examine forward door hinge closely for no overtravel impression damage. Damage would match UAL 811 hinge.
4. Have explanation ready when water impact is said to be cause of door area damage yet peeled skin is outward.
5. Have explanation ready for missing aft midspan latch, aft vertical edge of forward door, and large rupture hole centered there as shown in reconstruction.
6. Determine where the other 80% of the forward door structure is located since not in reconstruction.

I beg you, sir, seriously beg, to put your best investigators on forward cargo door as first culprit based upon this letter, NTSB AAR 92/02 and data at my web site at www.corazon.com

Sincerely

John Barry Smith
551 Country Club Drive

Carmel Valley, CA 93924
408 659 3552
barry@corazon.com
www.corazon.com

Excerpt from 24 Oct 97 letter to Congressman Farr from Chairman Hall of NTSB: "Please be assured that our team has examined all of the structure recovered from TWA flight 800, approximately 95%--including all of the cargo door mechanisms and structures. Early in the investigation we determined conclusively that the cargo doors were latched and locked at impact with the water, and there was no evidence of any failure of any of the latching mechanisms on the doors. This information has been forwarded to Mr. Smith by our investigators on previous occasions."

Aviation Week and Space Technology, 10 Mar 97 Page 35.
"NTSB investigators have suggested unofficially that the streaks the pilot saw could have been light reflections from the skin of the aircraft, tongues of flame from the airliner or the forward door of the aircraft popping open, a possibility that still intrigues investigators, the second official said."

Total of three emails from NTSB investigators:
From: Schleede Ron <SCHLEDR@ntsb.gov>
To: barry <barry@corazon.com>
Subject: RE: TWA crash cause ATTN Robert Francis
Date: Mon, 29 Jul 1996 15:24:00 -0400
Encoding: 17 TEXT
Status:

Be assured that we are checking that. I was the investigator in charge of the UAL flight 811 case and fully knowledgeable in its causes and factors.

Thanks for the interest.

From: Schleede Ron <SCHLEDR@ntsb.gov>
To: barry <barry@corazon.com>
Subject: RE: TWA crash cause
Date: Sun, 11 Aug 1996 11:39:00 -0400
Encoding: 13 TEXT
Status:

I have examined the cargo door from twa 800--it is locked and latched!

From: Dickinson Al <DICKINA@ntsb.gov>
To: barry <barry@corazon.com>
Subject: RE: mechanical crash cause
Date: Thu, 19 Sep 1996 19:04:00 -0400
Encoding: 129 TEXT
Status:

Mr. Smith, thank you for your message concerning the TWA 800 crash investigation. We have recovered many of the door/hatch/access panel/windows from the sea floor and none of them indicate that they came off the aircraft prior to the event which lead to the crash. In addition, both the CVR and the FDR do not have any

information that indicates any of the above things departed the aircraft prior to the event. A depressurization event most certainly would have been noted by the crew and recorded on the CVR. We will continue to look for any indications leading to the source of the event and definitely pay attention to items mentioned in your letter. Thank you for your interest in aviation safety.

Attached as separate letters:

31 Oct 97 reply to FAA Northwest phone call, Mr. Brenerman, to me.

5 Nov 97 reply to FAA Northwest letter, Mr. Brenerman, to me.

From: John Barry Smith <barry@corazon.com>

Date: November 15, 1997 7:20:09 PM PST

To: FAAOAI

Subject: Part three Chairman

Lyle Streeter

Lyle.Streeter@faa.dot.gov

Office of Accident Investigation

Federal Aviation Administration

Dear Mr. Streeter, below is part three Chairman for including
with part one Chairman and part two Chairman of my 14 Nov 97

letter to Chairman Hall.

Sincerely,

John Barry Smith
551 Country Club Drive,
Carmel Valley, CA 93924
408 659 3552
barry@corazon.com

Bob Brenerman,
FAA Structural Aerospace Engineer,
Federal Aviation Administration
Transport Airplane Directorate, ANM-100
1601 Lind Ave. S.W.
Renton, WA 98055-4056
(206) 227-2100
Ron Wojnar, Manager
Darrell Pederson, Assistant Manager
Tom McSweeney, Director ACS

Dear Mr. Brenerman,

5 Nov 97

Thank you for your 29 Oct 97 letter reference 97-120S-699. It was signed by Mr. Pederson for Mr. Wojnar but I'm assuming you wrote it and you are the "FAA structural engineer who assisted the NTSB at the hangar in Calverton, New York..."

I would prefer to discuss with you, an airplane person with the hands on experience of TWA 800, the details of your letter.

First, the politics...why is the Northwest Region of the FAA given the task by Mr. McSweeney through my congressman to

'investigate Mr. Smith's concerns'? Would not the Office of Accident Investigation of the FAA be more appropriate? Especially since the Northwest Region of the FAA is the only FAA authority to go on record as supporting the center tank as initial event with its own ignition theory?

"Worn Wiring May Have Had
Role In TWA Disaster

Chafing in

Fuel Tank Conduits Found

in Study of Early 747s

By Don

Phillips

Washington Post Staff Writer
Wednesday, July 2, 1997; Page

A16

The Washington Post

Northwest

A theory, developed by the FAA's

unlikely chain of

Region in Seattle, involves an

problem causes a

events in which an electrical

tank to the

fire to burn outward from the wing

designed

wing tip through a vent tube that is

tank. At the

to allow vapors to escape from the

reverses

wing tip, the flame front then

direction and travels back down

another vent

tube into the center tank.

800

The NTSB, conducting the TWA

theory as only

investigation, played down the

one of many."

So, you see, Mr. Brenerman, my cargo door explanation was sent for evaluation to a group who already have their own contrary explanation for TWA 800, not exactly an open mind to an impartial forum for investigation. It's like asking someone to prove they're wrong. Few will attempt to overcome that set bias. I hope you can.

By the way, we are as one on chafed wiring as a problem. NTSB AAR 92/02 for UAL 811 had chafed wiring which shorted to turn on door motor which unlatched door. This explanation of why door ruptured/opened may well explain why fuselage ruptured at cargo door area for AI 182, PA 103, and TWA 800 also.

One last thing on politics: We are the good guys, we seek to prevent airplane crashes, we are open, we discuss the possibilities relying of real evidence that we can see, touch, and hear. If my style 'chafes' when I rebut or attempt to refute your line of thinking, please don't take it personally. We are not indifferent; we care. We are on the same side with the same goal, as you state in your letter to me, "...the first priority of the ... (FAA) is ensuring the continued operational safety of aircraft."

In that regard let me dissect your letter of 29 Oct 97 very carefully and reply to each observation and conclusion you have made about TWA 800 and others.

Assumptions:

1. You are a FAA structural engineer and understand the Boeing 747 airframe.
2. I am a FAA licensed commercial pilot, instrument rated and previous FAA Part 135 certificate holder.
3. NTSB published documents such as AAR 92/02 shall be assumed to be correct unless otherwise noted.
4. UK AAIB and Canadian/Indian published government aircraft accident reports shall be assumed to be correct unless otherwise noted.
5. You have had hands on experience with TWA 800 and can confirm or refute deductions based upon personal experience lacking a published NTSB AAR for referral.
6. The color photograph of the reconstruction of TWA 800 is complete and accurate. (Photo included in letter and at www.corazon.com/800foreafthorreconweb.html.)
7. You may soon have internet access and can examine my web site at www.corazon.com which has scanned text of accident reports for referral. Email is available to you and you can correspond to me at barry@corazon.com
8. Hindsight is great and everybody makes mistakes once in a while.

29 Oct 97 letter to me from you:

Paragraph four, sentence two:

"However, when the wreckage of the nose section was recovered it became evident that the forward cargo door had not opened in flight or separated from the nose section prior to impact with water."

Well, sir, let's be picky. A door means a door and not pieces or segments or sections. The forward cargo door of TWA 800 is in tatters, it's shattered, it's in pieces; it's everything but a 'door'. It is so shattered that only 20% is recovered and reconstructed. What is the weight of a normal door? What is the weight of the recovered pieces? For the purposes of discussion I use 20%. If wrong, provide a more accurate number please. To base the conclusion, "...forward cargo door had not opened in flight or separated from the nose section..." based upon only 20% of the evidence is not valid.

Especially since I have pinpointed the location of door failure/rupture to the aft midspan latch of the forward cargo door and that latch is not connected to the frame, as seen in reconstruction photo. The identification of the aft midspan latch as the point of failure is deduced by a. observing the large round hole in reconstruction photo of TWA 800, b. reading descriptive text about the AI 182 door rupture, and c. viewing the recovered door of UAL 811. The UAL 811 door shows a small door rupture at aft midspan latch area. The forward midspan latch pin was not damaged while the aft latch pin was. The UAL 811 door had a rupture hole straight through the door. That was an opening in the door. The door opened inside the door itself as well as at the latches.

(<http://www.corazon.com/811page35analydoor.html>
<http://www.corazon.com/811doorhalves.html> and
<http://www.corazon.com/811doorhalvesphoto.html> give URLs of pictures and text of UAL 811 and <http://www.corazon.com/182pixtext1web.html> gives text about forward cargo door area of AI 182.)

UAL 811 is the model for the three other accidents, AI 182, PA 103, and TWA 800. It always comes back to NTSB AAR 92/02. (Not the first UAL 811 NTSB AAR which was NTSB/AAR-90/01 and then superseded by NTSB AAR 92/02, written after door was recovered and conclusions changed. Everybody makes mistakes once in a while.)

The TWA 800 reconstruction photo shows other similarities to UAL 811 which will be discussed as we go along.

Paragraph five, sentence one:

"The FAA structural engineer who assisted the NTSB at the hangar in Calverton, New York, verified that the forward cargo door was recovered at the same location as the rest of the nose section."

Well sir, again, not door recovered but pieces were. Let us assume the bottom 5% of the door pieces with the bottom eight latches was found with the nose section and attached to the sill and fuselage of TWA 800 as seen in NTSB photo. (That matches the description of AI 182 from video film 6700 feet underwater also, corazon.com/182pixtext1web.html.) Because 5% of the door of TWA 800 was found with the nose does not rule out door rupture at aft mid span latch. It does not rule out fuselage rupture caused by door failure. What it does do is say that bottom piece of door stayed with nose until water impact. Rupture at midspan latch still possible.

Paragraph five, sentence two:

"A further examination of the recovered wreckage showed that the upper hinge was still attached to the both the fuselage and the door."

Exactly! That is what the model shows too! UAL 811 had the door tear away with the top piece taking upper flange of the door and all the hinge and attachment bolts with it. The hinges of UAL 811 were in the same condition and attached to the door as TWA 800. (corazon.com/811page35analydoor.html) NTSB AAR 92/02 page 35 and 41: "The hinge pins and all hinge sections from N4713U's forward cargo door were intact; all hinge sections rotated relatively easily. All attach bolts from the hinge sections of the door remained attached..." The TWA 800 reconstruction photo shows a piece of fuselage skin attached to hinge. The fuselage skin that left with the door of UAL 811 was not recovered from ocean floor for examination.

Paragraph five, sentence four and five:

"In addition, the door latches at the bottom of the door were still attached to the fuselage lower sill structure. This indicates that the door was in the 'latched and locked' position at the time of impact with the water."

Well, sir, there are two latches unaccounted for out of ten, the mid span latches. The door may have been in the almost all latched and locked position when it hit the water but not totally. And it is in that area, specifically, the aft midspan latch area, where the evidence points to rupture.

It was an understandable conclusion to make that door did not rupture/open in flight when bottom latches were found latched and attached. It is an understandable conclusion to make that the door did not rupture/detach when the hinge stayed attached to the door. However, both conclusions can be adjusted by viewing more of the door and relying on past precedent.

The answer to refute aft midspan latch rupture is to locate and

identify the aft mid span latch and confirm it is latched around its pin, an impossibility when looking at the TWA 800 reconstruction photo with sharp, clean line at door frame where aft mid span latch is supposed to be latched and isn't.

Paragraph six, sentence one:

"The nose section of the airplane impacted the water on the right side, causing severe hydraulic damage with the result that the door structure did not remain completely intact."

Well, sir, is this an explanation of why the starboard side cargo door area is so shattered and the port side of fuselage is so smooth? You mentioned in our phone call that the skin appeared to be pushed inwards also. On page 41 of AAR 92/02 for UAL 811 it reads, "Examination of the outer skin contour of the upper door piece revealed that it had been crushed inward." So the cargo door of UAL 811 does give an appearance of inward crush on the door when top piece struck fuselage on its way up after explosive decompression. You may have noticed the same effect on the TWA 800 top piece of door. Regarding the rest of the nose having inward crushing, the TWA 800 reconstruction shows otherwise with large pieces of skin clearly showing an outward force with the skin peeled outwards. Regarding the many pieces of the cargo door area, that is to be expected when the fuselage ruptured in flight and the weakened nose tore off subjecting that now exposed and jagged area to 300 knots of slipstream.

Paragraph six, sentence two:

"However, wreckage for the entire door was recovered at the same location as the nose section and had the same impact damage as the surrounding fuselage structure on the right side."

Well, sir, I have to contest the use of the adjective, "entire." My

online dictionary states; entire \in-"tr\ adj : complete, whole
synonym: sound, perfect, intact, undamaged ~ entirely adv

No way was that entire door recovered period, anywhere, according to that TWA 800 reconstruction photo. I estimate 20% recovered and let us assume that was in the nose section debris field. That leaves most of door missing and in particular the accused aft midspan latch section of the door. In addition, the 20% recovered pieces shown in the reconstruction have all types of damage revealed; inward, outward, crushed, twisted, crumpled, torn, and frayed, which is dissimilar to damage only ten feet above cargo door area of the nose. (I am unable to comment on the forward part of the cargo door or the area forward as the only released photograph by NTSB is cropped short of the entire reconstruction.)

The many pieces of the door would explain the discrepancy in the newspapers, a computer simulation, and a Coast Guard Rear Admiral stating on the record that the forward cargo door was found closest to the event site, yet contradicted by your above statement. All may be correct, it depends upon which piece is talked about. The categorical statement by the officer in charge of recovery that the door was found closest to Kennedy Airport is probably true and implies that the critical midspan latches may in the piece of the door he is referring to. The statement by you that the door was found with nose section is true because you are referring to the pieces that stayed with the nose.

Please reconsider your appraisal of 'entire' and 'same impact damage' based upon close analysis of TWA 800 reconstruction photo.

Paragraph six, sentence three:

"This is additional verification that the forward cargo door had not opened in flight or separated from the airplane."

Well, sir, my explanation of TWA 800 is rupture in forward cargo door at aft mid span latch. A door can open at places other than the latches, some parts can separate and some can stay attached and yet door can still be said to have 'opened.' But 'open' implies turning doorknob and door opens. That's why I changed 'inadvertently opened' to 'ruptured'.

Now to paint smears. The red paint smears are real, there are a lot of them, and solid conclusions can be reached by that very real evidence. Their location is important, only above and slightly aft of the forward cargo door. Using NTSB AAR 92/02 as a model again, page, 41, "There were also many areas on the outer skin where blue and red paint transfer marks could be seen." The paint transfers for UAL 811 were from fuselage to door using blue and red paint of United Airlines. TWA 800 was the red of TWA from the door to the fuselage above. This indicates an outward expansion of the area below forcing the red colored door to slam upwards against the fuselage transferring red paint onto the white painted areas between the passenger windows. NTSB AAR 92/02 again, page, 41, "The forward cargo door can rotate open 143 degrees before the hinge would deform, permitting the door to contact the fuselage above."

The splotchy red painted skin above the door matches the splotchy red painted smears between windows, indicating the top of the door slammed up, transferred paint and tore away. The red paint smears above cargo door indicated outward force not inward. The peeled open skin indicates outward movement. The outward means the unilateral starboard damage is not water impact. Not water impact means that center tank explosion is not

viable as initial event since that would give bilateral damage and didn't. Outward unilateral damage strengthens rupture at cargo door area explanation as that is what would happen and did.

Paragraph seven, sentence two and three:

"There is even more compelling evidence resulting from the TWA flight 800 accident investigation that indicates that the forward cargo door did not cause the accident. However, it is up to the NTSB to share this information with you."

Well, sir, that hurts. NTSB sharing information with me? I think not. Secret information that cargo door didn't burst? I think not also.

Paragraph eight, sentence two and three:

"However, the accidents to which your refer, in particular the Pan Am flight 103 and the Air India flight 182 accidents, each had strong evidence of an internal explosion caused by high explosive materials (terrorist bomb). In each case there has been no evidence that the forward cargo door opened in flight causing the accident."

Well, sir, let me polite in disagreement. Not 'strong' evidence of bomb. Very weak is what the evidence shows and I have reviewed the evidence as described in UK, Canadian, and India accident reports over and over again. AI 182 and PA 103 as cargo door rupture is quite clear once the premise is made of fuselage rupture in flight in cargo door area. AI 182 said the fuselage ruptured in flight at cargo door area and for want of a better explanation, said bomb did it. PA 103 also had fuselage rupture on left side of forward cargo hold while wreckage evidence shows much more damage and sooner on starboard side, at cargo door area. The evidence is in the reports and they are on web site

www.corazon.com under the flight numbers.

Briefly, AI 182 summation leading to cargo door rupture is on web page <http://www.corazon.com/AI182essentials.html>. I will quote from only two of twenty statements about AI 182 here:

"As described earlier, the sudden nature of the occurrence indicates the possibility of a massive airframe structural failure or the detonation of an explosive device." Page 49. And then: "The AIB report concluded that the analysis of the CVR and ATC recordings showed no evidence of a high-explosive device having been detonated on AI 182. It further states there is strong evidence to suggest a sudden explosive decompression of undetermined origin occurred." Page 24.

So, Mr. Brenerman, the official report actually gives 'strong evidence' to cargo door rupture and 'no evidence' to bomb.

PA 103 is similar; rupture at cargo door area is supported by factual evidence including the reconstruction of PA 103 on starboard side which matches the photograph of UAL 811 after landing. The essentials for cargo door for PA 103 are on page <http://www.corazon.com/PA103essentials.html>. The premise of bomb is based upon evidence which shows that a '...rather large shotgun had been fired at the inner surface of the fuselage at close range.' Pages 19 and 20 of AAIB report. The resulting hole was about 15 inches in diameter, not a bomb hole and not big enough to bring down a 747. There was a blast in PA 103 but after the rupture at cargo door, just as center tank explosion was after cargo door rupture for TWA 800. One last thing on PA 103, the AAIB report never said bomb, only 'improvised explosive device.' The British are precise with language and they are right to be so. A door rupturing in flight becomes a device which wasn't meant to be but became an explosive causing agent, an explosive decompression. And residue that could be high

explosive is now shown to be possibly benign with TWA 800 and the dog sniffing test. Bomb explanation for PA 103 is tenuous at best and will not stand up to scrutiny. I would love to go over every point of AI 182 and PA 103 with you but first become very familiar with the government accident reports as I have, they give the evidence. I encourage you to do so.

The bomb conclusions were political. As an engineer and pilot let us leave shadowy Sikh terrorists and secret Libyan agents putting bombs aboard planes to the politicians and let us examine evidence such as CVR, FDR, FOD, bodies, metal, and statistics. I full well know the immense claim of PA 103 not being a bomb. It is a myth airplane like the ship Titanic, the airship Hindenberg, and the ship Maine, all three of which had original accident causes modified over time, brittle steel, flammable skin, and coal dust.

Four high time Boeing 747s took off at night running late and suffered a fuselage rupture at forward cargo hold which left similar evidence of sudden loud sound on CVR, similar abrupt power cut to the FDR, similar Fodded engines, similar paint smears, similar wreckage pattern, similar in flight damage, similar destruction sequence, similar missing never recovered bodies, similar reconstruction patterns, and similar red herring of bomb.

All four, Mr. Brenerman, all four; and only those four of all 747 accidents. Only one came back to reveal the cause, inadvertent opening of the forward cargo door in flight, rupture at aft midspan latch area, UAL 811 as described in text and pictures in NTSB AAR 92/02.

Paragraph nine, sentence two:

"A repetition of the events that caused the UAL flight 811 forward cargo door to open in flight is not likely to occur again because of modifications required by Airworthiness Directive

(AD) T89-04-54."

Well sir, the cargo door was not supposed to open:

1. after certification.
2. After the first AD when lower sill damage was noticed.
3. After the second AD after door opened on PA 125.
4. After the third AD after UAL 811 cargo door opened.
5. After the fourth AD after the UAL preflight uncommanded opening.
6. After the fifth AD you mention.

And they are still opening, leaking and malfunctioning. Here's just one of ten non fatal openings, leakings and loss of pressurizations over the past three years. SDR: 27 November 1994 Discrepancy/Corrective Action: On rotation, aft cargo door opened. Replaced spring on lock pin and adj per MM52-34-12.

The cargo door is known to be dangerous, has failed in the past, is still failing, and I'm saying it's failed/ruptured on three previously undetected events, AI 182, PA 103, and TWA 800.

The modification you refer to is to replace the aluminium locking sectors with steel to prevent the lower eight latching cams from being back driven past the soft metal and unlatch the door. It's like making the barn door stronger against a horse when it may be a bull inside trying to get out.

And more important, the midspan latches have no locking sectors at all so the modification does not apply to them at all. Is it not strange that the risk of latch cams becoming unlatched, and they have several times, is so great as to warrant locking sectors yet the two side midspan latches have none? And each of them holds in more door sill than the lower latches. That is an astonishing

discovery: no locking sectors on all Boeing 747 forward cargo door latches which have rupture evidence at that midspan latch as shown on UAL 811 recovered door.

The absence of locking sectors for the midspan latches and the AD to strengthen the eight locking sectors for the lower eight latch cams explains much.

It probably solves how the forward cargo door of AI 182 and TWA 800 ruptured at aft midspan latch while the bottom latches remained latched in place: that is the locking sectors did their job on those two doors and prevented the eight lower latch cams from being driven into the unlatched position when chafed wires shorted and turned door motor on. Unfortunately the midspan latches had no such protection and were driven into the unlatched position enough for the internal pressure to rupture at that now weakened area leaving similar shattered door pieces and bottom latches still attached to lower sill for AI 182 and TWA 800.

For UAL 811 and Pan Am 103, the soft, pre-AD, locking sectors were overridden by door motor and all ten latches were driven into the unlatched position allowing the door to open completely and slam upward, breaking in two and tearing away, leaving the identical pattern of torn away fuselage skin and door broken in half longitudinally at midspan latches for each door.

Four aircraft, four door motors to unlocked position, two locking sectors held and two didn't; two partial openings/ruptures and two total openings as reflected in the reconstructions and photographs of wreckage. AI 182 and TWA 800 had locking sectors hold so ruptures. PA 103 and UAL 811 had locking sectors overridden so entire door opened and came off.

Paragraph ten, sentence one:

"I hope that this information assures you that the tragedy of TWA flight 800 was not caused by the in-flight opening of the forward cargo door and that the FAA has taken measures to ensure that another occurrence similar to that of UAL flight 811 will not be repeated."

Well, sir, I am not assured that the tragedy of TWA 800 was not caused by the inflight opening of the forward cargo door and I am not assured that the actions of the FAA ensures another UAL 811 will not be repeated. On the contrary, I strongly believe that the tragedy of TWA 800 was caused by the inflight rupture of the fuselage at the forward cargo door at the aft midspan latch area and the actions of the FAA will not prevent such a reoccurrence.

Now, what to do about it. Eventually Boeing will have to fix the door again.

But first, FAA and NTSB are doing what they can prior to TWA 800 based upon the best evidence at the time. If the real cause of a failure is unknown, then the fault can't be fixed. If foreign governments insist on saying a bomb caused a crash, then it is a security matter, not a structural engineers' or accident investigators'.

Second, if the cause of a national aviation tragedy is unclear and ambiguous, then it is understandable for politicians to turn the cause to advantage, even if later proved wrong.

Third, accident investigating teams only had precedent to rely on up to their crash. Hindsight and the subsequent similar crashes were not available to them for their analysis. They are for mine and now they are for yours. We are all doing the best we can with what we have.

Fourth, the internet with its research and communication abilities

have sped up the citizen analysis of national accidents.

Fifth, I am the one to have discovered the cargo door cause because of circumstances:

1. Aircraft modeler.
2. Aircraft owner doing routine maintenance. Mooney M20C
3. Commercial pilot, instrument rated.
4. FAA Part 135 certificate holder, single pilot, single aircraft.
5. Enlisted aircrewman in SP-2E with 2000 hours in patrol aircraft maintaining and operating all electronic anti-submarine equipment with specialty of radar.
6. Officer as reconnaissance attack navigator in RA-5C going supersonic in combat during wartime flying off carriers.
7. Retired military officer with time, money, and motivation to devote to research into cargo door of Boeing 747s.
8. Survivor of sudden, night, fatal, fiery, jet airplane crash. June 14th, 1967.

I am qualified to give worthy explanation into other sudden, night, fatal, fiery jet airplane crashes, AI 182, PA 103, UAL 811, and TWA 800: inadvertent opening/rupture of forward cargo door in flight at aft midspan latch area on high time Boeing 747s.

What I'm personally doing to prevent a reoccurrence of those accidents is mailing my analysis to you, talking on the telephone, emailing government officials and media, and being open and sharing all information I find that is relevant as soon as I can. Only through fast, open, and accurate communications can we stop these fuselages of high time Boeing 747s rupturing in flight at forward cargo door.

What you can do, Mr. Brenerman, is up to you, as you see fit based upon the evidence that you have seen with your own eyes at Calverton, my analysis, NTSB and other government accident

reports, and your own conscience. You have contacts with Boeing, NTSB, and FAA aircraft accident related groups. I encourage you to pass along my concerns and analysis for discussion and possible rebuttal. Please give me scientific rebuttal to this letter today, I'm sure there must be some inaccuracies, everybody makes mistakes once in a while.

And everybody gets it right once in a while, too.

Sincerely,

John Barry Smith
551 Country Club Drive,
Carmel Valley, CA 93924
408 659 3552
barry@corazon.com

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From: John Barry Smith <barry@corazon.com>
Date: November 15, 1997 7:20:30 PM PST
To: FAAOAI
Subject: Part two Chairman

Lyle Streeter
Lyle.Streeter@faa.dot.gov
Office of Accident Investigation
Federal Aviation Administration

Dear Mr. Streeter,

Below is part two Chairman to be included with part one Chairman and part three Chairman of my 14 Nov 97 letter to Chairman Hall.

Sincerely,

John Barry Smith
551 Country Club Drive,
Carmel Valley, CA 93924
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Ron Wojnar, Manager
Darrell Pederson, Assistant Manager

Dear Mr. Brenerman,

31 Oct 97

Thank you for your telephone call on Thursday, 30 Oct 1997. You told me that a letter had been sent to me from FAA about my concerns about the forward cargo door area in Boeing 747s rupturing in flight.

We were able to chat for a few minutes about the crash of TWA 800 and others. You were able to tell me that:

1. The bottom sill of the forward cargo door is intact and

attached to fuselage skin but in several pieces.

2. The bottom latches are latched around the locking pins.
3. AD 88-12-04 was implemented in TWA 800 including all other ADs.
4. The nose hit the water on the right side and caused inward hydraulic impact damage in door area.
5. The door did not open in flight.
6. The door was found with nose debris and did not come off first.
7. Admiral who said door was found first was wrong because metal piece was misidentified underwater.
8. Nose came off at station 741.
9. You didn't scrutinize the paint smears on TWA 800 reconstruction photo.
10. PA 103 and AI 182 were inflight breakups and would show similar evidence but were proven to be bombs.
11. NTSB has tagged each piece of metal of wreckage and it's plotted.
12. You referred my photos to NTSB for reply.
13. A letter is coming to me from FAA explaining the above.

Well, sir, that was a lot and thank you again for chatting with me. For the first time in a year and a quarter I was able to hold a scientific conversation about TWA 800 with a government authority. As an engineer and commercial pilot we respect science. I contend fuselage rupture at cargo door area is all science which means it is reproducible and explainable.

Your statement of inward damage to the cargo door area from impact with water took me aback as I have not heard that before. I have had time to digest that information and wish to reply in this letter. I invite you to have a scientific discussion with me about metal and wreckage and air pressure. I'm not an engineer but a pilot with aerodynamic background.

I understand your sequence of events. Essentially it is center

tank explosion of unknown origin, nose comes off at station 741, plane falls and later fireball and destruction. The nose falls intact and alone on right side into water which hydraulic impact pushes metal skin into and past the stringers and bulkheads in cargo door area while leaving port side smooth and intact. Forward cargo door is in pieces from this impact and is in debris field of nose. The lower part of door has latches which are latched and attached to bottom sill of frame indicating door did not open in flight.

Do you understand my sequence? Did you go to my extensive web site which documents my explanation? To present such a complex sequence concisely is difficult but I will try.

Fuselage ruptures at forward cargo door area for unknown reason. Nose comes off at station 741, plane falls and later fireball and destruction. The nose falls intact and alone on right side onto water which gives hydraulic impact damage to nose gear doors which drives them inward. When fuselage ruptures at 13700 feet the skin is burst outward and the red painted metal on door is slammed against white painted area between windows above the door and red paint is transferred leaving red smears only above rupture area. Fireball is ignited by flaming fodded engine number three at 7500 feet. Sudden loud sound is explosive decompression when fuselage ruptures. Streak is shiny metal piece of door spinning away reflecting evening sunlight to ground observers. Missing bodies were ingested into number three engine. Abrupt power cut when cargo hold floor is severely disrupted. Nose comes off when huge hole appears in side of nose and 300 knot wind tears it off.

I offer that the fuselage rupture explanation explains all the evidence of streak, sudden loud sound, abrupt power cut, debris pattern, and many other observed events. I will be glad to go over them one by one with you. Center tank explosion as initial event leaves too many contradictory conclusions such as autopsies with no burns, abrupt singed areas on fuselage skin,

soundless explosion, no ignition source, etc.

As an engineer and pilot we understand the enormous internal forces of 4 pounds per square inch on a nine foot by ten foot outward opening door and the incredible power of 300 knots of slipstream on a weakened airframe. I trust you respect reality which means things you can see, touch, hear, and feel. In that regard, let me attempt to rebut the inward impact damage at cargo door area conclusion with the following reality which can be checked out:

If we look closely at NTSB TWA 800 reconstruction photograph there are red paint smears on the white paint between windows alongside the fuselage. These red paint smears are only above and slightly aft of the forward door. The cargo door normally has red paint on it. The space between the windows normally had white paint. The between window spaces now have red paint smears on them in the reconstruction. This indicates the red colored metal below expanded upward and struck the white painted area and transferred the red to the white. If the damage had been caused by inward action of water impact there would be no red paint smears on the white paint between the windows. But there are many smears and that is consistent with rupture outward, not inward.

Let us assume that the forward cargo door was latched and rode nose down to the water. That rules out FBI innocently altering latches searching for explosive residue in their lab, or a mistaken identity with the identical aft cargo door, and confusion with any other of the twelve doors on the 747.

Because the door was latched does not mean there was not a fuselage rupture at the cargo door area. In fact, I believe the picture shows such a rupture in the shattered right side forward of the wing. I don't have three dimensions but it appears to be a round outward rupture hole at lower left of cargo door. Doors can open at places other than where they are supposed to.

The damage on the right side is consistent with an outward opening rupture. It does not look like impact damage because it is located only around the cargo door and not far above it or aft. Of course the entire nose is not reconstructed nor is the NTSB photo complete with part of the extreme forward part missing so it is difficult to make definite conclusions based on observations of pictures, as you said in your call. Hands on examination is needed and you have that opportunity.

I am very familiar with AI 182 and PA 103 and 'they' did not 'prove' a bomb was the cause. On the contrary the evidence is very flimsy and could have gone either way of structural failure or bomb. AI 182 had structural failure as cause but said it was bomb that blew out the forward cargo hold on the right side without naming the door. AI 182 door description on the bottom of the ocean matches TWA 800 door area NTSB photo. PA 103 reconstruction drawing matches UAL 811 after landing with huge hole in side.

The importance of including other similar accidents is to group them and then draw conclusions based upon deductions. I did not choose the flight numbers; they were included only because of the evidence of sudden loud sound on CVR, inflight damage, abrupt power cut, and many more significant similarities. If you know of any more high time Boeing 747s that have a fatal accident centered near the forward cargo hold that left a sudden loud sound, an abrupt power cut, foddred engines, missing bodies, and forward door in pieces, and I'll include them in the group. So far it's only AI 182, PA 103, UAL 811, and TWA 800. As an aerospace engineer do you not welcome a possible scientific explanation for an aviation event rather than shadowy conspiracy Sikh terrorists or evil foreign secret agents?

But to talk of AI 182 and PA 103 is fraught with emotion and difficult without the reports to point to specific items. But let us at least agree that AI 182 and PA 103 and UAL 811 and TWA

800 all had inflight structural problem starting forward of the leading edge of the wing, with three of them pinpointing to forward cargo hold.

I checked TWA 800 station 741 nose separation point on PA 103 and it matches too. Both noses came off at same point on fuselage give or take a few inches.

To be specific about TWA 800 cargo door:

1. Is it confirmed it is forward and not aft or other latches?
2. Are all latches accounted for? There are eight below and one on each side for total of ten.
3. Are all latches latched around locking pins? If only one unlatches that may be sufficient for internal pressure to bulge out door into slipstream when ultimate destructive force of 300 knots tears door away and nose off.
4. Mid span latches are particularly critical as rupture appears to be in middle of door.
5. Where are the missing pieces of the door? Only about 20 percent of the door is in reconstruction. The missing portions may be the pieces that fell first and closest to event site and still unfound.

To say forward cargo door was latched is not sufficient to rule out rupture at cargo door area as initial event for TWA 800 because:

1. Not all latches are accounted for.
2. Most of door still missing.
3. Rupture can occur with a latched door but failure at corners or middle.
4. Description of TWA 800 door area matches AI 182 door area which had door attached to fuselage skin which was explained as fuselage rupture at forward cargo hold (caused by bomb). TWA 800 was thought to be bomb also based upon early evidence which NTSB computer simulation showed baggage spewed forth from forward cargo hold as first event.

I understand the problem NTSB has with that unilateral damage on right side because a center tank explosion should give bilateral damage and doesn't. So the water impact explanation is offered. If damage at cargo door area is inward then no rupture and if latches latched then no door opening.

What can be done to persuade you that rupture occurred? What evidence is there to examine? Can you confirm the direction of the metal in the forward cargo door area of TWA 800? Is that scientifically possible? If it is outward will you reconsider your conclusion of not door failure? I point to the red paint smears as evidence to warrant such an effort at confirmation of metal direction, in or out.

If you should find that the right side damage is outward and not inward, or not all of the latches or pieces of door are accounted for, please reconsider your conclusion that the door area did not fail in flight and rupture.

Please establish a dialogue with me. My email is barry@corazon.com and I can send and receive high resolution color photographs via email. My web site has accident reports from DC-10 to B747 and others to support cargo door fuselage rupture. I've attached some of the web page analysis for your consideration.

I apologize for any name misspellings; my hearing is shot from thousands of hours in recips and jets and I may have heard names wrong on the phone. I may have heard other statements wrong too and that is why I prefer writing to talking such as this letter and email. Please correct any misstatements I may have made.

Sincerely,

John Barry Smith

Inadvertent Opening of Forward Cargo Door in Flight

Each aircraft had the forward cargo door open in flight; one was called correctly (UAL 811), two were called bombs (AI 182 and PA 103) and one is unknown (TWA 800) but may be called bomb or fuel explosion near cargo door as probable cause. The forward cargo door opened in flight on all of them. Why the door opened is a mystery. Could have been a bomb or other reason why the door opened. Bombs and door openings are not incompatible.

United Airlines Flight 811:

Probable Cause: The NTSB determines that the probable cause of this accident was the sudden opening of the forward lower lobe cargo door in flight and the subsequent explosive decompression."

NTSB/AAR 92/02 Page 92

Air India Flight 182:

"There is considerable circumstantial and other evidence to indicate that the initial event was an explosion occurring in the forward cargo compartment."

Canadian Aviation Safety Board Air India 23 June 1985, page 58

Pan Am Flight 103:

"Cause: The in-flight disintegration of the aircraft was caused by the detonation of an improvised explosive device located in a baggage container positioned on the left side of the forward cargo hold at aircraft station 700."

UK AAIB Report 2/90 Page 57

"The analysis of the flight recorders, using currently accepted techniques, did not reveal positive evidence of an explosive event."

UK AAIB Report 2/90 Page 56

Trans World Airlines Flight 800:

"Investigators also said that a cargo door, presumably the front one, had been found significantly closer to Kennedy International Airport, where the flight originated, than almost all of the other parts located so far."

News Reports

The Mystery:

Why does the forward lower lobe cargo door open in flight?

There is a time for conjecture, speculation and just plain guessing. Now is that time. The investigation is open and active into TWA 800. Based upon the available evidence, observed events, experience, education, and some common sense, here are some possible explanations for why the forward cargo door of the Boeing 747 opens in flight:

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Principle: Balloon expands. Balloon pops. Why.

Fuselage undergoes internal pressure. Door pops. Why.

Boundary layer will reduce the actual speed of the air across the door to a very low amount. Further away from the door the airspeed builds up. The sucking force of the jet engine is negligible. The main force to open door comes from within. The internal pressure against the large forward cargo door is very, very high. The door will have to be open some distance before the slipstream can tear it open, up, and away.

All that is needed for the door to be pulled out and torn up and away is a lip of the door to protrude into airstream. A slight bulge on a worn door will stick door edge out into 300 KCAS slipstream and allow the air to pull door out and tear it away.

What can cause the door edge to stick out? How much is needed? Assuming 300 KCAS of force over the door, high internal

pressure to keep passengers comfortable, the edge of the door does not have to stick out very far before being pushed from within, and blown from the front. Let us assume two inches sticking out from the bottom of the sill is the amount that once reached the forces of wind take over and tear eight foot by nine foot door away. What would cause bottom of door to extend out two inches?

1. Pneumatic: If the air keeps on coming into the balloon and less air escapes the balloon expands until pressure inside balloon exceeds strength to contain pressure. Balloon pops at weakest spot on surface.

a. If air keeps coming into Boeing 747 fuselage with less air escaping, the fuselage will pop at weakest spot, a large door. Or if there is a small opening in fuselage, air may escape or air may enter from 300 KCAS airstream until door bulges out. If a hole appears in a seal of the cargo compartment, or a hole appears from corrosion, the 300 KCAS airstream might enter compartment and highly pressurize to cause door to bulge out the necessary small amount to allow a larger hole to allow more airstream to enter and the cycle continues rapidly until door is open enough for wind to tear it away. All the steel latches in the world are not strong enough to withstand 300 KCAS against a large surface door.

b. If the fuselage is balanced in pressure and the aircraft starts to climb that balance is disrupted and the system attempts to compensate. If the compensation is not smooth, or it is jerky, a surge of high pressure air may momentarily bulge out the door the required amount for it to be torn away. The puff of high pressure air may only last for a second before the pressurization system corrects its balance but that may be long enough to open a worn door with gouged latch cams and lock sectors. So, if there is a malfunction in pressure regulating devices of 747 then too

much air may enter and may bulge worn door out enough to be torn away.

c. If older fuselage flexes enough the worn seal on a worn door may leak allowing air to enter cargo compartment pressurizing it and pushing out on door which opens more allowing more air in to pressurize compartment which pushes out on door...

d If pilot applies power to all engines, increased air requirements result in increased sucking power of jet intakes which may allow cargo door to bulge toward engine number 3, just a few yards away. Very unlikely because of 300 knot slipstream which negates any suction of the jet engine on the door.

e. The midspan latches may be a weak area. One latch holds eight feet of vertical side of door in tight. The door may fracture/rupture at midspan and open. The bottom latches may remain latched. Fuselage distortion and twisting may put unusual stresses on door frame.

f. Engine cowling comes loose. Possible sequence: EPR/EGT indication of surge as loose cowling on number three comes off, shown as radar blip, bleed air from three affected, more heat/air goes into forward cargo compartment, overpressure blows out weakest area, around or through cargo door. Nose then comes off sequence follows as evidence shows. All suspect planes have JT9D. Cowlings have come off many times before. Cowling would explain radar blip too early in sequence for door. Cowling reflects light. Engine bleed air comes from three and others and goes into forward cargo compartment. Ducts fail. Blow out around/of door would explain latches being latched yet door goes.

2. Electrical:

a. Door actuator motor gets signal to open and turns cams which are normally stopped by lock sectors, but worn lock sectors allow cams to turn just a few degrees which allow door to slightly

open.

b. Frayed wires in door motor bundle rub against metal fuselage and short connection and turn motor on for a few seconds.

c. Motor gets signal to turn on from adjacent powerful transmitters in main equipment compartment.

d. Exhaust Pressure Ratio related problem:

800 had EPR changed before fatal flight

103 had EPR blip on #3 just before crash.

182 had EPR gripe not fixed for fatal flight.

811 could have had EPR gripe but all non cargo door gripes omitted from report.

3. Mechanical:

a. The cam sectors are not completely over center and therefore can be forced open by internal force.

b. The manual locking handle jams and looks locked but isn't.

c. The locking sectors get bent and do not fully engage cam sectors.

d. Something unseen is jammed between door and frame preventing full closure.

e. Loader rams door sill and bends it out of rig preventing flush closure.

4. Combination of factors:

a. Worn latches, not tight.

b. Worn lock sectors, not tight.

c. Not closed fully, not tight.

d. Pressure regulating system not smooth.

e. Door out of rig slightly, not tight.

f. Electrical short in door open system.

g. Must be going 296 KCAS or higher.

e. Older fuselage twisting and flexing.

f. Small hole from corrosion or worn seal allowing high speed air in with no way out.

g. Door motor gets signal to open.

Miscellaneous:

- a. It is never closed fully and pops open when pressure differential is high enough.
- b. It was backdriven manually damaging cams allowing door to spring open.
- c. It was back driven electrically damaging lock sectors.
- d. Fuselage flexing normal or by turbulence allowed door to spring open.
- e. Electrical short within door opening system turning on door actuator motor.
- f. Loose heavy cargo shifts into door.
- g. Internal explosive force against door.
- h. Locking pins shearing and releasing door to open.
- i. Intentionally/unintentionally opened by crew inflight.
- j. Electrical power surge from communication radio antenna or power supply.
- k. Frayed electrical wires to door control system shorting on fuselage.
- l. Passenger using electronic device triggering door open signal.
- m. At certain airspeed the wind has enough force to pry open poorly sealed door.
- n. When door closed it squeezed against something that prevented full closure allowing later opening.
- o. A ship or aircraft was pointing laser tracking device on aircraft and it penetrated door and ignited something which blew out door.
- p. Surface to air missile hits door and opens it.
- q More to come...open for suggestions, can't fix it without knowing the problem, can't stop the effect of crashing without knowing the cause of door opening.

United Airlines Flight 811:

Contributing Factors:

First AAR had wrong cause for door opening, improper latching.

Once door was found, a switch was found to be defective
changing probable cause to electrical short.

Frayed wires in door motor control bundle.

Air India Flight 182:

Contributing Factors:

Airspeed crept up to above recommended speed, 296 knots
instead of 290 knots because of fifth engine in pod.

Pan Am Flight 103:

Contributing Factors:

Older airplane, night door closing

Trans World Airlines Flight 800:

Contributing Factors:

Extremely old airplane, night door closing, running late.

Design considerations for a forward cargo door on a Boeing 747

The first rule in designing and building a pressurized hull is:

Don't cut holes in it. If one must cut holes in the hull for essential

reasons make sure the holes are small well sealed. And then if the hole fails to seal, make sure the hull does not come apart.

Those principles were violated in aircraft and submarines to the dismay of the families of the victims of inadvertent door openings in pressurized hulls.

The nuclear submarine Thresher was sunk because a small hole in the hull had a valve installed backwards so the water kept on coming in and sunk the boat and killed everyone on board.

UAL Flight 811 had a cargo door open inflight and nine passengers were sucked out to their deaths from their seats above the cargo door.

The design errors on doors for Boeing 747 are as follows.

1. The hole is too large. It is large to accommodate passengers' spare clothes and other non-essential items. A small hole will depressurize slowly and not allow huge amounts of fast moving air into the hull.

2. The hole has a complicated door system for locking and unlocking which is prone to misuse. In fact two Airworthiness Directives have been issued against that specific door, the forward lower lobe cargo door.

3. a. The door is hinged on top and opens upwards. The tradition of passengers entering by a front hinged door and baggage loaded into a top hinged door goes back to stagecoaches, buggies, cars, trains, and buses. And when those cargo doors opened the penalty was bashed baggage and damaged doors. At speeds above 200 knots such an error has catastrophic results. The door opens and the airstream pushes the door up and tears it off its upper hinges taking away as large part of fuselage skin, exposing the nose of the aircraft to huge amounts of powerful fast moving air. Top hinged doors on fast moving pressurized hulls is a fatal design error. They also exist to ease the loading of the non-essential items by the baggage handlers.

- b. Doors hinged on the front are slightly better but the door will

still flap around and eventually break off leaving a large hole. The air pressure will attempt to keep the door closed. A front hinged door, when it opens in flight, will at least give the crew time to slow the airplane down to reduce flutter and possibly allow safe return to land.

Cargo doors, and passenger doors, and engine doors, and access doors will all be left open or open by themselves sooner or later. The effect should be mild and easily corrected. The consequences for that small oversight should not be total destruction and death.

Doors

1. Big Airplane Doors that open when they shouldn't.

Forward lower cargo door in Boeing 747 resulting in nose tearing off and rest of airplane disintegrating into fireball. Cause of door opening unknown.

2. Medium airplane canopy that opened when it shouldn't.

RA-5C Vigilante reconnaissance carrier jet on final approach and rear canopy popped up and was lost at sea. Aircraft recovered safely. Thousands of dollars lost, plane grounded until replacement, cause unknown.

3. Small airplane doors that open when they shouldn't.

Right hand side passenger door on Beech Baron. On takeoff door popped open. Experienced passenger held door tight to keep it from flapping. Pilot returned and landed. Door closed and airplane resumed flight. Two months later same plane took off with different pilot, immediately went into steep climb, stalled, crashed, two killed, pilot and inexperienced passenger. Cause unknown.

4. Spacecraft door that opened when it shouldn't.

Gus Grissom on a Mercury spacecraft after landing in water and hatch popped and craft sank. Valuable scientific data lost. Cause

unknown.

5. Car door open when it shouldn't.

Rear hatchback on 1984 Honda Civic opened. Car stopped and hatchback closed. No damage. Cause was driver error in not slamming hatch shut.

6. Submarine valve open when it shouldn't.

USS Thresher valve installed backwards, water entered and couldn't be stopped. Ship sank, all aboard killed. Cause installation error.

7. House door open when it shouldn't.

After evening out occupants returned home to find front door unlocked and open. Cause negligence of home owners leaving in a rush and door open.

8. Motorcycle saddlebag open when it shouldn't.

Kawasaki Concours sport tourer motorcycle right side saddlebag had top two clasps only partially closed. Error noticed in mirrors, stopped, closed clasps on saddlebag and resumed ride. No damage, cause was rider negligence.

9. Ferry door that opened when it shouldn't.

An Estonian ferry between Tallin and Helsinki had front cargo door open, sank ferry, high loss of life. Cause was pilot going too fast in heavy seas. Wreck to be encased in concrete on seabed.

10. Car door that closed when it shouldn't.

1949, car door slammed on finger disfiguring tip for life.

Extreme pain. Cause miscoordination between person slamming door and person with fingers in the way.

11. Spacecraft door that wouldn't open when it should.

Apollo 1 capsule caught on fire on ground and crew could not escape because hatch would not open. Three killed.

12. House door that shut when it shouldn't.

Hot day and doors open to let in air and breeze came up. Air flow started closing door which accelerated and slammed shut with loud bang waking baby.

13. Door stayed shut and wouldn't open when they should. Cocacabana nightclub fire, exits blocked, many died. Doors sealed shut to prevent unauthorized entry.

Comment: The distinct crash similarities of aircraft type, radar returns, wreckage plot, sudden short loud sound, abrupt power cut, fodded engines, inflight damage, missing bodies, torn off noses, and start place of damage qualify three aircraft into one class from which the deduction may be made that one unifying cause had the same effects. Another accident with the same similarities except for a torn off nose and less wreckage may also be included in that class. The unifying cause for all four accidents is the inadvertent opening of the forward cargo door inflight.

From: John Barry Smith <barry@corazon.com>

Date: November 18, 1997 10:55:24 AM PST

To: FAAOAI

Subject: Letter for Chairman Hall/door rupture destruction sequence TWA 800

Dear Mr. Streeter,

17 Nov 97

Below is a letter to Chairman Hall suggesting option, laying out cargo door rupture destruction sequence, and request that he reply to me directly. I will send this snail mail but will you please forward this to the Chairman NTSB, Jim Hall? Thank you.

Your opinions are welcome, of course, although I know the restraints you are under.

"Working on mysteries without any clues,

working on my night moves."
"Night Moves," Bob Seger.

Sincerely,

John Barry Smith
551 Country Club Drive,
Carmel Valley, CA 93924
408 659 3552
barry@corazon.com

National Transportation Safety Board
Office of the Chairman
Jim Hall
490 L'Enfant Plaza, S.W.
Washington, DC 20594-2000

Dear Chairman Hall,

17 November 1997

We are on the same side. Please respond to me directly. You talked about me to my Congressman, Sam Farr, you replied directly to that ignorant missile conspiracy person Donaldson and I ask that you directly reply to me, a polite mechanical explanation person with over eight years of research and investigation into fuselage ruptures on high time Boeing 747s, including TWA 800.

We are on the same side, Mr. Hall. We both have mechanical explanations for TWA 800 that are only seconds and a few

thousand feet apart. My mechanical explanation incorporates center tank fire/explosion and answers center tank questions such as fuel and outside air temps, ignition source, and strength of tank.

Keep your options open. Have a backup explanation for TWA 800 should one be needed. There is one and it is supported by NTSB documents, including NTSB AAR 92/02 and the reconstruction of TWA 800. A reasonable backup explanation for NTSB is aft midspan latch rupture in forward cargo door in high time Boeing 747s including TWA 800. It withstands scrutiny. Show that NTSB has an open mind at this fact finding stage of the investigation to hold two mechanical explanations in play, not fixed on one. By having two now and later settling on one, NTSB will have shown that it evaluated another mechanical alternative and was not fixated on one to the exclusion of another reasonable one.

The time for final decisions is not yet upon NTSB. Permit the investigation to consider at least two explanations, not just one.

Here is my sequence for rupture at aft midspan latch using NTSB AAR 92/02 as guide:

Wire bundle gets chafed by continuous door openings and closings on it. Sheath around bundle gets worn through to insulation. Insulation gets worn through to bare wire. Bare wire shorts against metal powering on door motor which turns cam sectors to unlocked position. On TWA 800, at 13700 feet MSL and 300 KCAS, the eight lower cam sectors were prevented from unlocking because of the strengthened locking sectors which now have steel doublers as per AD 88-12-04. However, the two midspan latches have no locking sectors at all. The slack in

bellcranks, torque tubes, and high time worn cam latches allowed the aft midspan latch to rotate just past center allowing the 3.5 PSI internal pressure to rupture the forward cargo door at the aft midspan latch.

The door burst open at midspan latch sending the latch and door material spinning away in the setting sun which reflected upon the shiny metal and appeared as streak to ground observers. The aft door frame was clean of attachment to door and bulged outward. The door fractured at midline and shattered. The bottom eight latches held tight to the bottom eight latch pins while bottom external skin of door blew away. The top piece of red door slammed out and up smashing into the white fuselage skin above leaving the red paint on the door on the white paint between passenger windows above. The top piece of the door took the hinge with it and fuselage skin as it is tore away. The hinge appears to be working normally while having overtravel impression marks on the opposite hinge when door overextended to slam on fuselage above.

The air molecules rushed out of the ten foot by thirty foot hole equalizing high pressure inside to low pressure outside. The sudden rushing air was recorded on the CVR as a sudden loud sound. The explosive decompression of the forward cargo hold disrupted the nearby main equipment compartment and shut off power to the FDR leaving an abrupt power cut.

The door hole was now at least ten feet by thirty feet large. At least nine passengers were blown out of the hole into the nearby number three engine which mulched them up into tiny bone fragments. The number three engine became FODDED with baggage metal and started on fire from inefficient burning of fuel. Then engine with pylon started to vibrate and soon detached

from wing as designed.

The floor beams were bent, fractured and broken. The main structural member of door and frame were gone and compromised. The flight attitude of the aircraft was askew to the left from reaction of explosive decompression to the right. Air rushed into the hole and weakened other skin and frame peeling skin outward. The 300 knots of air pressed upon the weakened nose and crumpled it into the large hole. The nose tore off and fell and landed in a dense heap before the rest of the plane.

Pieces of baggage and fuselage skin flew backward and left more severe damage on starboard side of TWA 800 than port side such as right wing fillet.

The port side forward of the wing is smooth and unshattered while the starboard side forward of the wing is shattered, torn, and frayed at cargo door area.

The rest of the plane without the nose suddenly decelerated from 300 knots and caused whiplash injuries to passengers. Passengers inside fuselage had baro-trauma to eardrums which ruptured trying to equalize middle ear pressure. The plane started to descend with huge gaping wound in front increasing drag. The wind force disintegrated the fuselage and wings. Fuel poured out of ruptured tanks. The broken fuselage, the ruptured wings, the fuel cloud, the center tank, and the spinning, on fire engine number three met at 7500 feet and exploded into a bright loud fireball putting singe marks on the fuselage skin while leaving the broken off nose burn free. Center tank explodes/catches fire as well as other nearby fuel tanks. The debris falls and spreads out from 7500 feet to sea level.

Ground observers hear the fireball explosion of the center tank and other fuel and look up. Noise of fireball to observers is about 50 seconds for the ten miles distance. They see the still falling shiny pieces of the forward cargo door as it is still falling from 13700 feet to the sea in about 60 seconds.

The detached burnt engine number three and pylon fall apart from the other three engines which fall together.

Explosive decompression at the forward cargo hold led to suspicion of bomb in cargo compartment but bomb later ruled out.

Streak of shiny metal object spinning away reflecting evening sun to ground observers led to suspicion of missile but later ruled out.

Fire/explosion of center tank into fireball leads to suspicion of center tank explosion as initial event but difficulty arises in determining ignition source, fuel volatility, and strength of tank needed for such an initial explosion.

Fuselage rupture at aft midspan latch of forward cargo door in flight is initially rejected because most of latches are found latched around locking pins.

However, based upon an open mind of the Chairman of the NTSB, Jim Hall, all reasonable mechanical options are considered for investigation; if they include the center tank fire/explosion, supported by facts, could be true, happened before, and make sense.

Chairman Hall, cargo door rupture/burst/open has those

qualifications. Each step above has historical precedent based upon NTSB AAR 92/02, NTSB wreckage reconstruction of TWA 800, CASB Aviation Occurrence VT-EFO, Indian Report of Court Investigation "Kanishka", UK AAIB Aviation Accident Report 2/90, FAA ADs, UK Comet accident reports, and your letter about me to Sam Farr, 24 Oct 97.

Please talk to me, not about me.

I am polite, I have aircraft documents, I have experience, I have photographs, I am a poor messenger with an important message; aft midspan latch rupture in forward cargo door inflight on high time Boeing 747s has led to fatal accidents, including TWA 800.

Please investigate the message. Keep your TWA 800 crash cause options open. Have aft midspan latch rupture option available to you should the need arise for a reasonable alternative to center tank as initial event. Keep NTSB open minded enough to consider two possible mechanical explanations, especially when one explanation includes the other.

We are on the same side. We both agree it was mechanical. We are very close in the cause of TWA 800, only seconds apart in event time and a few thousand feet apart in event altitude. We both agree center tank caught fire/exploded.

Please ask questions if my explanation of aft midspan rupture is not totally reasonable. There is much much more data to support my explanation at www.corazon.com. Please put professional aircraft accident investigators on the explanation to rule it out or rule it in.

I welcome factual rebuttal and discussion. I invite it. I request it.

Respectfully submitted,

John Barry Smith
551 Country Club Drive
Carmel Valley, CA 93924
408 659 3552
barry@corazon.com
www.corazon.com

From: John Barry Smith <barry@corazon.com>
Date: November 20, 1997 8:13:27 AM PST
To: FAAOAI
Subject: Aging A/C, Analysis of center tank vs cargo door rupture as initial event.

Lyle Streeter
Lyle.Streeter@faa.dot.gov
Office of Accident Investigation
Federal Aviation Administration

Dear Mr. Streeter,

20 Nov 97

The public hearing, according to Mr. Hall, will consider the

problem of 'aging' aircraft. Cargo door rupture explanation is an 'aging' problem because all the cargo door accidents involve high time Boeing 747s, including TWA 800.

The FBI conference and CIA tape raise contradictions with center fuel tank explosion as initial event which are resolved when cargo door rupture is considered as first event followed by center tank fire/explosion. Analysis below and should be of interest to NTSB.

Sincerely,

John Barry Smith
551 Country Club Drive,
Carmel Valley, CA 93924
408 659 3552
barry@corazon.com

hearings -- scheduled to be held in Baltimore -- will address "in great detail" the question of what caused the fuel tank to explode, said James Hall, chairman of the NTSB. They also will probe the whole issue of aging aircraft, he said

Questions about center tank explosion as initial event which evidence raises.

1. Sudden loud sound on Cockpit Voice Recorder is described as

start of aircraft breakup but not sound of explosion. How can an explosion in the center tank be powerful enough to start the aircraft breakup and blow off nose of Boeing 747 and not be heard on CVR?

2. Center tank explosion would be spherical, not directed, and would either give no damage forward of the wing or about equal damage on both sides of the fuselage of TWA 800. The wreckage reconstruction shows smooth skin with little damage forward of the wing on the port/left side yet severe, shattered, torn, and frayed damage on the starboard/right side of the fuselage in the cargo door area. How can a center tank explosion cause unilateral damage only on starboard side?

3. TWA 800 wreckage reconstruction shows outward peeled skin, outward rupture hole, and paint transfers. Water impact damage would be inward, not outward. How could water impact damage produce outward peeled skin, outward rupture hole, and paint transfers?

4. TWA 800 wreckage reconstruction shows red paints smears only above the forward cargo door area and nowhere else on both side of the Boeing 747 fuselage. This indicates that the red painted door below ruptured/opened outward, slammed upward, and smashed into the white painted area above and transferred red paint from door onto white paint between windows. How did red paint smears get where they are?

5. A center tank explosion would be far enough away from power cables to allow the Flight Data Recorder to record longer than the abrupt power cut it suffered. How can a center tank explosion which is not loud enough to be heard on the CVR and some distance away be strong enough to abruptly cease power to the

FDR?

6. How could forward cargo door rupture/open when bottom eight latches are latched and locked in TWA reconstruction?

7. How could forward cargo door rupture cause center tank explosion?

Answers of forward cargo door rupture to questions which evidence raises:

1. Sudden loud sound is sound of explosive decompression which gives a sudden loud sound when forward cargo door ruptures/opens in flight. The TWA 800 sudden loud sound was linked to PA 103 sudden loud sound on CVR which was linked to AI 182 sudden loud sound on CVR which was linked to DC-10 cargo door explosive decompression on CVR. UAL 811 had a cargo door rupture/open in flight and recorded a sudden loud sound on the CVR. The sound is the sudden rushing of air molecules which were compressed now moving fast outward to equalize with the lower pressure outside air.

2. Explosive decompression and rupture of forward cargo door area when aft midspan latch ruptures would give shattered, torn and frayed, damage to cargo door area while leaving port/left/ opposite side smooth and light damage. Cargo door rupture would give the unilateral damage on starboard side as shown by TWA 800 wreckage. UAL 811 also had unilateral cargo door area damage when its door opened in flight.

3. Explosive decompression in nose of TWA 800 would give outward peeled skin in nose, outward rupture hole, and paint transfers as internal high pressure rushes outward to equalize

with the low outside pressure.

4. After the rupture at aft midspan latch the door fractured and upper piece of the red painted door was pushed outward, rotated on its hinge, slammed upward and smashed into the white painted fuselage skin above, transferring red paint to the white painted area between the passengers windows, as shown by the TWA 800 reconstruction. UAL 811 also had paint transfer from door to fuselage when its door opened in flight.

5. The explosive decompression in the cargo compartment would severely disrupt the cargo hold floor and the adjacent main equipment compartment in which the FDR and power cables are located. The severe disruption would abruptly cease power to the FDR. UAL 811 also had abrupt power cut when its cargo door opened in flight.

6. The forward cargo door of Boeing 747s is over nine feet by nine feet square. It has a hinge on the top and eight cam latches on the bottom. On each nine foot side is one midspan latch. The bottom eight cam latches go around eight latching pins. Over each cam latch is a locking sector. The two midspan latches have no locking sectors. The forward cargo door could rupture at the midspan latch and the hinge and bottom eight latches could still be attached to fuselage skin. The top of the door with hinge attached would tear off with the fuselage skin and spin away. The bottom eight latches could stay attached to bottom sill and continue down to the sea with the nose. The middle of the large door can still be ruptured/opened while the lower part stays attached to airframe. Doors can open/rupture with most or all latches latched. TWA 800 reconstruction shows aft mid span latch missing which implies it became unlatched. The aft door frame sill is smooth and not attached to door which implies door

opened in that area.

7. When cargo door ruptures in flight a huge hole is created in nose which the 300 knot slipstream tears off. The falling, noseless, structurally compromised aircraft disintegrated into wings of rupturing fuel tanks, fuselage pieces including center tank, and spinning hot on fire jet engine. When falling debris reached about 7500 feet, the fodded on fire engine number three ignited the fuel cloud and center fuel tank into a fireball. Center tank fire/explosion occurred but later and lower than forward cargo door rupture initial event.

Sequence of Destruction for TWA Flight 800 Aft Midspan Latch Rupture in Forward Cargo Door

Wire bundle gets chafed by continuous door openings and closings on it. Sheath around bundle gets worn through to insulation. Insulation gets worn through to bare wire. Bare wire shorts against metal powering on door motor which turns cam sectors to unlocked position. On TWA 800, at 13700 feet MSL and 300 KCAS, the eight lower cam sectors were prevented from unlocking because of the strengthened locking sectors which now have steel doublers as per AD 88-12-04. However, the two midspan latches have no locking sectors at all. The slack in bellcranks, torque tubes, and high time worn cam latches allowed the aft midspan latch to rotate just past center allowing the 3.5 PSI internal pressure to rupture the forward cargo door at the aft midspan latch.

The nine foot by nine foot squarish door burst open at midspan

latch sending the latch and door material spinning away in the setting sun which reflected upon the shiny metal and appeared as streak to ground observers. The aft door frame was clean of attachment to door and bulged outward. The door fractured at midline and shattered. The bottom eight latches held tight to the bottom eight latch pins on sill while bottom external skin of door blew away. The top piece of red door slammed out and up smashing into the white fuselage skin above leaving the red paint on the door on the white paint between passenger windows above. The top piece of the door took the hinge with it and fuselage skin as it is tore away. The hinge appears to be working normally while having overtravel impression marks on the opposite hinge when door overextended to slam on fuselage above.

The now uncompressed air molecules rushed out of the nine foot by thirty foot hole equalizing high pressure inside to low pressure outside. The sudden rushing air was recorded on the Cockpit Voice Recorder as a sudden loud sound. The explosive decompression of the forward cargo hold disrupted the nearby main equipment compartment and abruptly shut off power to the Flight Data Recorder.

The door hole was now at least nine feet by thirty feet large. At least nine passengers were blown out of the hole into the nearby number three engine which mulched them up into tiny bone fragments. The number three engine also ingested metal in baggage and started on fire from inefficient burning of fuel. Then the number three engine with pylon started to vibrate and soon detached from wing as designed.

The floor beams were bent, fractured and broken. The main structural members of door and frame were gone and

compromised. The flight attitude of the aircraft was askew to the left from reaction of explosive decompression to the right. Air rushed into the hole and weakened other skin and frame peeling skin outward. The 300 knots of air pressed upon the weakened nose and crumpled it into the large hole. The nose tore off and fell and landed in a dense heap before the rest of the plane.

Pieces of baggage and fuselage skin flew backward and left more severe damage on starboard side, such as right wing fillet, of TWA 800 fuselage than port side.

The port side forward of the wing was smooth and unshattered while the starboard side forward of the wing is shattered, torn, and frayed at ruptured cargo door area.

The rest of the plane without the nose suddenly decelerated from 300 knots and caused whiplash injuries to passengers. Passengers inside fuselage had baro-trauma to eardrums which ruptured trying to equalize middle ear pressure. The plane maneuvered with huge gaping wound in front increasing drag. The wind force disintegrated the fuselage and wings. Fuel poured out of ruptured tanks. The broken fuselage, the ruptured wings, the fuel cloud, the center tank, and the spinning, on fire engine number three met at 7500 feet and exploded into a bright loud fireball putting singe marks on the fuselage skin while leaving the nose burn free. Center tank exploded/caught fire as well as other nearby fuel tanks. The debris falls and spreads out from 7500 feet to sea level.

Ground observers hear the fireball explosion of the center tank and other fuel and look up. Noise of fireball to observers is about 50 seconds for the ten mile distance. They see the still falling shiny pieces of the forward cargo door as it is still falling

from 13700 feet to the sea in about 60 seconds.

The detached burnt engine number three and pylon fall apart from the other three engines which fall together.

Explosive decompression at the forward cargo hold led to suspicion of bomb in cargo compartment but bomb later ruled out.

Streak of shiny metal object spinning away reflecting evening sun to ground observers led to suspicion of missile but later ruled out.

Fire/explosion of center tank into fireball leads to suspicion of center tank explosion as initial event but difficulty arises in determining ignition source, fuel volatility, unheard of explosion sound, unilateral damage, and weakness of tank needed for such an initial explosion.

Fuselage rupture at aft midspan latch of forward cargo door in flight is initially rejected because most of latches are found latched around locking pins.

Further investigation reveals door rupture at aft midspan latch in forward cargo door possible with bottom latches latched and midspan latches missing.

From: John Barry Smith <barry@corazon.com>

Date: November 28, 1997 10:27:36 PM PST

To: FAAOAI

Subject: Cargo door rupture/NTSB TWA 800 Hearing

Lyle Streeter
FAA Office of Accident Investigation

Dear Mr. Streeter,

26 November 1997

Hello again, still trying...

We are allies, we are on the same side, we have the same goal. Let us use the upcoming public hearing in Baltimore to share our information. I will be there and look forward to meeting you.

I wish to prevent death by preventing airplane accidents by preventing fuselage disintegration in flight by preventing forward cargo door rupture at aft midspan latch on aging Boeing 747s. It's happened before and confirmed: UAL 811; and probably happened before on Pan Am 103, and before that Air India 182. It's probably happened again with TWA 800. The probable cause for all is the same, door rupture in flight.

The Chairman of NTSB has said the whole issue of aging aircraft will be examined. TWA 800 was certainly that.

Let's assume a few things about TWA 800, AI 182, PA 103, and UAL 811:

1. TWA 800 (93,000 hours), AI 182 (23,624 hours), PA 103 (72,464 hours), and UAL 811 (58,815 hours) were high time, aging early model Boeing 747-100, -200 aircraft.
2. Explosive decompression makes a sudden loud sound. If explosive decompression does not make a sudden loud sound

then the cargo door explanation is not valid.

3. TWA 800, Air India 182, PA 103, and UAL 811 all had sudden loud sounds on the CVR at event time. If not, then cargo door explanation for that aircraft is not valid.

4. If the forward cargo door were to rupture in flight and do the same damage as UAL 811, the nose could tear off, although it did not for UAL 811. If the nose of an aging 747 always stays on after forward door ruptures/opens, then the cargo door explanation is not valid.

4. Explosive decompression is an explosion.

5. Destructive force of 300 knots onto weakened structure is immense.

To explain TWA 800 from the top down is to match up four aging Boeing 747s which had fatal accidents with destruction starting in fuselage near leading edge of the wing, sudden loud sound on CVR, abrupt power cut to FDR, foddred engines, never recovered bodies, severe starboard side damage, similar wreckage plots, and all were thought to be a bomb for some time. Only four 747 accidents fit that pattern, UAL 811, AI 182, PA 103, and TWA 800. They belong to a group from which deductions can be made. The many other evidence matches of these four to each other are reported in the respective governments' AARs: UK AAIB 2/90, CASB and Indian Aviation Occurrence, and NTSB AAR 92/02; all available on web site www.corazon.com

To explain TWA 800 from the bottom up, the evidence pertaining to TWA 800 must be examined closely and deductions made. The following observations and explanations refer to TWA 800.

1. CVR sudden loud sound: Explosive decompression starts as air molecules rush against each other quickly. NTSB reported sudden loud sound.

2. FDR abrupt power cut: Severe disruption to cargo hold floor and adjacent main equipment compartment. NTSB reported abrupt power cut.
3. Streak: Top part of door with fuselage skin attached spinning away reflecting evening sunlight to ground observers appearing as streak as it decelerates. Door is shiny metal object and light source was orange setting sun.
4. TWA 800 wreckage reconstruction can be seen at URL <http://www.corazon.com/presskit.html> and reveals the following: Red flags on top of door indicate it was found closest to airport. Top piece of door and fuselage skin were found closest to airport and far apart from its usual frame and nose: Door ruptured/opened in flight and pieces spun away first, landed first, and found closest.
5. Red paint smears between passenger windows only found above forward cargo door: Red paint from door below transferred when door opened out, up, and slammed into fuselage above. Paint transfer between door and white fuselage principle matches UAL 811.
6. Missing red paint on trim above cargo door: Red paint from trim scraped off by friction of metal bending and rubbing together.
- 7 Inward bending of top of cargo door: Inward bend occurs when top of door hits fuselage. Inward bending of top door matches UAL 811 top door piece inward bend.
8. Most of middle of cargo door, aft midspan latch, door frame, and outer skin missing: Missing material not available for examination. Door can rupture even when bottom eight latches hold because only two midspan latches hold sixteen feet of door closed and have no locking sectors to prevent inadvertent unlatching.
9. Door hinges are attached to door and appear near normal: Hinges match UAL 811 hinge description in appearance and function.

10. Outward petal bulge rupture at aft midspan latch of forward cargo door: Outward bulge rupture suggests rupture at aft latch. Petal pattern indicated outward, not inward force of rupture.
11. Outward peeled upper fuselage skin: Outward indicates internal force pushed outward, not external force, such as water, pushing inward.
12. Vertical tear line at station 741 between windows: Vertical tear line is nose cut off point and matches other two Boeing 747 nose cut off points, AI 182, and PA 103.
13. Starboard only shattered, torn, and frayed fuselage around forward cargo door: Unilateral rupture suggests explosive decompression caused by inadvertent rupture at aft midspan latch of forward cargo door in flight and discounts center tank fire/explosion as initial event.

From top to bottom, TWA 800 crash cause is clear to see, hear, and touch; fuselage rupture forward of the wing on right side on a very old and worn aircraft. The cargo door explanation is plausible, it's mechanical, it's happened before, and it fits the evidence. It also incorporates the center tank fire/explosion explanation as happening as described by NTSB but a few seconds later and a few thousand feet lower than the initial event at 13700 feet/8:31 PM.

I first discovered the cargo door rupture problem on aging 747s after PA 103 in 1988 and confirmed for me by UAL 811 only three months later. My concerns were published first in an aviation newsletter in April, 1990 and in Flying magazine in July, 1992. I've had correspondence with a Pan Am 103 aviation insurance company representative in 1995 regarding the risk of another cargo door inadvertent opening. As soon as I heard that TWA 800 had disappeared from radar and disintegrated in flight shortly after takeoff I suspected cargo door and it was confirmed

for me when the sudden loud sound and abrupt power cut to the FDR were reported by NTSB. All of the subsequent evidence confirms even stronger that the cause of TWA 800 was the aft midspan latch rupture in flight. This letter only describes a few of the linking clues, evidence, and closely reasoned deductions based on the observations of the evidence.

To sum up specific, irrefutable evidence that leads to conclusion of cargo door rupture for TWA 800:

1. Sudden loud sound on CVR.
2. Abrupt power cut to FDR.
3. Red flags on top of door in wreckage reconstruction.
4. Red paint smears on white paint between passenger windows.
5. Most of middle door, aft latch, outer skin, and door frame missing.
6. Shattered, torn, and frayed starboard fuselage structure surrounds the blown apart cargo door yet the opposite port side is smooth and relatively undamaged.
7. Visible bulging outward opening rupture hole at missing aft midspan latch of forward cargo door.

A confirming exercise would be to closely examine the door hinge of TWA 800 to see if it has overtravel impressions on the opposite hinge which would match the overtravel impressions on the UAL 811 door hinge as reported in NTSB AAR 92/02 and seen at <http://www.corazon.com/811page40doorhinge.html>

Cargo door explanation for TWA 800 is worthy of intense investigation. My intentions at the public hearing are to support such an investigation. I have formally offered to speak before the fact finding panel as a qualified technical person with special knowledge. I will be offering literature to attendees including pictures and text from NTSB AAR 92/02 showing big hole in

nose of UAL 811.

What can be done to stop fuselage ruptures in high time Boeing 747s?

1. Boeing must modify/fix the cargo doors again.
2. FAA can direct Boeing to fix the doors with a sixth Airworthiness Directive.
3. NTSB can confirm door explanation and make recommendations to FAA.
4. NTSB public fact finding hearing can determine cargo door explanation worthy of investigation and confirm probable cause if valid.
5. Families of victims and their representatives may be persuaded to investigate the door and make recommendations to authorities.
6. Elected officials may be persuaded to conduct a parallel door investigation.
7. Media can draw attention to cargo door explanation and bring it to the attention of all concerned.

In all my discussions with persons involved with TWA 800, one person asked the key question: "Why do the doors open?" That was asked of me by my Congressman, Sam Farr, in his office as I presented the cargo door explanation to him. It is a good question.

I will reply now, as I did then, "I don't know for three of them, but for UAL 811 it was chafed wires shorting to turn on door motor which overrode safety features and unlatched the door which opened outward, up, and away, taking fuselage paint with it, killing nine passengers whose bodies were never recovered, leaving a sudden loud sound on the CVR, an abrupt power cut to the FDR, severe starboard side damage, and the cause was thought to be a bomb. The other three are probably the same

reason but there are lots of other possibilities that need to be investigated."

(Regarding the AD 'fix' installed after UAL 811, it affected locking sectors yet the two midspan latches have no locking sectors to be 'fixed.' TWA 800 shattered door shows a midspan rupture with bottom latches in place. There were two pairs of door failure: UAL 811 and PA 103 had door rupture midspan and entire door open; AI 182 and TWA 800 had bottom latches hold and door ruptured/opened just at midspan latch.)

I hope to work with you, the authorities and all those concerned to confirm the probable cause of TWA 800. Please contact me with questions or rebuttal. My email is barry@corazon.com. I hope to see you at the NTSB public fact finding hearing about TWA 800 and aging aircraft.

Sincerely,

John Barry Smith

Persons contacted and responded:

Mr. Sam Farr
17th District, California
House of Representatives
Congress of the United States
Washington, DC
samfarr@mail.house.gov
Contacted: 29 Oct 1996 09:10:09 EST
Responded: 29 Oct 1996 09:10:09 EST

John McCain, Arizona,

Chairman, Committee on Commerce, Science, and
Transportation
United States Senate
Julie_Swingle@mccain.senate.gov
Contacted: Mon, 09 Sep 96 17:49:37 EST
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Contacted: 29 Oct 97

From: John Barry Smith <barry@corazon.com>

Date: November 28, 1997 10:30:07 PM PST

To: FAAOAI

Subject: Cargo door rupture/NTSB TWA 800 Hearing

Dear Mr. Streeter, please forward to FAA Northwest Region,

Thanks, John Barry Smith

Ron Wojnar, Manager

Darrell Pederson, Assistant Manager

Bob Brenerman,

FAA Structural Aerospace Engineer,

Federal Aviation Administration

Transport Airplane Directorate, ANM-100

Dear Mr. Wojnar, Mr. Pederson, and Mr. Brenerman,

26 November 1997

Hello again, still trying...

We are allies, we are on the same side, we have the same goal. Let us use the upcoming public hearing in Baltimore to share our information. I will be there and look forward to meeting you.

I wish to prevent death by preventing airplane accidents by preventing fuselage disintegration in flight by preventing forward cargo door rupture at aft midspan latch on aging Boeing 747s. It's happened before and confirmed: UAL 811; and probably happened before on Pan Am 103, and before that Air India 182. It's probably happened again with TWA 800. The probable cause for all is the same, door rupture in flight.

The Chairman of NTSB has said the whole issue of aging aircraft will be examined. TWA 800 was certainly that.

Let's assume a few things about TWA 800, AI 182, PA 103, and UAL 811:

1. TWA 800 (93,000 hours), AI 182 (23,624 hours), PA 103 (72,464 hours), and UAL 811 (58,815 hours) were high time, aging early model Boeing 747-100, -200 aircraft.
2. Explosive decompression makes a sudden loud sound. If explosive decompression does not make a sudden loud sound then the cargo door explanation is not valid.
3. TWA 800, Air India 182, PA 103, and UAL 811 all had sudden

loud sounds on the CVR at event time. If not, then cargo door explanation for that aircraft is not valid.

4. If the forward cargo door were to rupture in flight and do the same damage as UAL 811, the nose could tear off, although it did not for UAL 811. If the nose of an aging 747 always stays on after forward door ruptures/opens, then the cargo door explanation is not valid.

4. Explosive decompression is an explosion.

5. Destructive force of 300 knots onto weakened structure is immense.

To explain TWA 800 from the top down is to match up four aging Boeing 747s which had fatal accidents with destruction starting in fuselage near leading edge of the wing, sudden loud sound on CVR, abrupt power cut to FDR, foddred engines, never recovered bodies, severe starboard side damage, similar wreckage plots, and all were thought to be a bomb for some time. Only four 747 accidents fit that pattern, UAL 811, AI 182, PA 103, and TWA 800. They belong to a group from which deductions can be made. The many other evidence matches of these four to each other are reported in the respective governments' AARs: UK AAIB 2/90, CASB and Indian Aviation Occurrence, and NTSB AAR 92/02; all available on web site www.corazon.com

To explain TWA 800 from the bottom up, the evidence pertaining to TWA 800 must be examined closely and deductions made. The following observations and explanations refer to TWA 800.

1. CVR sudden loud sound: Explosive decompression starts as air molecules rush against each other quickly. NTSB reported sudden loud sound.

2. FDR abrupt power cut: Severe disruption to cargo hold floor and adjacent main equipment compartment. NTSB reported

abrupt power cut.

3. Streak: Top part of door with fuselage skin attached spinning away reflecting evening sunlight to ground observers appearing as streak as it decelerates. Door is shiny metal object and light source was orange setting sun.

4. TWA 800 wreckage reconstruction can be seen at URL <http://www.corazon.com/presskit.html> and reveals the following: Red flags on top of door indicate it was found closest to airport. Top piece of door and fuselage skin were found closest to airport and far apart from its usual frame and nose: Door ruptured/opened in flight and pieces spun away first, landed first, and found closest.

5. Red paint smears between passenger windows only found above forward cargo door: Red paint from door below transferred when door opened out, up, and slammed into fuselage above. Paint transfer between door and white fuselage principle matches UAL 811.

6. Missing red paint on trim above cargo door: Red paint from trim scraped off by friction of metal bending and rubbing together.

7 Inward bending of top of cargo door: Inward bend occurs when top of door hits fuselage. Inward bending of top door matches UAL 811 top door piece inward bend.

8. Most of middle of cargo door, aft midspan latch, door frame, and outer skin missing: Missing material not available for examination. Door can rupture even when bottom eight latches hold because only two midspan latches hold sixteen feet of door closed and have no locking sectors to prevent inadvertent unlatching.

9. Door hinges are attached to door and appear near normal: Hinges match UAL 811 hinge description in appearance and function.

10. Outward petal bulge rupture at aft midspan latch of forward cargo door: Outward bulge rupture suggests rupture at aft latch.

Petal pattern indicated outward, not inward force of rupture.

11. Outward peeled upper fuselage skin: Outward indicates internal force pushed outward, not external force, such as water, pushing inward.

12. Vertical tear line at station 741 between windows: Vertical tear line is nose cut off point and matches other two Boeing 747 nose cut off points, AI 182, and PA 103.

13. Starboard only shattered, torn, and frayed fuselage around forward cargo door: Unilateral rupture suggests explosive decompression caused by inadvertent rupture at aft midspan latch of forward cargo door in flight and discounts center tank fire/explosion as initial event.

From top to bottom, TWA 800 crash cause is clear to see, hear, and touch; fuselage rupture forward of the wing on right side on a very old and worn aircraft. The cargo door explanation is plausible, it's mechanical, it's happened before, and it fits the evidence. It also incorporates the center tank fire/explosion explanation as happening as described by NTSB but a few seconds later and a few thousand feet lower than the initial event at 13700 feet/8:31 PM.

I first discovered the cargo door rupture problem on aging 747s after PA 103 in 1988 and confirmed for me by UAL 811 only three months later. My concerns were published first in an aviation newsletter in April, 1990 and in Flying magazine in July, 1992. I've had correspondence with a Pan Am 103 aviation insurance company representative in 1995 regarding the risk of another cargo door inadvertent opening. As soon as I heard that TWA 800 had disappeared from radar and disintegrated in flight shortly after takeoff I suspected cargo door and it was confirmed for me when the sudden loud sound and abrupt power cut to the FDR were reported by NTSB. All of the subsequent evidence

confirms even stronger that the cause of TWA 800 was the aft midspan latch rupture in flight. This letter only describes a few of the linking clues, evidence, and closely reasoned deductions based on the observations of the evidence.

To sum up specific, irrefutable evidence that leads to conclusion of cargo door rupture for TWA 800:

1. Sudden loud sound on CVR.
2. Abrupt power cut to FDR.
3. Red flags on top of door in wreckage reconstruction.
4. Red paint smears on white paint between passenger windows.
5. Most of middle door, aft latch, outer skin, and door frame missing.
6. Shattered, torn, and frayed starboard fuselage structure surrounds the blown apart cargo door yet the opposite port side is smooth and relatively undamaged.
7. Visible bulging outward opening rupture hole at missing aft midspan latch of forward cargo door.

A confirming exercise would be to closely examine the door hinge of TWA 800 to see if it has overtravel impressions on the opposite hinge which would match the overtravel impressions on the UAL 811 door hinge as reported in NTSB AAR 92/02 and seen at <http://www.corazon.com/811page40doorhinge.html>

Cargo door explanation for TWA 800 is worthy of intense investigation. My intentions at the public hearing are to support such an investigation. I have formally offered to speak before the fact finding panel as a qualified technical person with special knowledge. I will be offering literature to attendees including pictures and text from NTSB AAR 92/02 showing big hole in nose of UAL 811.

What can be done to stop fuselage ruptures in high time Boeing 747s?

1. Boeing must modify/fix the cargo doors again.
2. FAA can direct Boeing to fix the doors with a sixth Airworthiness Directive.
3. NTSB can confirm door explanation and make recommendations to FAA.
4. NTSB public fact finding hearing can determine cargo door explanation worthy of investigation and confirm probable cause if valid.
5. Families of victims and their representatives may be persuaded to investigate the door and make recommendations to authorities.
6. Elected officials may be persuaded to conduct a parallel door investigation.
7. Media can draw attention to cargo door explanation and bring it to the attention of all concerned.

In all my discussions with persons involved with TWA 800, one person asked the key question: "Why do the doors open?" That was asked of me by my Congressman, Sam Farr, in his office as I presented the cargo door explanation to him. It is a good question.

I will reply now, as I did then, "I don't know for three of them, but for UAL 811 it was chafed wires shorting to turn on door motor which overrode safety features and unlatched the door which opened outward, up, and away, taking fuselage paint with it, killing nine passengers whose bodies were never recovered, leaving a sudden loud sound on the CVR, an abrupt power cut to the FDR, severe starboard side damage, and the cause was thought to be a bomb. The other three are probably the same reason but there are lots of other possibilities that need to be investigated."

(Regarding the AD 'fix' installed after UAL 811, it affected locking sectors yet the two midspan latches have no locking sectors to be 'fixed.' TWA 800 shattered door shows a midspan rupture with bottom latches in place. There were two pairs of door failure: UAL 811 and PA 103 had door rupture midspan and entire door open; AI 182 and TWA 800 had bottom latches hold and door ruptured/opened just at midspan latch.)

I hope to work with you, the authorities and all those concerned to confirm the probable cause of TWA 800. Please contact me with questions or rebuttal. My email is barry@corazon.com. I hope to see you at the NTSB public fact finding hearing about TWA 800 and aging aircraft.

Sincerely,

John Barry Smith

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From: John Barry Smith <barry@corazon.com>
Date: December 18, 1997 10:28:12 PM PST
To: FAAOAI
Subject: All latched/mostly latched

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James F. Wildey II
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National Transportation Safety Board
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Dear Gentlemen, 18 December 1997.

I address you both as representing the United States government. You are officials and have the education, experience, and desire to investigate an aircraft accident of national importance. I know the differences between legislative branch and executive branch and NTSB and FAA, but in a matter of life and death, which this is, I prefer to address open minds, not fixed titles.

Mr. Streeter and Mr. Wildey, both of you asked a question regarding the cargo door rupture explanation for TWA 800 during the recent public inquiry. They were important questions and revealed an interest in an answer not yet known.

The formal question from Mr. Streeter to Mr. Wildey was, "Were there hoop stress fractures found on the wreckage of TWA 800 near the area of damage?" or words to that effect. The answer from Mr. Wildey was "Yes, and around stringer 40R," or words to that effect.

The informal question from Mr. Wildey to me was, "What did you think of the cargo door presentation?" or words to that effect. My answer to Mr. Wildey was "Very interesting, I wish to correspond with you about it."

I am now corresponding. I believe that discussion between an informed member of the public and officials about a matter of national importance, testimony on the public record, released public docket exhibits, and previously released government accident reports is appropriate and acceptable, even necessary sometimes. It takes everyone to help solve this mystery. FAA web page states, "The Office of Accident Investigation (AAI) is

the principal organization within the FAA with respect to aircraft accident investigation and all activities related to the National Transportation Safety Board (NTSB)."

We were all at the TWA 800 fact finding inquiry in Baltimore. Were facts found? I certainly found some, important ones. I've put them together to attempt to persuade you that the forward cargo door aft midspan rupture explanation is a worthy line of investigation. The first goal is a comprehensive professional examination of that forward cargo door area to rule in or rule out rupture at aft midspan latch.

You can do that; I can't.

Specific suggestions:

1. Examine aft midspan latch pin for damage as was observed on UAL 811, NTSB AAR 92/02 page 33, "The forward midspan latch pin was relatively undamaged. The aft midspan latch pin had definite areas of damage. Both pins had wear areas where the cams would contact the pins during latching. (Encl 1)
2. Examine the TWA 800 door hinge for damage as was observed in AAR 92/02, page 35, "Several areas on the hinge sections, such as the fuselage hinge sections, showed evidence of contact from the door during overtravel (See figure 14.) In addition the fuselage forward hinge sections were slightly bent." (Encl 2) Figure 14 is on page 40 and shows photograph of the hinge overtravel damage. (Encl 3)
3. Examine two midspan latches from forward cargo door for damage. The criterion for determining if latches latched was to check to see if still locked and attached to adjacent fuselage sill or frame. The bottom eight latches of TWA 800 door were attached to sill so conclusion latched. The two midspan latches are unattached to frame so conclusion unlatched. The door frame

is smooth where the aft midspan latch is supposed to be attached but isn't.

4. Examine forward and aft pull-in hooks of TWA 800 for compression and smearing damage as was observed in AAR 92/02, page 45. (Encl 4)

5. Examine door and fuselage for paint transfer from one to the other as was observed in AAR 92/02, page 41. (Encl 5) Red paint smears on TWA 800 on white paint between passenger windows above cargo door may have come from red paint on top of cargo door. The red paint smears are large and frequent only along the top of the cargo door area and not found on the other 460 feet of fuselage trim. This indicates door below opened outward and slammed upward into fuselage, giving overtravel over 143 degrees on the hinge and transferring red paint from door onto white paint between passenger windows. The opening door with hinge attached took red trim fuselage skin with it and that may have slammed upward also onto white painted skin. Red paint smears are not scraped away white paint revealing red underneath but red paint on top of white paint. White paint scraped away reveals green primer.

6. Examine outer skin contour of the upper door piece for inward crushing as was observed in AAR 92/02, page 41. (Encl 5) Door blows outward and top of door smashes into fuselage above giving inward crushing not by water impact. Photo of TWA 800 top door piece shows such damage. (Encl 6)

7. Examine master latch lock handle housing and trigger for position. AAR 92/02, page 41, found it relatively flush with door outer skin. (Encl 5)

8. Examine floor beams again of TWA 800 to confirm statement in Docket No. SA-516, Exhibit No. 18A, Sequencing Study, page 20, "Downward separation directions were noted at STA 900, 880, 840, 820, 800, and 780..." and ""The initial opening of the fuselage lower lobe (e.g. LF6A) would have the expected result

of rapid depressurization accompanied by collapse of the main deck floor for some distance forward of STA 1000. The red area recovery of interior components as far forward as STA 600 would not be inconsistent with this floor collapse and associated structural breakup." (Encl 7) This observation matches downward buckling as was reported in AAR 92/02, page 4, "The floor beams adjacent to and inboard of the cargo door area had been fractured and buckled downward." (Encl 8)

9. Confirm evidence on TWA 800 of direct circumferential tension or hoop stress tension found on lower right side skin in the red zone only, as stated in Docket No. SA-516, Exhibit No. 7A, Structures Group Chairman's Factual Report of Investigation, page 11. (Encl 9) This observation coincides with AAR 92/02 which states on page 11, "The cargo door and its associated hardware are designed to carry circumferential (hoop) load arising from pressurization of the airplane." (Encl 10) If cargo door was fully latched and intact until water impact then there should be no hoop tension fractures. If the door was missing in flight, hoop tension fractures could be expected to be found and they were on TWA 800 leading to conclusion door was missing in flight.

10. Confirm door frame of TWA 800 which abuts aft edge of door is curved outward in petal shaped bulge indicating outward force rupture. Aft midspan latch is unattached to aft midspan latch pin halfway up the door frame. Edge of door frame is smooth indicating door not missing by force but by unlatching of aft midspan latch. (Encl 6)

11. Establish large round rupture hole in TWA 800 photo centered at aft midspan latch is in fact a hole or something otherwise. (Encl 6)

12. Confirm outward peeled skin on TWA 800 upper skin as shown in photograph (Encl 6) which indicates outward force which matches AAR 92/02, page 6 photograph of peeled upper

skin in same location. (Encl 11)

Essentially, Mr. Wildey and Mr. Streeter, TWA 800 can be matched to UAL 811 through NTSB AAR 92/02 and the TWA 800 public inquiry exhibits. UAL 811 was an inadvertent opening of the forward cargo door in flight. TWA 800 may be also. A complete examination of the TWA 800 cargo door area should be done to compare with the UAL 811 cargo door area as reported in AAR 92/02. There are other things to examine in that TWA 800 door such as two overpressure relief doors for open or closed, torque tubes for bending, and viewing ports for direction of damage similar to AAR 92/02, page 44. (Encl 23)

Mr. Wildey, a complete examination of TWA 800 cargo door area requires more than the sentence from "Docket No. SA-516, Exhibit Number 15C, Report Number 97-82, Section 41/42 Joint, Forward Cargo Door, page 1, "Examination of the lower lobe forward cargo door showed that all eight of the door latching cams remain attached (along with pieces of the door itself) to the pins along the lower door sill." (Encl 12) The door is a known killer near the scene of its specialty crime, pressurized hull rupture. Exoneration of cargo door requires more than a cursory analysis.

Eight latches is not enough when ten exist. Twenty percent of door material is not enough when 100% exists. The incomplete early examination of the cargo door before reconstruction was completed has resulted in three distinct misinterpretations which continue to this day:

1. Entire door latched after initial event.
2. Door intact and attached to nose at water impact.
3. Water impact caused initial shattering of cargo door area.

Cargo door explanation proposes the door was not fully latched at water impact, it was mostly latched, only 80%. The door was not totally intact at water impact, it was partially intact; only the bottom 10% was attached to bottom sill of frame. The aft midspan rupture gave outward force to fuselage and door frame skin which burst outward. Explosive decompression and subsequent tearing off of nose caused initial shattering of cargo door area. The water impact gave any inward crushing damage to already shattered cargo door area.

Mr. Wildey, I noticed your name is author of report, No 97-82 of Docket No. SA-516, Exhibit No. 15C, Section 41/42 Joint, Forward Cargo Door, although you must have relied on investigator Al Dickinson, AS-10 for input. The report is dated April 22, 1997, a month before the reconstruction was completed and the red paint smears, outward bulge at aft midspan latch and general shattered effect became apparent. Mr. Ron Schleede of NTSB was kind enough to report the cargo door was locked and latched to me in an email on August 11, 1996, ten months before reconstruction completed. (Encl 13) Cargo door area was among the last parts to be reconstructed according to the pictures on the CD-ROM from NTSB about TWA 800.

It is apparent a hasty conclusion was reached about the status of the forward cargo door based upon incomplete evidence available at the time of only eight bottom latches latched and that hasty conclusion has not been modified. In Docket No. SA-516, Exhibit No. 18A, Sequencing Report, page 30, you write: "It is therefore possible that new scenarios (sequences) may emerge as new information is acquired whether it be from newly identified parts, or simply a new interpretation of current information." (Encl 14)

Mr. Wildey, Yes, Yes, Yes! Can you do that? Can you write a new sequence as new information and new interpretation is acquired? Can you add an addendum/correction/errata sheet to Exhibit 15C, Section 41/42 Joint, Forward Cargo Door? It would be written after the reconstruction was completed in May which showed new evidence such as red paint smears which have allowed for a new interpretation of events. A further examination of the forward cargo door area is now warranted.

Mr. Streeter, as an accident investigator I believe you put value in finding similar accidents to the one under current investigation from which similarities may be observed and conclusions drawn. The NTSB has done that for TWA 800: Docket No. SA-516, Exhibit No. 12-B, Sound Spectrum Study, page 21, Chart 12. (Encl 15) The sudden loud sound on the CVR which is followed by an abrupt power cut which occurred on four high time Boeing 747s is displayed for comparison. TWA 800, Pan Am 103, Air India 182, and United Airlines 811 are plotted together in that sequence by the NTSB. In addition, a Philippines 737 sound is added at the bottom.

The linchpin of the cargo door explanation is the sudden loud sound on the CVR. I believe that to be the sudden rushing sound of the air molecules as they push outward to equalize the higher inner pressure to the lower outside pressure. (The Air India 182 CVR sudden loud sound is matched to the CVR sudden loud sound on the DC-10 cargo door crash in the Canadian government accident report. (Encl 16))

It is apparent to me that the four Boeing 747 accidents shown in Chart 12 match in everything but duration and that is measured in microseconds. All are less than a second. All are followed by an abrupt power cut. The cargo door explanation states all

Boeing 747 sudden loud sounds are produced by explosive decompression followed by severe disruption of the adjacent main equipment compartment cutting off power to FDR and CVR. The initial disruptive force is the explosive decompression but the ultimate destructive force is the 300 knots slipstream tearing off the entire nose.

The sudden loud sound does not match bomb or center tank explosion and is left as unexplained or called a vague structural breakup sound. A decompression air rushing sound would explain the sound spectrum of rise time, frequency components and amplitude. The abrupt power cut could be explained by nearby cables in adjacent main equipment compartment disrupted by the explosive force of the decompression.

Gentlemen, another clue to accident cause is the sequence of breakup and that is determined from wreckage plot. What departs the aircraft first may well be near the initial event. The NTSB has provided a study: Docket No. SA-516, Exhibit No. 22B, Trajectory Study Supporting Material, page 45 in faded numbers and page 30 in dark numbers. (Encl 17) Among all the charts of pieces of the plane coming off and when, there is one chart that shows the first to go, that is page 30 chart, Forward cargo door trajectories. The first item is A489, fwd lower cargo bay struct, FS 900. That item left even before the last ASR radar beacon to Islip radar. The next item to go before anything else in the entire plane is A470, R fwd lower cargo bay struct, FS 820. There are five other forward cargo bay structures which are plotted and leave soon thereafter. On dark page number 29 lower frame stringer 40L-42R is shown to leave very early. (Encl 18)

The overall appraisal was made by Docket Number SA-516, Exhibit No. 22A, Trajectory Study, page 3: "The wreckage

distribution shows that parts were initially shed from the area just forward of the wing." (Encl 19) Please carefully agree, gentleman, cargo door is just forward of the wing and the center tank is not.

There is another interesting observation in an exhibit: Docket No. SA-516, Exhibit No. 7A, Structures Group Report, page 33: "5.1 Horizontal Stabilizer, "Some of the items found in the horizontal stabilizer are sections of seat track, a stator blade from turbine section, and glitter." (Encl 20) On 5.1.1 Right Horizontal Stabilizer, page 34, "An engine stator blade from turbine section penetrated the upper honeycomb surface near the outboard trailing edge. (Encl 21)

Engine number three is on the right side inboard and would be the engine to throw off a stator blade to penetrate the right horizontal stabilizer. Engine number four is too far outboard of stabilizer. The left side stabilizer had no such engine part penetration.

Cargo door explanation relies heavily on engine number three data. It is the one to catch on fire, lands apart from the other three, throws off FOD into number four, ingests humans, and is heavily damaged upon retrieval. Engine number three may well be the ignition source for the center tank fire/explosion according to the cargo door explanation. The door ruptures/opens out and tears off, big hole appears, starboard engines ingest foreign objects, 300 knots tears nose off, wings and fuel tanks and fuselage fall and disintegrate and fodded on-fire engine number three or four ignites fuel vapor cloud and center tank at 7500 feet many seconds and thousands of feet lower after initial event of door rupture.

The four engines hold vital accident clues. To ignore and omit that information is wrong. They are four vacuum cleaners at the scene of the crime. The door rupture or center tank explosion would send debris into the engines. How much debris, what kind it is, what did the engines do, and what happened to them is vitally important. Blade tip rubs and inlet cowling damage reports are extremely relevant. Pratt and Whitney was not even a party to the investigation and no exhibit item was released of the engine breakdown. This is a grievous error, gentleman, can you correct it?

A stator blade was embedded in the right horizontal stabilizer right behind engine number three. This indicates engine number three was foddled early on and threw off pieces which is consistent with cargo door explanation and inconsistent with center tank explosion in which engines windmill and fall intact to water.

NTSB AAR 92/02, page 2, has engine number three foddled by baggage debris and throwing off fod into engine number four which caught fire. Both engines had to be shut down. (Encl 22) Early news reports had TWA 800 engine number three foddled with inlet cowl material and the only engine to show burn damage. UAL 811 had dents in right horizontal stabilizer and torn, punctured, and dented inlet cowl material according to AAR 92/02, page 7. (Encl 24)

The engine breakdown report is vital and is connected to the TWA 800 investigation by the stator blade in right horizontal stabilizer. The engines are involved; they are not innocent bystanders. Engine number three may be the center tank mysterious ignition source. Can you get powerplant breakdown report exhibit released? Can you confirm for yourselves engine

number three burnt, fiddled, or otherwise different from 1, 2, or 4?

The cargo door rupture explanation is very detailed and explains the evidence, from streak to red paint smears to center tank explosion. Please inquire for more details or peruse www.corazon.com. At this stage I believe you gentlemen are not yet that interested in 'how' but 'if' door shattered in flight or on water impact. We agree door area did shatter but 'when' is the question. We agree the center tank exploded but 'when' is the question.

NTSB currently has center tank explodes first, then door shatters later, I suggest door area shatters first, then center tank explodes later. Door, then tank; or tank, then door? There is our item of difference in a concise sentence.

I offer hard evidence to support 'yes, door did rupture/open in flight for TWA 800.' (When center tank exploded is for later.)

1. Floor beam downward movement.
2. Hoop stress fractures.
3. Red paint smears.
4. Curved outward smooth door frame at aft edge of missing door piece.
5. Outward peeled skin.
6. Petal shaped outward rupture hole at aft midspan latch.
7. Aft midspan latch not attached to latch pin.
8. Inward crush of top piece of door.

Possible hard evidence of door rupture in flight:

1. Hinge overtravel impression damage.
2. Aft midspan latch pin damage.
3. Other matching items to confirmed cargo door opening, UAL 811, may be discovered with exhaustive examination of cargo

door area.

Mr. Streeter and Mr. Wildey, here is my big picture overview:
(Everybody means us.)

1. Everybody knows the poly-X wiring in early model Boeing 747s, including TWA 800, had problems of easily chafing in vibration in the past. Cargo door explanation says that happened again to TWA 800.

2. Everybody knows that chafed wiring can cause a forward cargo door motor to go to the unlatched position with UAL 811. Cargo door explanation says that happened again to TWA 800.

3. Everybody knows that high cycle Boeing 747s have a weak structural area aft of the flight deck and forward of the wing called Section 41 which requires retrofit of structural strengthening after 20000 cycles. Cargo door explanation says TWA 800 at 18000+ cycles had not had that retrofit and cargo door area was thus weak.

4. Everybody knows that a forward cargo door opening on an (1) aged (2) high flight time/high cycles (3) early model Boeing 747, UAL 811 (4) which took off in dusk or darkness (5) running late (6) and during climb (7) experienced a sudden initial event near the leading edge of wing in fuselage which left a (8) short (9) sudden (10) loud (11) sound on the cockpit voice recorder, an (12) abrupt (13) power cut to the flight data recorder, (14) foreign object damage to starboard engine #3, (15) more severe inflight damage on starboard side, (16) nine never recovered bodies, (17) port fuselage side forward of the wing relatively undamaged, (18) shattered, torn, and frayed skin in forward cargo door area on starboard side, (19) unusual paint smears in forward cargo door area, (20) rupture appearance of skin at aft midspan latch of the forward cargo door, (21) outward peeled skin on upper forward fuselage, (22) vertical fuselage tear lines forward of the wing and aft of forward cargo door, (23) had hinge stay attached

to top piece of forward cargo door, (24) and destruction initially thought to be have been caused by a bomb but (25) later conclusively ruled out. Cargo door explanation says that all twenty five happened again to TWA 800.

Everybody knows an aged aircraft, TWA 800, with problem wiring, poly-X, with a weak area, Section 41, which had a previous fatal electrical fault cargo door opening in same model and type, UAL 811, could have a similar problem. AAR 92/02, page 92. (Encl 25) Cargo door explanation and evidence says that happened again to TWA 800. But only one believes it. And now maybe you two gentleman.

At least believe the evidence enough to complete an exhaustive examination of the forward cargo door of TWA 800 on the wreckage reconstruction. Thank goodness it's there. The landing gear doors, which have never killed anyone, got twenty two paragraphs of damage description in Exhibit 7A; the forward cargo door which has nine confirmed kills, got one sentence in Exhibit 15C.

At least believe the evidence enough to request that the powerplant breakdown exhibit be released as part of the public docket so that the results may be examined and compared with other engine breakdown reports of similar accidents, UAL 811, AI 182, and PA 103, a grouping suggested by NTSB document Chart 12 in Exhibit 12-B.

At least believe the evidence enough to pursue the cargo door explanation by going to www.corazon.com and reviewing analysis of government accident reports and contact me at barry@corazon.com.

At least believe the current evidence enough to personally examine possible new evidence such as hinge and latch pin of TWA 800 door hanging on wreckage reconstruction.

Mr. Wildey, there were three large poster photographs of TWA 800 reconstruction behind you on the platform during the inquiry hearing. One was of hundreds of pieces of wreckage, one was of starboard side and one was of port side of wrecked aircraft. We three all saw those three pictures every day. They were real and included real things. I have discussed real things that were in those three pictures so close to us at the hearing: 1. Hinge, 2. Pins, 3. Peeled skin, 4. Door frame, 5. Red paint smears, 6. Round rupture hole, 7. Bottom latches, 8. Missing door material, 9. Downward floor beams, 10. Hoop stress fractures, 11. Shattered starboard skin, 12. Smooth port skin, 13. Door manual locking handle, 14. Door pull in hooks. 15. Center tank, 16. Vertical tears, 17. Right horizontal stabilizer.

During the hearing on the other side of the stage were rotated large poster photographs. For the first few days one photograph was of the CVR sudden loud sound showing rise time and frequency analysis. I have discussed that real thing and the real things connected to it by NTSB Chart 12 in Exhibit 12-B, which groups UAL 811, PA 103, and AI 182 and TWA 800 together.

The three photographs of wreckage showed a hangar floor with parts and reconstruction. Nearby were other rooms with real things in them. I have discussed those real things:

1. Flight Data Recorder, 2. Engines. 3. Cabin interior.

At the inquiry in front of us on tables were reams and reams of paper compiled into exhibits for review and analysis. I have discussed those exhibits:

1. Docket No. SA-516, Exhibit No. 18A, Sequencing Study, page 20, "Downward separation directions were noted at STA 900, 880, 840, 820, 800, and 780..." and ""The initial opening of the fuselage lower lobe (e.g. LF6A) would have the expected result of rapid depressurization accompanied by collapse of the main deck floor for some distance forward of STA 1000. The red area recovery of interior components as far forward as STA 600 would not be inconsistent with this floor collapse and associated structural breakup."

2. Docket No. SA-516, Exhibit No. 7A, Structures Group Chairman's Factual Report of Investigation, page 11 which discusses direct circumferential tension or hoop stress tension found on lower right side skin in the red zone only.

3. Docket Number SA-516, Exhibit No. 15C, Report Number 97-82, Section 41/42 Joint, Forward Cargo Door, "Examination of the lower lobe forward cargo door showed that all eight of the door latching cams remain attached (along with pieces of the door itself) to the pins along the lower door sill."

4. Docket No. SA-516, Exhibit No. 18A, Sequencing Report, page 30: "It is therefore possible that new scenarios (sequences) may emerge as new information is acquired whether it be from newly identified parts, or simply a new interpretation of current information."

5. Docket No. SA-516, Exhibit No. 12-B, Sound Spectrum Study, page 21, Chart 12. The sudden loud sound on the CVR which is followed by an abrupt power cut which occurred on four high time Boeing 747s is displayed for comparison. TWA 800, Pan Am 103, Air India 182, and United Airlines 811 are plotted together in that sequence.

6. Docket No. SA-516, Exhibit No. 22B, Trajectory Study Supporting Material, page 45 in faded numbers and page 30 in dark numbers. One chart that shows the first items to go, that is page 30 chart, Forward cargo door trajectories. The first item is

A489, fwd lower cargo bay struct, FS 900. The next item to go before anything else in the entire plane is A470, R fwd lower cargo bay struct, FS 820. There are five other forward cargo bay structures which are plotted and leave soon thereafter. On dark page number 29 lower frame stringer 40L-40R is shown to leave very early.

7. Docket Number SA-516, Exhibit No. 22A, Trajectory Study, page 3: "The wreckage distribution shows that parts were initially shed from the area just forward of the wing."

8. Docket No. SA-516, Exhibit No. 7A, Structures Group Report, page 33: "5.1 Horizontal Stabilizer, "Some of the items found in the horizontal stabilizer are sections of seat track, a stator blade from turbine section, and glitter." On 5.1.1 Right Horizontal Stabilizer, page 34, "An engine stator blade from turbine section penetrated the upper honeycomb surface near the outboard trailing edge.

Other real evidence was discussed as stated in official government accident reports:

1. US NTSB AAR 92/02 UAL Flight 811.
2. Canadian and Indian Aviation Occurrence, Air India Flight 182.
3. UK AAIB 2/90 PA Flight 103.
4. US NTSB CD-ROM .jpg pictures of TWA 800.

I realize not everything stated in reports is exact. It is as precise as possible and when discussing thousands of pieces of wreckage of a catastrophic mystery airplane crash there is room for modification of conclusions. Cargo door explanation is constantly altering precise sequence to accommodate new evidence such as downward floor beams and hoop stresses in TWA 800 forward area.

For open minds there are seven basic questions. For closed minds there are none.

The open minds ask these questions in any order:

1. How and why does forward cargo door open in flight?
2. How does open door in flight cause nose to come off for AI 182, PA 103, and TWA 800?
3. Why did nose of UAL 811 stay on?
4. AI 182 and PA 103 not a bomb?
5. TWA 800 not center tank as initial event?
6. Explosive decompression enough to tear nose off?
7. Is there a conspiracy to keep cargo door explanation quiet?

Let me answer those basic questions briefly:

1. I don't know about AI 182, PA 103, or TWA 800, but UAL 811 door open cause was electrical short to door motor to unlatch position which overrode safety locking sectors and failed switch and door unlatched and opened. PA 103 and UAL 811 had total forward cargo door openings while AI 182 and TWA 800 had rupture at aft midspan latch with bottom eight latches holding tight. Door openings were probably a result of aging aircraft, out of rig door, chafed aging faulty poly-x wiring, weakened Section 41 area, design weakness of no locking sectors for midspan latches, AAR 92/02, page 12, (Encl 26) and only one latch per eight feet of vertical door. AI 182, PA 103, and TWA 800 had similar circumstances.

2. Cargo door opens and huge ten by thirty foot hole appears in nose, structural members of door and frame are missing, floor beams are fractured, bent, and broken, aircraft direction is askew, flight control surfaces affected, engines damaged, and 300 knots, more than the fastest hurricane or force five tornado on earth, hits damaged area and tears nose off within three to five seconds.

3. Nose of UAL 811 may have stayed on because pilot said he

had just come off autopilot and did not fight plane as it gyrated, or plane was younger than others, or the time from door opening to tearing off was 1.5 seconds and allowed the pressurization to be relieved somewhat and six less feet of width of hole was torn off. Cargo door inadvertently opened on the ground during UAL preflight in 1991 and no damage was done. Cargo door opened in flight two inches on PA 125 in 1987 and stayed attached to fuselage and only damage was cost of fuel dumped. Cargo door opened in flight for UAL 811 in 1989 and nine died when door tore off. Cargo door explanation for AI 182, PA 103, and TWA 800 has door opening inflight, tearing off, and then nose tearing off leading to three similar accident wreckage patterns, debris fields and total destruction. Door openings have different consequences depending on altitude, speed and mode of flight.

4. Yes, not a bomb for AI 182 and PA 103 as initial event.

Evidence refutes bomb explanation and is in government accident reports which careful analysis will reveal and documented on www.corazon.com. Those accident investigators did not have the benefit of hindsight, the internet, or several subsequent similar accidents to compare and draw different conclusions.

5. Center tank exploded yes, but after door ruptured/opened, hole appeared in nose, nose torn off in wind, fuselage falling with disintegrating fuel tanks and ignited by fodded and on fire engine number 3 or 4 at 7500 feet thereby explaining the Chairman's question, "Why so few bodies burned?" The answer is they were not there to be burned. The nose came off with the passengers inside cabin and descended to ocean alone. The center tank exploded into nothingness not the passenger compartment.

6. Explosive decompression is enough to rupture pressurized hull at weak spot, one latch for eight feet of door, in a weak area, Section 41, but not enough to tear nose off. The ultimate destructive force is the 300 knots of slipstream, more powerful

than any wind on earth. If cargo door popped in balloon, the large hole would appear but the nose would stay on. In a tornado, nose comes off within three to five seconds.

7. There is no conspiracy, no plot, no coverup by anyone involved with the cargo door explanation:

a. No conspiracy of Sikh terrorists named Singh to put a bomb on AI 182; the door ruptured in flight.

b. No conspiracy of Libyan terrorists or whoever to put a bomb on PA 103; the door ruptured in flight.

c. No conspiracy to detonate a bomb on UAL 811 as the passengers thought, as the crew thought and told the tower who told the Coast Guard and crash crews on the ground as they prepared for a wounded 747 coming in after a bomb blast; the door ruptured in flight.

d. No conspiracy to put a bomb on TWA 800, no conspiracy of terrorists to shoot a missile, no coverup by US Navy to hide accidental shootdown, no coverup by Boeing, NTSB, FAA, TWA who know the cargo door is the problem and are hiding that knowledge; the door ruptured in flight.

There is no conspiracy or cover up or plot but it is understandable for the public and others to believe that explanation: Cargo door cause is subtle.

1. The explosive decompression of door rupture mimics a bomb with noise and blast effects.

2. The events happen years apart in different jurisdictions with different airlines.

3. Explosive decompression of door rupture leaves no direct evidence such as soot, only noise on CVR tape.

4. The cargo door manufacturer and operator are large and highly respected companies.

5. Explosive decompression causes secondary diversionary effects such as fireball from center tank explosion and relatively

mild blast in cargo compartment of incendiary device.

6. A door opening and slipstream are considered trivial things by the public who thinks of a car trunk opening at highway speed not understanding high internal force of pressurization, large size of cargo door, and destructive force of 320 miles per hour on weakened structure.

7. Cargo door explanation assumes responsibility for rupture by manufacturer, operator, government, while bomb or missile can be blamed elsewhere.

Everybody involved is doing the best they can, including us, to find out what happened to TWA 800 based upon what we know, our experience, and the evidence.

So, gentleman, thank you for reading and thinking so far, let me end with respectful requests and an anecdote.

Please:

1. Conduct a complete examination of the forward cargo door area on the TWA 800 reconstruction and add an addendum to Exhibit 15C and then release the document to the public docket.
2. Request with good reasons that the powerplant group exhibit be released to the public docket.
3. Investigate the entire cargo door explanation for four high time Boeing 747 accidents by visiting www.corazon.com, critically analyzing presentation and email comments to barry@corazon.com.

Here's a true story that just happened to me two weeks ago:

On the way to the NTSB hearing from SFO I noticed my assigned Boeing 757, not 747, come into the gate after a flight from Miami. As the baggage handler opened up the forward outward opening, non-plug cargo door, at least two pints of water

rained down on him. He did not appear disturbed and then went about his business.

I deduced that the hot humid air in the cargo compartment condensed after take off from Miami into water on the cold metal fuselage skin and pooled inside until door opened and released outside on the ground in San Francisco. This much water on possibly chafed wire bundles in the forward cargo compartment would explain how wires got shorted out to turn on door motor to unlatch position for UAL 811 taking off from Honolulu. It would explain why three of the four 747s had door open in climb or shortly thereafter. We've all had the air conditioner turn on inside a hot humid car or passenger compartment and have water vapor condense into fog; or go out in the morning to have metal car covered in dew with no rain; or start descent in jet and have water vapor fill the cockpit. It is possible that enough fog and dew inside a large metal cargo door compartment could condense into two pints of water.

Water and chafed old faulty wiring in a known weak structure with a known faulty device is a dangerous combination. Let us make it safe.

Best Regards,

John Barry Smith

FAA commercial licensed pilot, instrument rated, former Part 135 certificate holder.

Light aircraft owner, Mooney M20C

2000 hours Navy aircrewman radar operator/electronics technician, P2V-5FS.

650 hours Navy reconnaissance navigator on carrier jet, RA-5C.

Survivor by ejection in sudden, night, fiery, fatal, jet airplane

crash, June 14th, 1967.

(US Mail envelope with 26 formal enclosures and seven informal ones to be mailed tomorrow, 19 Dec, 97)

From: John Barry Smith <barry@corazon.com>
Date: December 19, 1997 11:10:31 AM PST
To: FAAOAI
Subject: **Sending again/TWA 800 cargo door**

Mr. Streeter, I will send this again, it's important. Mr. Wildey emailed me in response to my earlier email, I look forward eagerly to your reply also.

Merry Christmas,

Barry Smith

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*****  
**   THIS IS A WARNING MESSAGE ONLY   **  
**  YOU DO NOT NEED TO RESEND YOUR MESSAGE  **  
**  
*****
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----- The following addresses had transient non-fatal errors -----
<Lyle.Streeter@faa.dot.gov>

To: Lyle.Streeter@faa.dot.gov
From: John Barry Smith <barry@corazon.com>
Subject: All latched/mostly latched

Lyle Streeter
FAA AAI
Aircraft Accident Investigator
FAA National Headquarters
800 Independence Avenue, S.W
Building FOB 10A, Room 838,
Washington D.C 20591

James F. Wildey II
National Resource Specialist
National Transportation Safety Board
490 L'Enfant Plaza East, SW.
Washington, DC 20594

Dear Gentlemen, 18 December 1997.

I address you both as representing the United States government.
You are
officials and have the education, experience, and desire to
investigate an
aircraft accident of national importance. I know the differences
between
legislative branch and executive branch and NTSB and FAA, but
in a matter
of life and death, which this is, I prefer to address open minds,
not fixed
titles.

Mr. Streeter and Mr. Wildey, both of you asked a question
regarding the
cargo door rupture explanation for TWA 800 during the recent
public

inquiry. They were important questions and revealed an interest in an answer not yet known.

The formal question from Mr. Streeter to Mr. Wildey was, "Were there hoop stress fractures found on the wreckage of TWA 800 near the area of damage?" or words to that effect. The answer from Mr. Wildey was "Yes, and around stringer 40R," or words to that effect.

The informal question from Mr. Wildey to me was, "What did you think of the cargo door presentation?" or words to that effect. My answer to Mr. Wildey was "Very interesting, I wish to correspond with you about it."

I am now corresponding. I believe that discussion between an informed member of the public and officials about a matter of national importance, testimony on the public record, released public docket exhibits, and previously released government accident reports is appropriate and acceptable, even necessary sometimes. It takes everyone to help solve this mystery. FAA web page states, "The Office of Accident Investigation (AAI) is the principal organization within the FAA with respect to aircraft accident investigation and all activities related to the National

Transportation Safety Board (NTSB)."

We were all at the TWA 800 fact finding inquiry in Baltimore. Were facts found? I certainly found some, important ones. I've put them together to attempt to persuade you that the forward cargo door aft midspan rupture explanation is a worthy line of investigation. The first goal is a comprehensive professional examination of that forward cargo door area to rule in or rule out rupture at aft midspan latch.

You can do that; I can't.

Specific suggestions:

1. Examine aft midspan latch pin for damage as was observed on UAL 811, NTSB AAR 92/02 page 33, "The forward midspan latch pin was relatively undamaged. The aft midspan latch pin had definite areas of damage. Both pins had wear areas where the cams would contact the pins during latching.
(Encl 1)
2. Examine the TWA 800 door hinge for damage as was observed in AAR 92/02, page 35, "Several areas on the hinge sections, such as the fuselage hinge sections, showed evidence of contact from the door during overtravel (See figure 14.) In addition the fuselage forward hinge sections were slightly

bent." (Encl 2) Figure 14 is on page 40 and shows photograph of the hinge

overtravel damage. (Encl 3)

3. Examine two midspan latches from forward cargo door for damage. The criterion for determining if latches latched was to check to see if still

locked and attached to adjacent fuselage sill or frame. The bottom eight

latches of TWA 800 door were attached to sill so conclusion latched. The

two midspan latches are unattached to frame so conclusion unlatched. The

door frame is smooth where the aft midspan latch is supposed to be attached

but isn't.

4. Examine forward and aft pull-in hooks of TWA 800 for compression and smearing damage as was observed in AAR 92/02, page 45. (Encl 4)

5. Examine door and fuselage for paint transfer from one to the other as

was observed in AAR 92/02, page 41. (Encl 5) Red paint smears on TWA 800 on

white paint between passenger windows above cargo door may have come from

red paint on top of cargo door. The red paint smears are large and frequent

only along the top of the cargo door area and not found on the other 460

feet of fuselage trim. This indicates door below opened outward and slammed

upward into fuselage, giving overtravel over 143 degrees on the

hinge and transferring red paint from door onto white paint between passenger windows. The opening door with hinge attached took red trim fuselage skin with it and that may have slammed upward also onto white painted skin. Red paint smears are not scraped away white paint revealing red underneath but red paint on top of white paint. White paint scraped away reveals green primer.

6. Examine outer skin contour of the upper door piece for inward crushing as was observed in AAR 92/02, page 41. (Encl 5) Door blows outward and top of door smashes into fuselage above giving inward crushing not by water impact. Photo of TWA 800 top door piece shows such damage. (Encl 6)

7. Examine master latch lock handle housing and trigger for position. AAR 92/02, page 41, found it relatively flush with door outer skin. (Encl 5)

8. Examine floor beams again of TWA 800 to confirm statement in Docket No. SA-516, Exhibit No. 18A, Sequencing Study, page 20, "Downward separation directions were noted at STA 900, 880, 840, 820, 800, and 780..." and "The initial opening of the fuselage lower lobe (e.g. LF6A) would have the expected result of rapid depressurization accompanied by

collapse of the main deck floor for some distance forward of STA 1000. The red area recovery of interior components as far forward as STA 600 would not be inconsistent with this floor collapse and associated structural breakup."

(Encl 7) This observation matches downward buckling as was reported in AAR

92/02, page 4, "The floor beams adjacent to and inboard of the cargo door

area had been fractured and buckled downward." (Encl 8)

9. Confirm evidence on TWA 800 of direct circumferential tension or hoop

stress tension found on lower right side skin in the red zone only, as

stated in Docket No. SA-516, Exhibit No. 7A, Structures Group Chairman's

Factual Report of Investigation, page 11. (Encl 9) This observation

coincides with AAR 92/02 which states on page 11, "The cargo door and its

associated hardware are designed to carry circumferential (hoop) load

arising from pressurization of the airplane." (Encl 10) If cargo door was

fully latched and intact until water impact then there should be no hoop

tension fractures. If the door was missing in flight, hoop tension fractures could be expected to be found and they were on TWA 800 leading to

conclusion door was missing in flight.

10. Confirm door frame of TWA 800 which abuts aft edge of

door is curved
outward in petal shaped bulge indicating outward force rupture.
Aft midspan
latch is unattached to aft midspan latch pin halfway up the door
frame.
Edge of door frame is smooth indicating door not missing by
force but by
unlatching of aft midspan latch. (Encl 6)
11. Establish large round rupture hole in TWA 800 photo
centered at aft
midspan latch is in fact a hole or something otherwise. (Encl 6)
12. Confirm outward peeled skin on TWA 800 upper skin as
shown in
photograph (Encl 6) which indicates outward force which
matches AAR 92/02,
page 6 photograph of peeled upper skin in same location. (Encl
11)

Essentially, Mr. Wildey and Mr. Streeter, TWA 800 can be
matched to UAL 811
through NTSB AAR 92/02 and the TWA 800 public inquiry
exhibits. UAL 811 was
an inadvertent opening of the forward cargo door in flight. TWA
800 may be
also. A complete examination of the TWA 800 cargo door area
should be done
to compare with the UAL 811 cargo door area as reported in
AAR 92/02. There
are other things to examine in that TWA 800 door such as two
overpressure
relief doors for open or closed, torque tubes for bending, and
viewing
ports for direction of damage similar to AAR 92/02, page 44.

(Encl 23)

Mr. Wildey, a complete examination of TWA 800 cargo door area requires more than the sentence from "Docket No. SA-516, Exhibit Number 15C, Report Number 97-82, Section 41/42 Joint, Forward Cargo Door, page 1, "Examination of the lower lobe forward cargo door showed that all eight of the door latching cams remain attached (along with pieces of the door itself) to the pins along the lower door sill." (Encl 12) The door is a known killer near the scene of its specialty crime, pressurized hull rupture. Exonerating of cargo door requires more than a cursory analysis.

Eight latches is not enough when ten exist. Twenty percent of door material is not enough when 100% exists. The incomplete early examination of the cargo door before reconstruction was completed has resulted in three distinct misinterpretations which continue to this day:

1. Entire door latched after initial event.
2. Door intact and attached to nose at water impact.
3. Water impact caused initial shattering of cargo door area.

Cargo door explanation proposes the door was not fully latched at water impact, it was mostly latched, only 80%. The door was not totally intact at

water impact, it was partially intact; only the bottom 10% was attached to bottom sill of frame. The aft midspan rupture gave outward force to fuselage and door frame skin which burst outward. Explosive decompression and subsequent tearing off of nose caused initial shattering of cargo door area. The water impact gave any inward crushing damage to already shattered cargo door area.

Mr. Wildey, I noticed your name is author of report, No 97-82 of Docket No.

SA-516, Exhibit No. 15C, Section 41/42 Joint, Forward Cargo Door, although

you must have relied on investigator Al Dickinson, AS-10 for input. The

report is dated April 22, 1997, a month before the reconstruction was

completed and the red paint smears, outward bulge at aft midspan latch and

general shattered effect became apparent. Mr. Ron Schleede of NTSB was kind

enough to report the cargo door was locked and latched to me in an email on

August 11, 1996, ten months before reconstruction completed. (Encl 13)

Cargo door area was among the last parts to be reconstructed according to

the pictures on the CD-ROM from NTSB about TWA 800.

It is apparent a hasty conclusion was reached about the status of

the
forward cargo door based upon incomplete evidence available at
the time of
only eight bottom latches latched and that hasty conclusion has
not been
modified. In Docket No. SA-516, Exhibit No. 18A, Sequencing
Report, page
30, you write: "It is therefore possible that new scenarios
(sequences) may
emerge as new information is acquired whether it be from newly
identified
parts, or simply a new interpretation of current
information." (Encl 14)

Mr. Wildey, Yes, Yes, Yes! Can you do that? Can you write a new
sequence as
new information and new interpretation is acquired? Can you add
an
addendum/correction/errata sheet to Exhibit 15C, Section 41/42
Joint,
Forward Cargo Door? It would be written after the reconstruction
was
completed in May which showed new evidence such as red paint
smears which
have allowed for a new interpretation of events. A further
examination of
the forward cargo door area is now warranted.

Mr. Streeter, as an accident investigator I believe you put value
in
finding similar accidents to the one under current investigation
from which
similarities may be observed and conclusions drawn. The NTSB

has done that
for TWA 800: Docket No. SA-516, Exhibit No. 12-B, Sound
Spectrum Study,
page 21, Chart 12. (Encl 15) The sudden loud sound on the CVR
which is
followed by an abrupt power cut which occurred on four high
time Boeing
747s is displayed for comparison. TWA 800, Pan Am 103, Air
India 182, and
United Airlines 811 are plotted together in that sequence by the
NTSB. In
addition, a Philippines 737 sound is added at the bottom.

The linchpin of the cargo door explanation is the sudden loud
sound on the
CVR. I believe that to be the sudden rushing sound of the air
molecules as
they push outward to equalize the higher inner pressure to the
lower
outside pressure. (The Air India 182 CVR sudden loud sound is
matched to
the CVR sudden loud sound on the DC-10 cargo door crash in
the Canadian
government accident report. (Encl 16))

It is apparent to me that the four Boeing 747 accidents shown in
Chart 12
match in everything but duration and that is measured in
microseconds. All
are less than a second. All are followed by an abrupt power cut.
The cargo
door explanation states all Boeing 747 sudden loud sounds are
produced by

explosive decompression followed by severe disruption of the adjacent main equipment compartment cutting off power to FDR and CVR. The initial disruptive force is the explosive decompression but the ultimate destructive force is the 300 knots slipstream tearing off the entire nose.

The sudden loud sound does not match bomb or center tank explosion and is left as unexplained or called a vague structural breakup sound. A decompression air rushing sound would explain the sound spectrum of rise time, frequency components and amplitude. The abrupt power cut could be explained by nearby cables in adjacent main equipment compartment disrupted by the explosive force of the decompression.

Gentlemen, another clue to accident cause is the sequence of breakup and that is determined from wreckage plot. What departs the aircraft first may well be near the initial event. The NTSB has provided a study: Docket No. SA-516, Exhibit No. 22B, Trajectory Study Supporting Material, page 45 in faded numbers and page 30 in dark numbers. (Encl 17) Among all the charts of pieces of the plane coming off and when, there is one chart that shows the first to go, that is page 30 chart, Forward cargo door trajectories.

The first item is A489, fwd lower cargo bay struct, FS 900. That item left even before the last ASR radar beacon to Islip radar. The next item to go before anything else in the entire plane is A470, R fwd lower cargo bay struct, FS 820. There are five other forward cargo bay structures which are plotted and leave soon thereafter. On dark page number 29 lower frame stringer 40L-42R is shown to leave very early. (Encl 18)

The overall appraisal was made by Docket Number SA-516, Exhibit No. 22A, Trajectory Study, page 3: "The wreckage distribution shows that parts were initially shed from the area just forward of the wing." (Encl 19) Please carefully agree, gentleman, cargo door is just forward of the wing and the center tank is not.

There is another interesting observation in an exhibit: Docket No. SA-516, Exhibit No. 7A, Structures Group Report, page 33: "5.1 Horizontal Stabilizer, "Some of the items found in the horizontal stabilizer are sections of seat track, a stator blade from turbine section, and glitter." (Encl 20) On 5.1.1 Right Horizontal Stabilizer, page 34, "An engine stator blade from turbine section penetrated the upper honeycomb

surface near the
outboard trailing edge. (Encl 21)

Engine number three is on the right side inboard and would be
the engine to
throw off a stator blade to penetrate the right horizontal
stabilizer.

Engine number four is too far outboard of stabilizer. The left side
stabilizer had no such engine part penetration.

Cargo door explanation relies heavily on engine number three
data. It is
the one to catch on fire, lands apart from the other three, throws
off FOD
into number four, ingests humans, and is heavily damaged upon
retrieval.

Engine number three may well be the ignition source for the
center tank
fire/explosion according to the cargo door explanation. The door
ruptures/opens out and tears off, big hole appears, starboard
engines
ingest foreign objects, 300 knots tears nose off, wings and fuel
tanks and
fuselage fall and disintegrate and fodded on-fire engine number
three or
four ignites fuel vapor cloud and center tank at 7500 feet many
seconds and
thousands of feet lower after initial event of door rupture.

The four engines hold vital accident clues. To ignore and omit
that
information is wrong. They are four vacuum cleaners at the scene
of the

crime. The door rupture or center tank explosion would send debris into the engines. How much debris, what kind it is, what did the engines do, and what happened to them is vitally important. Blade tip rubs and inlet cowling damage reports are extremely relevant. Pratt and Whitney was not even a party to the investigation and no exhibit item was released of the engine breakdown. This is a grievous error, gentleman, can you correct it?

A stator blade was embedded in the right horizontal stabilizer right behind engine number three. This indicates engine number three was fodded early on and threw off pieces which is consistent with cargo door explanation and inconsistent with center tank explosion in which engines windmill and fall intact to water.

NTSB AAR 92/02, page 2, has engine number three foddod by baggage debris and throwing off fod into engine number four which caught fire. Both engines had to be shut down. (Encl 22) Early news reports had TWA 800 engine number three foddod with inlet cowl material and the only engine to show burn damage. UAL 811 had dents in right horizontal stabilizer and

torn, punctured, and dented inlet cowl material according to AAR 92/02, page 7. (Encl 24)

The engine breakdown report is vital and is connected to the TWA 800 investigation by the stator blade in right horizontal stabilizer. The engines are involved; they are not innocent bystanders. Engine number three may be the center tank mysterious ignition source. Can you get powerplant breakdown report exhibit released? Can you confirm for yourselves engine number three burnt, foddled, or otherwise different from 1, 2, or 4?

The cargo door rupture explanation is very detailed and explains the evidence, from streak to red paint smears to center tank explosion. Please inquire for more details or peruse www.corazon.com. At this stage I believe you gentlemen are not yet that interested in 'how' but 'if' door shattered in flight or on water impact. We agree door area did shatter but 'when' is the question. We agree the center tank exploded but 'when' is the question.

NTSB currently has center tank explodes first, then door shatters later, I suggest door area shatters first, then center tank explodes later. Door,

then tank; or tank, then door? There is our item of difference in a concise sentence.

I offer hard evidence to support 'yes, door did rupture/open in flight for

TWA 800.' (When center tank exploded is for later.)

1. Floor beam downward movement.
2. Hoop stress fractures.
3. Red paint smears.
4. Curved outward smooth door frame at aft edge of missing door piece.
5. Outward peeled skin.
6. Petal shaped outward rupture hole at aft midspan latch.
7. Aft midspan latch not attached to latch pin.
8. Inward crush of top piece of door.

Possible hard evidence of door rupture in flight:

1. Hinge overtravel impression damage.
2. Aft midspan latch pin damage.
3. Other matching items to confirmed cargo door opening, UAL 811, may be discovered with exhaustive examination of cargo door area.

Mr. Streeter and Mr. Wildey, here is my big picture overview: (Everybody means us.)

1. Everybody knows the poly-X wiring in early model Boeing 747s, including TWA 800, had problems of easily chafing in vibration in the past. Cargo door explanation says that happened again to TWA 800.
2. Everybody knows that chafed wiring can cause a forward cargo door motor

to go to the unlatched position with UAL 811. Cargo door explanation says

that happened again to TWA 800.

3. Everybody knows that high cycle Boeing 747s have a weak structural area

aft of the flight deck and forward of the wing called Section 41 which

requires retrofit of structural strengthening after 20000 cycles.

Cargo

door explanation says TWA 800 at 18000+ cycles had not had that retrofit

and cargo door area was thus weak.

4. Everybody knows that a forward cargo door opening on an (1) aged (2)

high flight time/high cycles (3) early model Boeing 747, UAL 811 (4) which

took off in dusk or darkness (5) running late (6) and during climb (7)

experienced a sudden initial event near the leading edge of wing in

fuselage which left a (8) short (9) sudden (10) loud (11) sound on the

cockpit voice recorder, an (12) abrupt (13) power cut to the flight data

recorder, (14) foreign object damage to starboard engine #3, (15) more

severe inflight damage on starboard side, (16) nine never recovered bodies,

(17) port fuselage side forward of the wing relatively undamaged, (18)

shattered, torn, and frayed skin in forward cargo door area on starboard

side, (19) unusual paint smears in forward cargo door area, (20)

rupture
appearance of skin at aft midspan latch of the forward cargo door, (21)
outward peeled skin on upper forward fuselage, (22) vertical fuselage tear
lines forward of the wing and aft of forward cargo door, (23) had hinge
stay attached to top piece of forward cargo door, (24) and destruction
initially thought to be have been caused by a bomb but (25) later conclusively ruled out. Cargo door explanation says that all twenty five
happened again to TWA 800.

Everybody knows an aged aircraft, TWA 800, with problem wiring, poly-X,
with a weak area, Section 41, which had a previous fatal electrical fault
cargo door opening in same model and type, UAL 811, could have a similar
problem. AAR 92/02, page 92. (Encl 25) Cargo door explanation and evidence
says that happened again to TWA 800. But only one believes it. And now
maybe you two gentleman.

At least believe the evidence enough to complete an exhaustive examination
of the forward cargo door of TWA 800 on the wreckage reconstruction. Thank
goodness it's there. The landing gear doors, which have never killed
anyone, got twenty two paragraphs of damage description in

Exhibit 7A; the forward cargo door which has nine confirmed kills, got one sentence in Exhibit 15C.

At least believe the evidence enough to request that the powerplant breakdown exhibit be released as part of the public docket so that the results may be examined and compared with other engine breakdown reports of similar accidents, UAL 811, AI 182, and PA 103, a grouping suggested by NTSB document Chart 12 in Exhibit 12-B.

At least believe the evidence enough to pursue the cargo door explanation by going to www.corazon.com and reviewing analysis of government accident reports and contact me at barry@corazon.com.

At least believe the current evidence enough to personally examine possible new evidence such as hinge and latch pin of TWA 800 door hanging on wreckage reconstruction.

Mr. Wildey, there were three large poster photographs of TWA 800 reconstruction behind you on the platform during the inquiry hearing. One was of hundreds of pieces of wreckage, one was of starboard side and one

was of port side of wrecked aircraft. We three all saw those three pictures every day. They were real and included real things. I have discussed real things that were in those three pictures so close to us at the hearing: 1. Hinge, 2. Pins, 3. Peeled skin, 4. Door frame, 5. Red paint smears, 6. Round rupture hole, 7. Bottom latches, 8. Missing door material, 9. Downward floor beams, 10. Hoop stress fractures, 11. Shattered starboard skin, 12. Smooth port skin, 13. Door manual locking handle, 14. Door pull in hooks. 15. Center tank, 16. Vertical tears, 17. Right horizontal stabilizer.

During the hearing on the other side of the stage were rotated large poster photographs. For the first few days one photograph was of the CVR sudden loud sound showing rise time and frequency analysis. I have discussed that real thing and the real things connected to it by NTSB Chart 12 in Exhibit 12-B, which groups UAL 811, PA 103, and AI 182 and TWA 800 together.

The three photographs of wreckage showed a hangar floor with parts and reconstruction. Nearby were other rooms with real things in them. I have discussed those real things:

1. Flight Data Recorder, 2. Engines. 3. Cabin interior.

At the inquiry in front of us on tables were reams and reams of paper compiled into exhibits for review and analysis. I have discussed those exhibits:

1. Docket No. SA-516, Exhibit No. 18A, Sequencing Study, page 20, "Downward separation directions were noted at STA 900, 880, 840, 820, 800, and 780..." and ""The initial opening of the fuselage lower lobe (e.g. LF6A)

would have the expected result of rapid depressurization accompanied by collapse of the main deck floor for some distance forward of STA 1000. The red area recovery of interior components as far forward as STA 600 would not be inconsistent with this floor collapse and associated structural breakup."

2. Docket No. SA-516, Exhibit No. 7A, Structures Group Chairman's Factual Report of Investigation, page 11 which discusses direct circumferential tension or hoop stress tension found on lower right side skin in the red zone only.

3. Docket Number SA-516, Exhibit No. 15C, Report Number 97-82, Section 41/42 Joint, Forward Cargo Door, "Examination of the lower lobe forward

cargo door showed that all eight of the door latching cams remain attached (along with pieces of the door itself) to the pins along the lower door sill."

4. Docket No. SA-516, Exhibit No. 18A, Sequencing Report, page 30: "It is therefore possible that new scenarios (sequences) may emerge as new information is acquired whether it be from newly identified parts, or simply a new interpretation of current information."

5. Docket No. SA-516, Exhibit No. 12-B, Sound Spectrum Study, page 21, Chart 12. The sudden loud sound on the CVR which is followed by an abrupt power cut which occurred on four high time Boeing 747s is displayed for comparison. TWA 800, Pan Am 103, Air India 182, and United Airlines 811 are plotted together in that sequence.

6. Docket No. SA-516, Exhibit No. 22B, Trajectory Study Supporting Material, page 45 in faded numbers and page 30 in dark numbers. One chart that shows the first items to go, that is page 30 chart, Forward cargo door trajectories. The first item is A489, fwd lower cargo bay struct, FS 900.

The next item to go before anything else in the entire plane is A470, R fwd lower cargo bay struct, FS 820. There are five other forward cargo bay

structures which are plotted and leave soon thereafter. On dark page number

29 lower frame stringer 40L-40R is shown to leave very early.

7. Docket Number SA-516, Exhibit No. 22A, Trajectory Study, page 3: "The

wreckage distribution shows that parts were initially shed from the area

just forward of the wing."

8. Docket No. SA-516, Exhibit No. 7A, Structures Group Report, page 33:

"5.1 Horizontal Stabilizer, "Some of the items found in the horizontal

stabilizer are sections of seat track, a stator blade from turbine section, and glitter." On 5.1.1 Right Horizontal Stabilizer, page

34, "An

engine stator blade from turbine section penetrated the upper honeycomb

surface near the outboard trailing edge.

Other real evidence was discussed as stated in official government accident reports:

1. US NTSB AAR 92/02 UAL Flight 811.

2. Canadian and Indian Aviation Occurrence, Air India Flight 182.

3. UK AAIB 2/90 PA Flight 103.

4. US NTSB CD-ROM .jpg pictures of TWA 800.

I realize not everything stated in reports is exact. It is as precise as

possible and when discussing thousands of pieces of wreckage of a

catastrophic mystery airplane crash there is room for

modification of
conclusions. Cargo door explanation is constantly altering
precise sequence
to accommodate new evidence such as downward floor beams
and hoop stresses
in TWA 800 forward area.

For open minds there are seven basic questions. For closed minds
there are
none.

The open minds ask these questions in any order:

1. How and why does forward cargo door open in flight?
2. How does open door in flight cause nose to come off for AI 182, PA 103, and TWA 800?
3. Why did nose of UAL 811 stay on?
4. AI 182 and PA 103 not a bomb?
5. TWA 800 not center tank as initial event?
6. Explosive decompression enough to tear nose off?
7. Is there a conspiracy to keep cargo door explanation quiet?

Let me answer those basic questions briefly:

1. I don't know about AI 182, PA 103, or TWA 800, but UAL 811 door open cause was electrical short to door motor to unlatch position which overrode safety locking sectors and failed switch and door unlatched and opened. PA 103 and UAL 811 had total forward cargo door openings while AI 182 and TWA 800 had rupture at aft midspan latch with bottom eight latches holding

tight. Door openings were probably a result of aging aircraft, out of rig door, chafed aging faulty poly-x wiring, weakened Section 41 area, design weakness of no locking sectors for midspan latches, AAR 92/02, page 12, (Encl 26) and only one latch per eight feet of vertical door. AI 182, PA 103, and TWA 800 had similar circumstances.

2. Cargo door opens and huge ten by thirty foot hole appears in nose, structural members of door and frame are missing, floor beams are fractured, bent, and broken, aircraft direction is askew, flight control surfaces affected, engines damaged, and 300 knots, more than the fastest hurricane or force five tornado on earth, hits damaged area and tears nose off within three to five seconds.

3. Nose of UAL 811 may have stayed on because pilot said he had just come off autopilot and did not fight plane as it gyrated, or plane was younger than others, or the time from door opening to tearing off was 1.5 seconds and allowed the pressurization to be relieved somewhat and six less feet of width of hole was torn off. Cargo door inadvertently opened on the ground during UAL preflight in 1991 and no damage was done. Cargo door opened in flight two inches on PA 125 in 1987 and stayed attached to

fuselage and
only damage was cost of fuel dumped. Cargo door opened in
flight for UAL
811 in 1989 and nine died when door tore off. Cargo door
explanation for AI
182, PA 103, and TWA 800 has door opening inflight, tearing off,
and then
nose tearing off leading to three similar accident wreckage
patterns,
debris fields and total destruction. Door openings have different
consequences depending on altitude, speed and mode of flight.
4. Yes, not a bomb for AI 182 and PA 103 as initial event.
Evidence refutes
bomb explanation and is in government accident reports which
careful
analysis will reveal and documented on www.corazon.com.
Those accident
investigators did not have the benefit of hindsight, the internet, or
several subsequent similar accidents to compare and draw
different
conclusions.
5. Center tank exploded yes, but after door ruptured/opened, hole
appeared
in nose, nose torn off in wind, fuselage falling with disintegrating
fuel
tanks and ignited by fodded and on fire engine number 3 or 4 at
7500 feet
thereby explaining the Chairman's question, "Why so few bodies
burned?" The
answer is they were not there to be burned. The nose came off
with the
passengers inside cabin and descended to ocean alone. The center
tank

exploded into nothingness not the passenger compartment.

6. Explosive decompression is enough to rupture pressurized hull at weak

spot, one latch for eight feet of door, in a weak area, Section 41, but not

enough to tear nose off. The ultimate destructive force is the 300 knots of

slipstream, more powerful than any wind on earth. If cargo door popped in

balloon, the large hole would appear but the nose would stay on.

In a

tornado, nose comes off within three to five seconds.

7. There is no conspiracy, no plot, no coverup by anyone involved with the

cargo door explanation:

a. No conspiracy of Sikh terrorists named Singh to put a bomb on AI 182;

the door ruptured in flight.

b. No conspiracy of Libyan terrorists or whoever to put a bomb on PA 103;

the door ruptured in flight.

c. No conspiracy to detonate a bomb on UAL 811 as the passengers thought,

as the crew thought and told the tower who told the Coast Guard and crash

crews on the ground as they prepared for a wounded 747 coming in after a

bomb blast; the door ruptured in flight.

d. No conspiracy to put a bomb on TWA 800, no conspiracy of terrorists to

shoot a missile, no coverup by US Navy to hide accidental shutdown, no

coverup by Boeing, NTSB, FAA, TWA who know the cargo door

is the problem
and are hiding that knowledge; the door ruptured in flight.

There is no conspiracy or cover up or plot but it is understandable for the public and others to believe that explanation: Cargo door cause is subtle.

1. The explosive decompression of door rupture mimics a bomb with noise and blast effects.
2. The events happen years apart in different jurisdictions with different airlines.
3. Explosive decompression of door rupture leaves no direct evidence such as soot, only noise on CVR tape.
4. The cargo door manufacturer and operator are large and highly respected companies.
5. Explosive decompression causes secondary diversionary effects such as fireball from center tank explosion and relatively mild blast in cargo compartment of incendiary device.
6. A door opening and slipstream are considered trivial things by the public who thinks of a car trunk opening at highway speed not understanding high internal force of pressurization, large size of cargo door, and destructive force of 320 miles per hour on weakened structure.
7. Cargo door explanation assumes responsibility for rupture by manufacturer, operator, government, while bomb or missile can be blamed

elsewhere.

Everybody involved is doing the best they can, including us, to find out what happened to TWA 800 based upon what we know, our experience, and the evidence.

So, gentleman, thank you for reading and thinking so far, let me end with respectful requests and an anecdote.

Please:

1. Conduct a complete examination of the forward cargo door area on the TWA 800 reconstruction and add an addendum to Exhibit 15C and then release the document to the public docket.
2. Request with good reasons that the powerplant group exhibit be released to the public docket.
3. Investigate the entire cargo door explanation for four high time Boeing 747 accidents by visiting www.corazon.com, critically analyzing presentation and email comments to barry@corazon.

Here's a true story that just happened to me two weeks ago:

On the way to the NTSB hearing from SFO I noticed my assigned Boeing 757, not 747, come into the gate after a flight from Miami. As the baggage handler opened up the forward outward opening, non-plug cargo

door, at
least two pints of water rained down on him. He did not appear
disturbed
and then went about his business.

I deduced that the hot humid air in the cargo compartment
condensed after
take off from Miami into water on the cold metal fuselage skin
and pooled
inside until door opened and released outside on the ground in
San
Francisco. This much water on possibly chafed wire bundles in
the forward
cargo compartment would explain how wires got shorted out to
turn on door
motor to unlatch position for UAL 811 taking off from Honolulu.
It would
explain why three of the four 747s had door open in climb or
shortly
thereafter. We've all had the air conditioner turn on inside a hot
humid
car or passenger compartment and have water vapor condense
into fog; or go
out in the morning to have metal car covered in dew with no rain;
or start
descent in jet and have water vapor fill the cockpit. It is possible
that
enough fog and dew inside a large metal cargo door compartment
could
condense into two pints of water.

Water and chafed old faulty wiring in a known weak structure
with a known

faulty device is a dangerous combination. Let us make it safe.

Best Regards,

John Barry Smith

FAA commercial licensed pilot, instrument rated, former Part 135

certificate holder.

Light aircraft owner, Mooney M20C

2000 hours Navy aircrewman radar operator/electronics technician, P2V-5FS.

650 hours Navy reconnaissance navigator on carrier jet, RA-5C.

Survivor by ejection in sudden, night, fiery, fatal, jet airplane crash,

June 14th, 1967.

(US Mail envelope with 26 formal enclosures and seven informal ones to be mailed tomorrow, 19 Dec, 97)

barry@corazon.com

<http://www.corazon.com/>

From: John Barry Smith <barry@corazon.com>

Date: December 31, 1997 10:50:47 AM PST

To: FAAOAI

Subject: Cargo door letter for Mr. Streeter

Lyle Streeter

FAA AAI

Aircraft Accident Investigator

FAA National Headquarters
800 Independence Avenue, S.W
Building FOB 10A, Room 838,
Washington D.C 20591

Dear Mr. Streeter, 31 Dec 97

I've just mailed off several 95 page documents to some of the persons below. The original mailed document, in tan clasp envelope, has color pictures embedded in the text which I am unable to transmit via email because government servers do not accept pictures. The text of the main letter is attached below. I've also included copies of my sources referred to in the text.

It's essentially laying out cargo door as precipitating event for TWA 800 and offers interpretation of evidence expanding on Exhibit 15C, Forward Cargo Door.

Please permit me to impose once again, Mr. Streeter; can you forward this email to the FAA officials below, I don't have their email addresses. There is one letter/document/package coming in the mail for you, and one for Mr. McSweeney to share with the others below.

Thomas McSweeney
Director, Aircraft Certification Service

Doug Kirkpatrick
Aircraft Certification Service

Ron Wojnar,
Manager

James Devany
Acting Manager

Darrell Pederson,
Assistant Manager

Bob Breneman,
Aerospace Engineer,
Federal Aviation Administration
Transport Airplane Directorate, ANM-100
1601 Lind Ave. S.W.
Renton, WA 98055-4056

TWA 800 will be solved.

Respectfully,

John Barry

Smith
408 659 3552

barry@corazon.com
www.corazon.com

551 Country Club Drive
Carmel Valley, CA 93924

Sam Farr
Member of Congress
17th District, California
House of Representatives

Congress of the United States
Washington, DC

John McCain
Member of Congress
Chairman, Committee on Commerce, Science, and
Transportation
United States Senate
Washington, DC

James Hall
Chairman,
National Transportation Safety Board
490 L'Enfant Plaza East, SW.
Washington, DC 20594

Bernard Loeb,
Director of Aviation Safety
National Transportation Safety Board
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Al Dickinson, AS-10
Lead Investigator, TWA 800
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Donald Lawson
Navy Aviation Accident School Instructor
Naval Postgraduate School
Monterey, CA 93940

Dear Gentlemen,

29 December 1997

I address you as an American citizen to United States government officials. I have come to the conclusion that you are listening to me. You may not agree or always respond, but still my information is getting through. So I continue.

Chairman Jim Hall of NTSB has made an important yet unsubstantiated reply to Congressional inquiry regarding TWA 800 cargo door status: "Early in the investigation we determined conclusively that the cargo doors were latched and locked at impact with the water, and there was no evidence of any failure of any of the latching mechanisms on the doors."

That statement is not yet correct. A complete examination of the forward cargo door and two other cargo doors remains to be done. Only eight of ten latches have been examined in the forward door and none of the other doors. Chairman Hall has reported to me and senior officials that all doors have been conclusively determined to be all latched at water impact. That statement is not yet exactly true. It can be.

One person made an early conclusion under time pressure and poor working conditions about one shattered door and that erroneous first guess has been compounded into three doors over time and not corrected. It leads to this imaginary yet factual

conversation between Chairman Jim Hall and Mr. Bob Breneman, the person who first examined and deduced forward cargo door all latched and intact at water impact:

Chairman Hall: I have reported in writing to high officials that all the cargo doors are all latched, is that correct, Mr. Breneman?

Mr. Bob Breneman: Maybe, sir!

Chairman Hall: What is the position of the forward cargo door manual locking handle, is it locked or unlocked?

Mr. Bob Breneman: Don't know, sir, didn't examine it.

Chairman Hall: Do any of the forward door latches show damage?

Mr. Bob Breneman: Don't know, sir, didn't examine them all, only eight of ten.

Chairman Hall: Are the latches on the two vertical sides of the forward door latched?

Mr. Bob Breneman: Don't know, sir, didn't examine the sides, only the top and bottom.

Chairman Hall: Do you have the two midspan latches?

Mr. Bob Breneman: Don't know sir, maybe, or maybe missing, or maybe destroyed.

Chairman Hall: Does the hinge show overtravel damage?

Mr. Bob Breneman: Don't know, sir, didn't examine it for that.

Chairman Hall: What is the status of the two overpressure relief doors in the forward door?

Mr. Bob Breneman: Don't know, sir, didn't examine them.

Chairman Hall: What are the positions of the aft and the bulk cargo door manual locking handles?

Mr. Bob Breneman: Don't know, sir, didn't examine them.

Chairman Hall: What is the status of any the latches and hinges of the aft and bulk cargo doors?

Mr. Bob Breneman: Don't know, sir, didn't examine any of them.

Chairman Hall: What is the status of the door frames, the overpressure relief doors, the viewing ports, and the hinges of the aft and bulk cargo doors?

Mr. Bob Breneman: Don't know, sir, didn't examine any of them.

Chairman Hall: Very well, Mr. Breneman, and you want me to say all cargo doors are all latched, locked and no latch failures at water impact for TWA 800?

Mr. Bob Breneman: You can say anything you want, Mr. Chairman, you're the Chairman!

Gentleman, I ask you, how did such a crazy thing come about? Here's how. The chain of erroneous conclusion regarding forward

cargo door of TWA 800 is thus:

1. July 1996. Mr. Bob Breneman examined bottom eight latches. He stated to me in a phone call on 30 October 1997 that "early on as the pieces of door were being brought into Calverton hangar," he determined cargo door latched and not implicated in crash of TWA 800 because bottom latches latched. He said he felt relief that bottom latches were latched as the initial thought was the forward cargo door might be a problem. He could not recall status of two midspan latches.

2. 11 August, 1996. Mr. Ron Schleede emails me on 11 August 1996 to tell me, "I have examined the cargo door from twa 800--it is locked and latched!"

3. 19 September, 1996. Mr. Al Dickinson emails me and states, "We have recovered many of the door/hatch/access panel/windows from the sea floor and none of them indicate that they came off the aircraft prior to the event which lead to the crash."

4. 1 November, 1996, Congressman Sam Farr, D-CA, writes to me and states, "In an effort to be of assistance to you, I have forwarded a copy of your communication to the Federal Aviation Administration and asked them to respond directly to you. Their officials have the resources and expertise to thoroughly investigate your claims about the inadvertent inflight opening of the forward lower lobe cargo door."

5. 18 November, 1996. Thomas E. McSweeney writes, (Douglas G. Kirkpatrick signs,) to Congressman Sam Farr, D-CA, reporting, "The Federal Aviation Administration (FAA) has no evidence that would lead us to suspect that the forward cargo door is implicated in this accident."

6. 26 November, 1996, Congressman Farr writes to me and states, "According to Mr. McSweeney, the FAA has looked into the possibility that door failures played a role in the accident, but have found no evidence to that effect."

7. 19 December 1996, Senator John McCain R-AR, Chairman, Senate Commerce, Science, and Transportation Committee, writes to me and states, "Thank you again for contacting me with your concerns regarding the potential hazards involving Boeing 747s. As you know, I have passed the information you sent to Chris Paul and he has informed me of your findings. I have since forwarded the material you sent to the Commerce, Science and Transportation Committee for their review."

8. 5 February 1997, LCDR Don Lawson of US Navy Aviation Accident School emails me and states, "From the head of the NTSB team working TWA 800:

1. He personally, even again this morning, looked at all the doors from the airplane. All latches were either destroyed or in closed positions. The destroyed latches were adjacent to ones in closed positions.

2. Nobody associated with the investigation is considering further a cargo/passenger door malfunction to be part of the probable cause of this accident. Door problems have been categorically ruled out because there is simply no evidence pointing to the doors (and latches)."

9. 10 Mar 97, Aviation Week and Space Technology, Page 35.

"NTSB investigators have suggested unofficially that the streaks the pilot saw could have been light reflections from the skin of the aircraft, tongues of flame from the airliner or the forward door of the aircraft popping open, a possibility that still intrigues

investigators, the second official said."

10. 22 April, 1997. Mr. James Wildey II signs report No. 97-82 of Docket No. SA-516, Exhibit 15C, Section 41/42, Forward Cargo Door, dated 22 April 1997, with Mr. Al Dickinson, AS-10, listed as investigator. Report states, "Examination of the lower lobe forward cargo door showed that all eight of the door latching cams remain attached (along with pieces of the door itself) to the pins along the lower door sill."

11. May, 1997, TWA 800 reconstruction of fuselage wreckage is completed. Outward bulge of door frame, red paint smears above cargo door on white fuselage, missing/not hung aft midspan latch, outward peeled upper skin, rupture hole at aft midspan latch, and larger explosive decompression shape become apparent in photograph of reconstruction.

12. 19 May 1997, Mr. Ron Schleede emails me and states, "As I have told you before, the cargo door was locked and latched at impact."

13. 6 June, 1997. Senator McCain writes to me and states, "My staff reviewed the detailed information you provided concerning a faulty cargo door which could have caused the crash. They promptly contacted the appropriate agencies and were advised they had received similar correspondence from you and were aware of and looking into your theory. Inasmuch as the investigation is not yet complete, I expect that the information you provided is being handled appropriately by the crash investigation team."

14. 11 June 1997. Congressman Sam Farr writes to me, "I have every confidence in the ability of the professional investigators

who are looking into the cause of the accident. If one of the plane's doors was at fault, as you suspect might be the case, it is certain that evidence of this will be found. Further, since you have conveyed your ideas to the NTSB (National Transportation Safety Board), I have no doubt that NTSB staff will be in contact with you if the Board feels that this information would be useful to its investigation."

15. 24 October 1997. Chairman NTSB Jim Hall writes Congressman Farr and states, "'Please be assured that our team has examined all of the structure recovered from TWA flight 800, approximately 95%--including all of the cargo door mechanisms and structures. Early in the investigation we determined conclusively that the cargo doors were latched and locked at impact with the water, and there was no evidence of any failure of any of the latching mechanisms on the doors. This information has been forwarded to Mr. Smith by our investigators on previous occasions."

16. 29 October, 1997. Ronald T. Wojnar writes, (Darrell M. Pederson signs), "When the first bits of information became available that the nose section of TWA flight 800 had separated from the rest of the airplane, we were concerned that a possible in-flight opening of the forward cargo door may have caused the accident. However, when the wreckage of the nose section was recovered it became evident that the forward cargo door had not opened in flight or separated from the nose section prior to impact with the water."

"The FAA structural engineer who assisted the NTSB at the hangar at Calverton, New York, verified that the forward cargo door was recovered at the same location as the rest of the nose section. A further examination of the recovered wreckage showed that the upper door hinge was still attached to both the fuselage

and the door. In addition, the door latches at the bottom of the door were still attached to the fuselage lower sill structure. This indicates that the door was in the "latched and locked" position at the time of impact with the water."

"The nose section of the airplane impacted the water on the right side, causing severe hydraulic damage with the result that the door structure did not remain completely intact. However, wreckage for the entire door was recovered at the same location as the nose section and had the same impact damage as the surrounding fuselage structure on the right side. This is additional verification that the forward cargo door had not opened in flight or separated from the airplane."

17. 20 November 1997. Mr. Peter Goelz of NTSB writes to Sandy Hentges of Congressman Farr's office and states, "As Congressman Farr was advised by letter dated October 24, 1997, early in the investigation we determined conclusively that the cargo doors were latched and locked at impact with the water, and there was no evidence of any failure of any of the latching mechanisms on the doors."

18. 10 December 1997. Congressman Sam Farr writes me and states, "You will also note that the NTSB continues to stand by their findings that the cargo doors were latched and locked at impact with the water."

19. 19 December 1997. Chairman Jim Hall of NTSB writes me and states, "However, to repeat, the investigation of the accident involving TWA flight 800 has revealed no evidence to suggest that a failure of a cargo door precipitated the event."

Gentlemen of government, I assume you respect facts, evidence, data...eight is not ten. Most is not 'all.' That forward door has ten

latches. Eight have been examined. A close reading of the correspondence to me reveals that when latches are mentioned, only the bottom eight latch status of one door is reported. The other two latches, the midspan latches, are unexamined and unreported. To say door is all latched is wrong; it is misstatement, it is exaggeration, it is an error. You may consider it not a serious error, but it is an error nonetheless. It can be corrected. Closely examine the other two latches on that forward door.

To drive point home; to say that all the latches are latched based on examination of only eight of the ten is to make the wrong conclusion entire door was latched at water impact. If you lose two toes to frostbite you can not say truthfully say to your wife you have all your toes, you have most of your toes. If you have ten marbles and a bully comes by and takes two, you can not fib to your buddies you have all your marbles, you have most of your marbles. If your test has ten questions and you get eight right you can not truthfully report to your parents you got them all right, you got most of them right. If a door with ten latches has eight latched, you can not truthfully issue a report stating the door is all latched, it is mostly latched.

The forward cargo door and aft cargo door are identical in size and number of latching cams, locking sectors and latching pins. For each door there are ten latching cams and eight locking sectors. The midspan latches have no locking sectors. An Airworthiness Directive to strengthen locking sectors would have no direct effect on the midspan latches because there are no locking sectors to strengthen. A latching system consists of a cam sector turned around a latching pin. The pins are in the door frame. All ten latches of the door have a cam sector and pin. Only the bottom eight latches of each door have an additional

locking sector for each latch system for safety to prevent inadvertent unlatching.

The total for the two identical starboard cargo doors and frames of TWA 800 is twenty latching cams, twenty latching pins, and sixteen locking sectors. There exist twenty latching systems for two cargo doors and only eight have been examined, the bottom eight latch system on the forward cargo door. Eight latching systems examined of twenty in two identical doors which have both opened in flight in the past is not a high percentage. In fact, it changes from most latched to some latched.

Facts, evidence, data...The bulk cargo door as reported in Exhibit 7A, page 15, is an approximate square of eleven feet wide and ten feet high and is aft of wing on port side. Assuming TWA 800 had one port side bulk cargo door, as stated in exhibit 7A, and although larger, has the same amount of latches as the two starboard side cargo doors, the total number of cargo doors for TWA 800 is three.

The total number of latch pins for the three cargo doors and frames is thirty, total number of latch cams is thirty, total number of locking sectors is twenty four, total number of door sides is twelve, total number of feet of cargo door frame edge cut out of fuselage is one hundred eleven, and total manual locking handles is three.

Total number of cargo doors examined by FAA and NTSB of three available is three, 100%. Complete. None to go.

Total number of latch pins examined of thirty available is eight, 26.6%. Incomplete. Twenty two latches to go.

Total number of latch cams examined of thirty available is eight, 26.6%. Incomplete. Twenty two cams to go.

Total number of locking sectors examined of twenty four available is eight, 33%. Incomplete. Sixteen locking sectors to go.

Total number of sides of cargo door examined of twelve available is two, 16.6%. Incomplete. Ten sides to go.

Total number of feet of cargo door frame examined of one hundred eleven available is eighteen, 16.2%. Incomplete. Ninety three feet to go.

Total number of manual locking handles examined of three available is zero, 0%. Incomplete. Three manual locking handles to go.

To say all cargo doors conclusively determined as latched and locked, as Chairman Hall stated to Congressmen, is not true and needs to be true, and can be true. Just fully examine all three doors.

Or at least fully examine one previous faulty killer door, the forward cargo door, located just forward of the wing, where the first objects left TWA 800 as shown in Docket No. SA-516, Exhibit No. 22B, Trajectory Study Supporting Material, page 30 in dark numbers. The first item to depart TWA 800 is "A489, fwd lower cargo bay struct, FS 900."

Every aft and forward cargo door is 110 inches wide and 99 inches high, or about nine by eight feet square and each has four sides, one hinge, ten latch cams, eight locking sectors, thirty four feet of door frame cut out of fuselage, two over pressure relief doors, eight viewing ports, torque tubes, and one manual locking handle. Every cargo door frame in the fuselage has ten latching pins; eight on the bottom and two on the sides.

Total number of forward cargo doors examined of one available

is one, 100%. Complete. None to go.

Total number of latch pins examined of ten available is eight, 80%. Incomplete. Two latch pins to go.

Total number of latch cams examined of ten available is eight, 80%. Incomplete. Two latch cams to go

Total number of locking sectors examined of eight available is eight, 100%. Complete. None to go.

Total number of sides of forward cargo door examined of four available is two, 50%. Incomplete. Two sides to go.

Total number of feet of forward cargo door frame examined of thirty two feet available is eighteen, 52.9%. Incomplete. Sixteen feet of frame to go.

Total number of manual locking handles examined of one available is zero. 0%. Incomplete. One manual locking handle to go.

To say that forward cargo door was conclusively determined to be latched and locked, as said by Mr. Breneman, Mr. Schleede, Mr. Dickinson, and Chairman Hall is not true, and needs to be, and can be. Just examine fully the forward cargo door. For example, the TWA 800 cargo door hinge can be examined for overtravel impression damage similar to that observed on UAL 811 in AAR 92/02 on page 35. That will confirm door opened in flight or rule against it.

I suspect it is wrong to tell people they are wrong. I can't help it. To say eight equals ten is wrong. To say conclusively when only 50% is examined is wrong. Wrong, wrong, wrong. The top and bottom of the forward cargo door were examined but the sides were overlooked. It's an oversight. It was a hasty, time driven, wishful thinking error. It's not right. It can be corrected.

As a citizen I trust I am permitted to be impertinent once in a

while.

Facts, evidence, data ...

A fact is a forward cargo door has burst open in flight before on a high time Boeing 747 during climb leaving a sudden loud sound on the CVR as the air molecules rushed outside to equalize the internal high pressure with the external low pressure followed by an abrupt power cut to FDR. The evidence is the mangled CVR and FDR of TWA 800. The data is the sudden loud sound on CVR tape and abrupt power cut to the FDR of TWA 800.

It is apparent that the conclusion of fully latched forward cargo door was made early on in the investigation based upon only examining eight of ten latch systems. That erroneous conclusion has held firm although new data has arrived with the TWA 800 wreckage reconstruction completed in May.

The reconstruction shows new evidence, that's one reason why it was built. The new evidence is the red paint smears above the door on the usually white paint between windows; outward bulged door frame at aft midspan latch; outward peeled skin at many places on nose, door hinge, the missing manual locking handle, the missing two overpressure relief doors, missing red trim paint, and the missing/not hung midspan latches of the forward cargo door which are supposed to be there if latched and are not.

You can see it with your own eyes. The red paint smears are found only between seven passenger windows, all above the cargo door area. This indicates red paint transfer from a red object, most likely the red painted top of door below. An outward force would cause red door to open outward and rotate on hinge

and slam into upper white fuselage. It happened that way on UAL 811, in principle and documented on page 41 of AAR 92/02. Parts of the TWA 800 red paint trim on top of the white base coat above cargo door is missing and may be source of the red paint smears. Outside force from water impact would not give red paint smears.

You can see the missing aft midspan latch location with your own eyes. The door frame in which the aft midspan latch pin is embedded is smooth with no latch cam attached. The frame is smooth and indicates unlatched latch.

The door frame at the aft midspan latch is bulged outward from within. You can see it with your own eyes. Other bulged outward skin in the area shows a round rupture hole at aft midspan latch.

The skin is peeled outward above the windows above the cargo door. You can feel it with your own fingers. Mr. Streeter and Mr. Wildey contributed the knowledge there were hoop stresses in the area, stresses the closed forward cargo door is supposed to prevent.

The cockpit voice recorder data plays a sudden loud sound at event time. You can hear it with your own ears. It is sudden, loud, an audible sound, and it lasts a short time. NTSB has grouped AI 182, TWA 800, PA 103, and UAL 811 sounds together in Chart 12 of Exhibit 12-B. They match except in duration and that variable was determined by abrupt power cut, not the source of the sound which is probably rapidly rushing air molecules seeking to equalize high pressure inside to low pressure outside.

The Exhibits in the Public Docket reveal evidence. You can read

it with your own eyes. For instance, Exhibit 7A, page 34, has red paint smears and an engine stator blade in the right horizontal stabilizer. Red painted top of door with red hinge and red trim on fuselage skin departed and blew back into object directly behind it, the right horizontal stabilizer. The engine, probably number three, came partially apart when it ingested foreign objects and spit stator blade out into slipstream into object directly behind it, the right horizontal stabilizer.

The cargo door, aft or forward, is a known killer of wide body airliners such as DC-10. The forward cargo door has caused a fatal accident in a high time Boeing 747, UAL 811. To rule out previously inadvertently opened in flight aft and forward Boeing 747 cargo door involvement in TWA 800 based on examination of only eight of twenty latching systems of the two cargo doors is not right. To rule out forward cargo door, a known killer of nine in a 747, who was at scene of recent crime and left early, based upon alibi of all latched when only eight examined is not right. The forward cargo door was not all latched; it was mostly latched. A mostly latched large door can rupture. The cargo door alibi has holes in it, a big hole, a four foot round hole at the aft midspan latch, as seen in NTSB reconstruction photograph.

Mr. Breneman and Mr. Schleede, under great time pressure, working in poor conditions, surrounded by hundreds of pieces of twisted metal, under supervision of police forces not familiar with aircraft accidents, trying to please seniors and media with simple answers to complex problems, quickly examined eight bottom latches of the forward door and deduced the entire door was latched and reported it as such. The door all latched conclusion was later raised to all cargo doors latched without examination of other doors to support conclusion. The early conclusion was not reviewed in light of completion of the

reconstruction and old report was not modified. Officials in senior positions have maintained that early stance of all doors all latched through good discipline and loyalty but it is not supported by facts, evidence or data. It is supported by wishful thinking.

Chairman Hall has written a yet to be substantiated statement to Congressman Farr. Mr. Hall states, "Early in the investigation we determined conclusively that the cargo doors were latched and locked at impact with the water, and there was no evidence of any failure of any of the latching mechanisms on the doors." Mr. Hall wisely refers to all cargo doors, not only forward cargo door but the aft and port side bulk cargo door as well. He wants a comprehensive report.

There is evidence of failure of one of the latching mechanisms, the aft midspan latch which is not latched to its pin and should be, as seen on NTSB reconstruction photograph. The forward midspan latch is not hung also and should be. There are no reports stating the status of the aft or bulk cargo door latches. It is not conclusively determined all doors were all latched. Only eight latches of one door of thirty latching mechanisms of three doors were examined. Mr. Hall's statement is not yet true, but can be.

A good idea is to do what the Chairman Hall obviously wants done, conclusively determine all cargo doors latched and locked at water impact and find no evidence of any failure of any latching mechanism.

Conclusion means the logical consequence of a reasoning process. A proper reasoning process requires as much data as available. There is much more data now available since the

reconstruction was completed upon which to reach a logical conclusion. That reconstruction data has not yet been considered; the reasoning process is flawed, the current conclusion is in error.

For one door, ten is total, ten is conclusive; eight is not total, eight is not conclusive. For all doors, as Chairman Hall refers to, thirty latches is total; eight is some. Eight is not conclusive.

To say no evidence found of any failure of a latch mechanism requires the mechanisms be examined. If they are missing or not examined, as twenty two latch mechanisms are, then the statement is not valid. It can be valid. Examine all the latching mechanisms Chairman Hall states have not failed.

Mr. Dickinson refers to "door/hatch/access panel/windows" but does not mention latching mechanisms at all.

Mr. Wildey repeats the eight bottom latched observation from Mr. Schleede and Mr. Breneman in final report used for Exhibit 15C, the latest official statement.

LCDR Lawson quotes the lead investigator as saying, "All latches were either destroyed or in closed positions. The destroyed latches were adjacent to ones in closed positions." No numbers are given. Destroyed latches may be missing latches and are latches not examined. The bottom eight were reported as latched, that indicates the two midspan latches are destroyed; either way they were not examined and the word 'all' is not correct. Are the midspan latches destroyed, or missing, or recovered but not hung? Just what exactly is the status of the missing/destroyed/recovered midspan latches?

The only basis for the conclusion that the forward cargo door

was all latched and intact at water impact as stated by Congressman Farr, Senator McCain, high FAA officials and NTSB Chairman Hall, is one report made 'early on' by an FAA structural engineer at Calverton, under stress, without benefit of wreckage reconstruction and who examined a few door pieces of many, and only eight of ten latches. That one person's best conclusion at the time has not been modified all these months even though new evidence has been observed in completed wreckage reconstruction such as red paint smears, bulging rupture hole, explosive decompression damage visible, absent aft midspan latch, smooth door frame and unattached aft midspan latch.

NTSB AAR 90/01, the original AAR about UAL 811, had the incorrect cause for the inadvertent opening of the forward cargo door in flight as improper latching. Upon later new evidence, the retrieval of the door from the ocean floor, the cause was changed to properly latched but electrical short and new AAR was issued, NTSB AAR 92/02. This shows that the NTSB responds to reason and logic supported by facts, evidence and data. It shows NTSB will modify itself when appropriate. It shows that the highest priority of NTSB is to find out conclusively what happened, regardless.

Docket No. SA-516, Exhibit 15C, Section 41/42, Forward Cargo Door, dated 22 April 1997, with Mr. Al Dickinson, AS-10, listed as investigator and Mr. Wildey as author, states, "Examination of the lower lobe forward cargo door showed that all eight of the door latching cams remain attached (along with pieces of the door itself) to the pins along the lower door sill." That's it. One door gets one sentence. This is an incomplete report based upon the new evidence of the completed reconstruction, and an addendum should be added based upon total, not most of,

examination of the forward cargo door latches. A comprehensive report would include all three cargo doors, all twelve sides, and all thirty latch systems, as suggested by Chairman Hall.

The aft cargo door, identical in shape, function, and design, is reported in Docket No. SA-516, Exhibit 7A, Structures Group Report, page 15, 2.3, Aft Fuselage, (Section 46), "The upper fuselage structure broke into relatively large sections and the lower fuselage structure, including the aft main and bulk cargo doors, fragmented into smaller pieces." That's it, that's the total examination of the aft cargo door and bulk cargo door. There is no report of any latch status. Two doors get one sentence.

Three cargo doors get two sentences. These are known killers, gentleman. A main side cargo door opened and caused the crash of a DC-9. An aft cargo door opened and caused the crash of a DC-10. The forward cargo door opened and caused the fatal accident of a Boeing 747.

Each cargo door is a very complex mechanism. Each door includes a hinge, bottom eight latch cams, bottom eight locking sectors, two midspan latches, manual locking handle, two overpressure relief doors, two pull in hooks, eight viewing ports, and various torque tubes. Every item is affected when door rupture/opens in flight. Every item needs thorough examination to determine conclusively if doors were all latched at water impact with no evidence of latching failures.

Chairman Hall's recent letter repeats position of no evidence found for cargo door as causing initial event but omits statement that all cargo doors examined totally and all latches latched. And there is lots and lots of NTSB provided evidence that the cargo door was the initiating event. What is missing is the NTSB

interpretation of the evidence they recovered. For instance, Exhibit 7A, Structures Group Report, page 34, examination of right horizontal stabilizer revealed: "A section of the structure outboard of H7 exhibited evidence of red paint transfer marks on the upper skin (H8); ..."

Picture above is Boeing photograph of -400 series of basic 747-100 design. The livery of Boeing demo is different than TWA 800. It's still the most beautiful airplane in the world.

The red paint has to come from somewhere. And somewhere some red paint has to be missing. There is a rare location on the wreckage reconstruction that fits that description. It's the spotted red trim area above the cargo door. The cargo door explanation/interpretation has door rupturing/opening in flight, blowing out, up, and away, smashing into white painted fuselage skin above, transferring red paint to white, and removing red paint from trim at impact, then red trim pieces and top of door which is red blows directly aft in the 300 knot slipstream and impacts the object directly behind, the right horizontal stabilizer, leaving "...evidence of red paint transfer marks on the upper skin (H8)..."

There is no red paint skin down low under the wing where the center tank resides. There is a lot of red paint on the forward cargo door and trim above and some of it is missing.

Photo above shows principle of colored object at cargo door location flying aft at 300 knots would strike right horizontal stabilizer. TWA had different paint scheme than above.

The evidence is there, gentlemen; the interpretation is missing. And the one that exists officially is not exactly correct. Eight is not ten and red is not white. There is a more exact interpretation

of the evidence. Forty two seconds earlier than center tank explosion and five thousand feet higher. Nose comes off. Still no fireball explosion. Before nose comes off a large hole had appeared on starboard side, forward of the wing. The large hole started from a small hole, located at the aft midspan latch of the forward cargo door. The aft midspan latch ruptured at the aft midspan latch because...because...I don't know the confirmed answer to that and need help. I have a good dozen possibilities why the fuselage rupture point of TWA 800 is located at aft midspan latch of the forward cargo door. Why, why, why?

TWA 800 is UAL 811 with bottom latches holding and the nose coming off. The evidence is there on the CVR, the FDR, the wreckage reconstruction, the Exhibits of Sound Spectrum Study, Structures Report, Trajectory Study and many more. The expensive evidence collecting devices such as CVR and FDR, the expensive accident recreation device of the reconstruction, and the expensive analysis of experts into Exhibits are very, very important. They were done for very good reasons. They have provided the facts, evidence, and data. They did their job. What is missing and now needed is interpretation. Cargo door explanation is an interpretation that fits as initial event, then center tank explodes seconds later and lower. Interpretation of center tank explodes first; then forward cargo door area shatters on water impact later does not fit the facts, evidence and data.

Come on now, gentleman, to confirm if a door was open or closed, you at least need to check the door locking handle, and you have not done that. The prime suspect, before bomb or missile or center tank or meteor, in a fuselage rupture accident forward of the wing on a high time Boeing 747 during climb after take off is the forward cargo door. They all could have done it, but which actually did it? Only one has done it before so I say

the prime suspect is the one worthy of intense investigation.

There is one interpretation by NTSB of the evidence which supports the cargo door explanation:

Docket No. SA-516, Exhibit No. 18A, Sequencing Study, Author: Mr. James F. Wildey II, page 20, "The initial opening of the fuselage lower lobe (e.g. LF6A) would have the expected result of rapid depressurization accompanied by collapse of the main deck floor for some distance forward of STA 1000. The red area recovery of interior components as far forward as STA 600 would not be inconsistent with this floor collapse and associated structural breakup." That is to say, initial fuselage opening gives explanation for observed evidence. Forward cargo door is within the STA 1000 to STA 600 zone.

Each step up the line the early, hasty conclusion of all doors all latched has been affirmed:

Mr. Breneman sees eight bottom latches of one door latched.

That leads to assumption all ten latched.

Mr. Wojnar and Mr. Pederson confirm bottom latches latched so all latched and locked.

That leads to assumption all three doors latched, locked and intact at water impact.

Mr. Schleede says all latched and locked.

Mr. Dickinson avoids direct statement about latches but refers to hatches.

LCDR Lawson quotes Mr. Dickinson saying all latches latched or destroyed.

Mr. Wildey repeats eight bottom latches latched so door all latched and intact at water impact based upon Mr. Dickinson's report.

Mr. McSweeney says no evidence of latching failure.

Mr. Goelz reports all latches on all cargo doors latched and

locked to Congressman.

Chairman Hall says all cargo doors all latched and locked and no evidence of any latching failure to Congressman Farr and Senator McCain.

Mr. Farr and Senator McCain write to me all three cargo door latches latched and locked at water impact.

Chairman Hall writes to me and repeats no evidence for initial event as cargo door failure.

Here are the errors of deduction early on and not corrected, "A further examination of the recovered wreckage showed that the upper door hinge was still attached to both the fuselage and the door. In addition, the door latches at the bottom of the door were still attached to the fuselage lower sill structure. This indicates that the door was in the "latched and locked" position at the time of impact with the water."

"The nose section of the airplane impacted the water on the right side, causing severe hydraulic damage with the result that the door structure did not remain completely intact. However, wreckage for the entire door was recovered at the same location as the nose section and had the same impact damage as the surrounding fuselage structure on the right side. This is additional verification that the forward cargo door had not opened in flight or separated from the airplane."

Absolutely not true. Absolutely not good science. Absolutely not American.

As Americans, we build them, we fly them, we break them, we fix them, and then we fly them again. To fix a broken airplane requires precision.

Here is rebuttal to erroneous conclusion of all latched and shattered skin caused by water impact only:

1. Because upper door hinge was attached to door and fuselage skin is no proof door was attached to nose. In fact, the wayward UAL 811 door stayed attached to hinge also. The entire top piece of door of TWA 800 and the attached hinge, and the attached fuselage skin tore away, as the reconstruction photo shows.

2. The eight door latches on bottom sill were latched. Fine. There at ten latches holding that door closed. Eight is not ten. Ten is conclusive; eight is maybe. Eight of ten latched does not indicate, "that the door was in the "latched and locked" position at the time of impact with the water."

3. The nose may have landed on the right side; however, the outward peeled skin in many places, not inward, and the red paint smears, indicate force from within, not outside, caused peeling evidence. The outward force is sharply outlined on reconstruction photo; a water impact landing and damage would give gradual damage from severe to less severe to mild, not an abrupt cut as shown by photo. Nearby passenger door is intact; cargo door is shattered. Water impact damage did not cause the shattered skin found only in the cargo door area, explosive decompression did.

4. Wreckage for the entire door was not recovered so could not be examined and said to be recovered at same location. The door was shattered into many large, small and tiny pieces as shown by the reconstruction. To say entire door was examined is wrong; it's in hundreds of pieces, there is no door, only pieces. Only 20% of door material is visible. The larger door pieces were reported to be recovered on several different days of dredging and reported by recovery officials to be found closest to Kennedy airport, a finding later corroborated by trajectory study Exhibits 22 A and B showing pieces of the cargo hold, which the door belongs to,

as the first to leave TWA 800 at initial event time.

5. Door wreckage does not exhibit the same impact damage as the surrounding fuselage on the right side, as shown by the picture. The surrounding fuselage around the shattered cargo door area is smooth and intact.

The entire rupture/blowout/explosive decompression damage can be seen on NTSB photo of starboard side forward of the wing. The small initial rupture hole can be seen at unlatched missing midspan latch position on the curved outward door frame and petal shaped outward skin. The door then opened outward and upward tearing off with hinge and piece of fuselage skin attached, striking the white painted fuselage above and transferring red paint from trim and door to paint between the passenger windows.

The total explosive decompression damage can be seen as approximate square with sharp delineation at vertical sides further out from cargo door sides to top as horizontal line just below top row of passenger windows. The flat bottom of blowout is the bottom sill of cargo door. The picture shows a small rupture round hole within a large blowout square. Reinforced stringers and bulkheads defined the square shape.

The explosive decompression zone of damage is clear to see and resulted in severe, shattered, twisted skin and destroyed stringers, and downward movement of floor beams. It is a blowout frozen in metal. It is not water impact damage. Most of door is missing, including the crucial midspan latches where the blowout occurred.

The explosive decompression consequence is a huge hole on the right side of the nose of TWA 800, much larger than the huge

hole on the side of the nose of UAL 811. It is easy to see the 300 knots of slipstream tearing that weakened and damaged nose off in three to five seconds.

Gentleman, we agree on so much about TWA 800.

1. Suspicion of forward cargo door opening in flight.
2. The cargo door area is shattered.
3. Bottom latches latched.
4. Two midspan latch status not reported.
5. Hinge attached to top of door.
6. Outward peeled skin.
7. Vertical cuts in fuselage skin.
8. Red paint smears between passenger windows and on right horizontal stabilizer.
9. Floor beams in area bent downward.
10. First pieces to leave were just forward of the wing.
11. Port side forward of wing relatively smooth.
12. Center tank had fire/explosion.

Do we agree eight is not ten? Do we agree red paint is not white paint? If we do, then a comprehensive examination of all three cargo doors is warranted. If a suspicion exists, and it does, that forward cargo door failed in flight, then only an exhaustive evaluation of that possibility will satisfy.

We all agree that center tank exploded and cargo door area is shattered. Current official position is center tank exploded from unknown source, nose came off and fell into water shattering cargo door. My explanation is cargo door shattered from rupture leading to explosive decompression, nose comes off leading to disintegrating fuselage and wing tanks and engine number three ignites vapor into fireball seconds later and thousands of feet lower.

We agree on evidence, just disagree on timing and that is only seconds. Tank then door; or door then tank?

You were right at the beginning to suspect the door. You were right. Don't give up so easily. Check out that door thoroughly.

Why? Eight is not 'all.' It has to get past nine before it can get to ten and be called 'all.' The official last word to date, released 8 December 1997, is Exhibit 15C, Forward Cargo Door which states, "Examination of the lower lobe forward cargo door showed that all eight of the door latching cams remain attached (along with pieces of the door itself) to the pins along the lower door sill."

The number eight is written above, not ten. Ten is 'all.' Eight is most. The forward door was mostly latched. Mostly latched large doors can rupture when subjected to high internal pressures and have in the past.

The forward door was mostly latched, and as it turns out, that's not good enough. That aft midspan latch area appears to have ruptured in flight for TWA 800 and the evidence is there for you to see in the reconstruction and it is there to see in NTSB AAR 92/02, UAL 811 report. AAR 92/02 has a good examination of the forward cargo door and its adjacent fuselage after the door ruptured/opened in flight, killing nine. The rupture hole at the aft midspan latch on the door of UAL 811 can be seen in the photograph on page 36 of AAR 92/02. That UAL 811 rupture hole is smaller than TWA 800 rupture hole because the eight bottom latches held while they all unlatched completely on UAL 811. UAL 811 had all latches unlatch in flight. That's 'all,' as in ten.

Another Boeing 747 forward cargo door rupture description can be read about, Air India 182, that also broke apart in flight. The Indian and Canadian Occurrence report states the forward cargo door being frayed from an outward force and broken horizontally one quarter of the way up and bottom of door attached to fuselage. That is similar to TWA 800. Air India 182 and UAL 811 can be discussed together as relevant because NTSB grouped them together, along with PA 103, in Docket No. SA-516, Exhibit No. 12-B, Sound Spectrum Study, page 21, Chart 12. All four accidents are similar in all having a sudden loud sound on CVR at event time, a sound that was matched from TWA 800 to AI 182 in NTSB Chart 12. The Canadian report on page 23 links that AI 182 sudden loud sound to the DC-10 cargo door decompression sudden loud sound. The reports link TWA 800 to PA 103 sound which is linked to AI 182 sound which is linked to DC-10 cargo door event sound. Chart 12 links all sounds to UAL 811.

Air India 182 is the matching Boeing 747 door rupture event to TWA 800. UAL 811 is the matching door open event to PA 103. Both pairs have similar forward cargo door area wreckage descriptions, drawings and photograph matches. Why doors opened is not yet officially determined for two of them.

Center tank explanation is being tested for one Boeing 747 accident. Irregularities can be excused as random. Cargo door explanation has four high time Boeing 747 accidents to explain. Every evidence item or sequence for a ruptured forward cargo door has to satisfy four accidents, and does.

The recently adjourned but not concluded TWA fact finding public hearing and release of public docket was good and can get

better by the further release into the docket of three already completed exhibits: eyewitness, wreckage plot, and powerplant breakdown.

There is interesting observation, already briefly referred to, in an exhibit: Docket No. SA-516, Exhibit No. 7A, Structures Group Report, page 33: "5.1 Horizontal Stabilizer, "Some of the items found in the horizontal stabilizer are sections of seat track, a stator blade from turbine section, and glitter." On 5.1.1 Right Horizontal Stabilizer, page 34, "An engine stator blade from turbine section penetrated the upper honeycomb surface near the outboard trailing edge."

Engine number three is on the right side inboard and would be the engine to throw off a stator blade to penetrate the right horizontal stabilizer. Engine number four is too far outboard of stabilizer. The left side stabilizer had no such engine part penetration.

A stator blade was embedded in the right horizontal stabilizer right behind engine number three. This indicates engine number three was fodded early on and threw off pieces which is consistent with cargo door explanation and inconsistent with center tank explosion as initial event in which engines windmill and fall intact to water.

The four engines hold vital accident clues. To ignore and omit that information is wrong. They are four vacuum cleaners at the scene of the crime. The door rupture or center tank explosion would send debris into the engines. How much debris, what kind it is, what did the engines do, and what happened to them is vitally important. Blade tip rubs and inlet cowling damage reports are extremely relevant. Pratt and Whitney was not even a

party to the investigation and no exhibit item was released of the engine breakdown.

NTSB AAR 92/02, page 2, has engine number three foddred by baggage debris and throwing off fod into engine number four which caught fire. Both engines had to be shut down. Early news reports had TWA 800 engine number three foddred with inlet cowl material and the only engine to show burn damage. UAL 811 also had dents in right horizontal stabilizer and torn, punctured, and dented inlet cowl material according to AAR 92/02, page 7.

The engine breakdown report is vital and is connected to the TWA 800 investigation by the stator blade in right horizontal stabilizer. The engines are involved; they are not innocent bystanders. Engine number three may be the center tank mysterious ignition source. P&W should be invited to the party.

Gentlemen, another clue to an accident cause is the sequence of breakup and that is determined from wreckage plot. What departs the aircraft first may well be near the initial event. The NTSB has provided a study: Docket No. SA-516, Exhibit No. 22B, Trajectory Study Supporting Material, page 45 in faded numbers and page 30 in dark numbers. Among all the charts of pieces of the plane coming off and when, there is one chart that shows the first to go, that is page 30 chart, Forward Cargo Structure trajectories. The first item is "A489, fwd lower cargo bay struct, FS 900." That item left even before the last ASR radar beacon to Islip radar. The next item to go before anything else in the entire plane is "A470, R fwd lower cargo bay struct, FS 820." There are five other forward cargo bay structures which are plotted and leave soon thereafter.

The overall debris appraisal was made by Docket Number SA-516, Exhibit No. 22A, Trajectory Study, page 3: "The wreckage distribution shows that parts were initially shed from the area just forward of the wing."

Please carefully agree, gentleman, cargo door is just forward of the wing and the center tank is not.

The wreckage plot exhibit is needed to corroborate this most important conclusion of first parts shed forward of wing.

Eyewitnesses saw orange-red streak near TWA and later Aviation Week reports an NTSB official as saying it could be forward door departing aircraft. "NTSB investigators have suggested unofficially that the streaks the pilot saw could have been light reflections from the skin of the aircraft, ... or the forward door of the aircraft popping open, a possibility that still intrigues investigators, the second official said." It may well be the shiny metal piece of door spinning away from sunlit TWA 800 and reflecting red-orange evening sunlight to ground observers who perceive the erratic, falling blur as a streak. NTSB has considered streak as door piece spinning away. They are probably correct. That NTSB hypothesis can be checked out by experiment of throwing out metal door sized objects at 13700 feet at 300 knots in evening sunlight and recording ground observers statements.

The eyewitness group exhibit should be released to corroborate or rebut cargo door explanation of streak as shiny metal piece of door spinning away reflecting evening sunlight and appearing as orange-red streak to ground observers.

The wreckage plot exhibit should be released to corroborate or rebut cargo door area material as first to leave TWA 800 at initial

event time.

The powerplant group exhibit should be released to corroborate or rebut cargo hold debris being ingested by engine number three causing it to catch on fire, provide ignition source for center tank explosion, and then disintegrate and throw stator blade into right horizontal stabilizer of TWA 800.

Please conduct an examination of the two identical starboard cargo doors of TWA 800 and the bulk cargo door in at least the same depth as was given to the two cargo doors of other high time Boeing 747s grouped by NTSB as being similar, AI 182, PA 103, and UAL 811, as shown in their government reports, Canadian and Indian Aviation Occurrence, UK AAIB 2/90, and NTSB AAR 92/02. (All scanned in and available for viewing at www.corazon.com) And at least as much examination as the landing gear doors of TWA 800 in Exhibit 7A which had twenty two paragraphs more than the one sentence about forward cargo door in Exhibit 15C.

Exhibit 7A, Structure Report, discusses twenty one landing gear doors and the aft and bulk cargo doors but nothing about the forward cargo door. The forward cargo door, a known previously faulty complex device in a fuselage rupture killer accident, is detected departing early and near the scene of another fuselage rupture accident, and is given one sentence among literally thousands of pages of wreckage examination exhibits.

Not right. Not complete. Not precise. Not American.

According to NTSB and FAA AARs and SDRs, the aft and forward cargo doors of Boeing 747s have opened inadvertently four times, 1987, 1989, 1991, and 1994. That's four in nine years by official numbers or one cargo door opening in just over two

years. Cargo door explanation for TWA 800 adds three more, 1985, 1988, and 1996. That's seven in eleven years by my numbers or a cargo door opening every year and a half. It is now a year and a half after TWA 800. That gives me a sense of urgency. I have researched the forward cargo door on high time Boeing 747s for eight years. TWA 800 was no surprise to me.

The message is that inadvertent rupture/opening at the aft midspan latch of the forward cargo door in flight has caused the accident of TWA 800 and other high time Boeing 747s. The message is supported by official government released text, reports, documents, exhibits and photographs.

The medium is internet email and web, hard copy snail mail, face to face, telephone, the English language, high resolution color photographs, printed words, and stories.

The messenger is me. Why listen to me? Others have explanations. The only difference is I'm a survivor of a sudden night fiery jet airplane crash talking about a sudden night fiery jet airplane crash. My crash is documented on web site www.corazon.com, US Navy carrier jet crashed, one dead, one alive. I'm the live one. C.T. Butler was the dead one. Mr. Butler saved my life. Literally, as in exact. It was a sudden night fiery fatal jet airplane crash. We were practicing landings and heard a strange noise on starboard side. Within three seconds he told me to eject and I did. He did too. I pulled my face curtain and waited, my canopy jettisoned, my ejection seat fired and then separated from me and my parachute deployed and opened automatically and two seconds later, I hit the nighttime flat dirt of Sanford Florida at 1130 at night on June 14th, 1967. My pilot, LCDR Charles T. Butler, pulled his face curtain, had his canopy separate after my canopy had gone, his ejection seat fired,

separate from him and his parachute automatically deployed. But did not open in time as his body hit the ground and killed him from multiple traumatic injuries. In the two seconds coming down in my parachute, the RA-5C Vigilante with twin GE J-79-8 engines, Navy carrier reconnaissance two seater jet, exploded beneath us.

The suddenness of it is stunning. From perfectly normal to ejection seat firing within three seconds. From normal to death within ten seconds. That suddenness is what the passengers of TWA 800 knew and what the CVR and FDR recorded.

So, the messenger has the experience in the matter under discussion, a sudden, night, fiery fatal jet airplane crash. Few have that specific.

The messenger has the aviation knowledge of modeler, then Navy aircrewman technician for 2000 hours, then Navy bombardier reconnaissance navigator in carrier jet for 650 hours, then private aircraft Mooney owner for 1000 hours, and commercial licensed pilot, instrument rated with FAA Part 135 certificate holder for 100 hours. Few have that breadth.

I also have the brilliant insight of intelligence to figure this problem out. In a flash I saw that eight is not ten. Red is not white. Most have that genius.

Chairman Hall has said in his closing statement of the recent TWA 800 public inquiry, "We have presented all of the factual information available at this time." Well that's not exactly true as the exhibits on eyewitnesses, powerplants, and wreckage plot were available but not released or presented. The Chairman's statement can be made true by release of all the factual

information available.

He also said, "We have sought to take a careful, objective look at all conceivable ideas and theories, and have called on a wide array of experts to assist us in this endeavor." Well, that's not exactly true either. A careful look has not been taken at the rupture at cargo door theory and only one engineer looked at a few pieces. The Chairman's statement can be made true by having a wide array of experts carefully look at cargo door explanation.

Chairman Hall continued by stating, "We are by no means finished. Our work will continue and we will spare no effort to determine the cause of the crash of TWA 800." Chairman Hall says the right words, let them be made true.

We are judged by our actions, not our words. Please examine all twenty latching pins, all twenty latching cams, and all sixteen locking sectors of the two identical cargo doors for comparison and damage consistent with inflight unlatching as described in NTSB AAR 92/02. In addition, for completeness, the other cargo doors on TWA 800 should receive the same thorough examination. Only then can Chairman Hall's statement to high elected government officials about conclusive determination that all three cargo doors are latched and locked and no evidence found of any latching failure be correct or corrected. Only then can the statements of Mr. Goelz, Mr. Schleede, Mr. Dickinson, LCDR Lawson, Mr. Wildey, Mr. Breneman, Mr. Wojnar, Mr. Pederson, Mr. Kirkpatrick, Mr. Sweeney, Senator McCain, and Congressman Farr be correct or corrected.

Only then will the numbers add up.

What if I'm wrong?

If I am wrong, I want to know about it. I ask questions to determine if cargo door explanation holds up.

Why are the red paint smears there?

What is status of midspan latches of forward door?

What is status of all latches.?

Why is forward skin shattered and then close by smooth and intact?

What is hinge status?

Are locking handles locked or unlocked?

What is position of the overpressure relief doors?

Why is large rupture square shape apparent?

Why is forward door frame aft so smooth with no midspan latch attached?

Why is red paint missing on red trim?

Why is red paint on right horizontal stabilizer?

Why is engine stator blade in right horizontal stabilizer?

Why is fuselage skin peeled outward?

Why most of door material missing?

Why port side smooth and starboard side shattered?

Why did cargo door structure leave plane first?

What caused the sudden loud sound?

What ignited the center tank?

Why so few forward passengers burned? (I know the answer to that one, they were not there to be burned.)

Why are statements made by high officials that are not exactly true, but could be with a little extra work?

I would hope someone here would ask the question, "What if he is right?"

In Docket No. SA-516, Exhibit No. 18A, Sequencing Report,

page 30, Mr. Wildey of NTSB writes: "It is therefore possible that new scenarios (sequences) may emerge as new information is acquired whether it be from newly identified parts, or simply a new interpretation of current information."

That is an open minded approach both reasonable and logical. It is possible and it has happened. New evidence, new interpretation, new scenario/sequence has emerged: aft midspan latch rupture in forward cargo door.

If cargo door explanation is wrong the downside is work done on examining three cargo doors which was not necessary to determine accident cause. But, if cargo door explanation is right, then...

There are no evil people involved with TWA 800; everyone is giving their best effort. It appears there is a blind spot regarding cargo doors on Boeing 747s. It may be legacy from UAL 811 where everybody looked bad. NTSB excoriated Boeing for not modifying door after DC-10 cargo door accident. It lambasted the airline for not complying with AD in time. It chided FAA for giving such a long compliance time for AD. And then NTSB got cause of opening door wrong and had to correct itself with new AAR, 92/02. But, the cause was eventually determined:

Electrical short to door motor which overrode safety feature of locking sectors coupled with a bad switch S2, caused unlatching of door which burst open, in a tremendous explosion smashing outward and up into the fuselage above, leaving paint smears and a sudden loud sound on the CVR and an abrupt power cut to the FDR. As a result of NTSB recommendations and FAA ADs, the bottom latches were fixed so that they would not open again with the same problem, and they didn't. TWA 800 bottom latches held, the strengthened locking sectors

worked.

But, the midspan latches have no locking sectors and a rupture hole is evident at that aft midspan latch point and the aft midspan latch is missing. The cause was conclusively determined for UAL 811 but not conclusively fixed. Now is that time.

In the short term cargo door confirmation looks bad but in long term it is best for Boeing and the US.

Everybody, even me as a passenger demanding cheap fares and lots of luggage loaded fast, has to share blame for these accidents. We all have blood on our teeth. Boeing for designing large, squarish, outward opening, non-plug, doors cut into a highly pressurized hull. The airlines for wanting to operate the planes when out of warranty and wanting large cargo loading capability. Government for trying to please all parties and ending up pleasing none. And the lawyers for putting blame assessment first before the accident cause was conclusively found thereby bringing in the police, nondisclosure and secrecy in an area where information and idea exchanges are essential, aircraft accident investigation.

The police have been intimately involved in all four cargo door caused accidents and have adversely affected the professional aircraft investigators. AI 182, RCMP still have an active investigation going. PA 103, United Nations still has inquiry going. UAL 811, the Coast Guard and Hickam Air Force Police had an active investigation going until further investigation revealed door was gone but not by bomb. TWA 800, FBI had sixteen months of primary active investigation and even when suspended the FBI controls release of relevant documents into the Public Docket and access to the evidence, the wreckage reconstruction.

Now is the time for openness for TWA 800; let a citizen have a chance to explain what happened. Everyone else has had a whack at it, from lawyers to cops to scientists to politicians to wackos. It's time for a survivor of a sudden night fiery fatal jet plane crash to be listened to.

Please engage my intellect. Check my numbers, confirm my sources, evaluate my reasoning. My goal is to prevent death, the only worthy adversary, by preventing plane crashes by preventing pressurized fuselage ruptures by preventing aft midspan latch area of forward cargo door of high time Boeing 747s from opening in flight. I am attempting to persuade the National Transportation Safety Board that a worthy line of investigation is the possible inadvertent rupture/opening of the forward cargo door in flight. If confirmed, NTSB will make recommendations to the Federal Aviation Administration. The FAA will then direct the manufacturer to fix the doors again. Boeing shall then makes changes to conclusively stop those doors from opening in flight.

Let Senator John McCain hold all the latches in his hand for examination. He is a jet pilot who has also ejected and understands mental and metal stresses as well as dangers of high speed structural failure and the suddenness of aviation accidents.

Let Congressman Sam Farr examine all the latches. He asked the key question, "What causes the doors to open?"

Let Chairman Jim Hall examine all the latches. He effectively made the definitive statement, 'all doors, all latched, no problems.'

Let everyone who has officially reported status of latches on cargo doors hold all of them in their hands and examine them closely.

There are mechanical problems associated with confirmation of cargo door opening on TWA 800. They can be fixed with workers, that's why the manufacturer makes the big bucks, that's his job, to fix things.

There are political problems associated with confirmation of cargo door opening on PA 103. They can be fixed with negotiation, that's why the politicians get the high respect, that's their job, to smooth things over.

There are administrative problems with confirmation of cargo door opening on high time Boeing 747s. They can be fixed in time, that's why government bureaucrats get steady tenure, that's their job, to handle the paperwork.

There are investigative questions raised in the confirmation of cargo door openings in airliner pressurized hulls. They can be answered. That's why aircraft investigators get their hands dirty, it's hard work to figure out what happened.

Chairman Hall stated, "I now declare this hearing to be in recess indefinitely."

I request that the recess soon end and the hearing reconvene. The sequel should release all the information available, take a careful, objective look at all conceivable ideas and theories, call on a wide array of experts to assist, and take every effort to determine the cause of the crash of TWA 800.

Very Respectfully,

John Barry Smith
barry@corazon.com
408 659 3552
551 Country Club Drive
Carmel Valley, CA 93924
Taken from my deck.

Email attachments:

From: Schleede Ron <SCHLEDR@ntsb.gov>
To: barry <barry@corazon.com>
Subject: RE: TWA crash cause
Date: Sun, 11 Aug 1996 11:39:00 -0400
Encoding: 13 TEXT
Status:

I have examined the cargo door from twa 800--it is locked and latched!

From: Dickinson Al <DICKINA@ntsb.gov>
To: barry <barry@corazon.com>
Subject: RE: mechanical crash cause
Date: Thu, 19 Sep 1996 19:04:00 -0400
Encoding: 129 TEXT

Status:

Mr. Smith, thank you for your message concerning the TWA 800 crash investigation. We have recovered many of the door/hatch/access panel/windows from the sea floor and none of them indicate that they came off the aircraft prior to the event which lead to the crash. In addition, both the CVR and the FDR do not have any information that indicates any of the above things departed the aircraft prior to the event. A depressurization event most certainly would have been noted by the crew and recorded on the CVR. We will continue to look for any indications leading to the source of the event and definitely pay attention to items mentioned in your letter. Thank you for your interest in aviation safety.

Date: Wed, 05 Feb 1997 12:34:04 -0800

From: Donald Lawson <DLawson@mntny.nps.navy.mil>

To: barry@corazon.com

Subject: 747 cargo door final report

From the head of the NTSB team working TWA 800:

1. He personally, even again this morning, looked at all the doors from

the airplane. All latches were either destroyed or in closed positions.

The destroyed latches were adjacent to ones in closed positions.

2. Nobody associated with the investigation is considering

further
a cargo/passenger door malfunction to be part of the probable
cause of
this accident. Door problems have been categorically ruled out
because
there is simply no evidence pointing to the doors (and latches).

- So, there it is. They had already looked at the doors (so I still
have
faith in the system) and they looked at it further and replied back
basing
their answer on the actual evidence in hand. It may not be the
answer
you were looking for, but I believe that you were looking for the
attention
to the possible problem and not a particular answer o that
problem. And
you accomplished that.

LCDR Don Lawson

Mime-Version: 1.0

Date: Thu, 19 Dec 1996 09:53:05 -0500

From: Julie Swingle <Julie_Swingle@mccain.senate.gov>

Subject: Boeing 747 Information

To: barry@corazon.com

Dear Mr. Smith,

Thank you again for contacting me with your concerns
regarding the
potential hazards involving Boeing 747s.

As you know, I have passed the information you sent to Chris Paul and

he has informed me of your findings. I have since forwarded the

material you sent to the Commerce, Science and Transportation

Committee for their review.

Again, thank you for contacting me. I am always glad to have the

opportunity to be of assistance.

Sincerely,

John McCain

U.S. Senator

JM/jes

ATA Code : 5230
Aircraft Manufacturer : BOEING
Aircraft Model : 747245F
Aircraft Serial No. : 20826
Difficulty Date : 27 November 1994
Operator Desig. : FDEA
Operator Type : Air Carrier
A/C N Number : 640FE
Precautionary Procedure : Unshed. Landing
Nature : Warning Indication
Stage of Flight : Take Off
Station : ORD

Flight # : 77

Discrepancy/Corrective Action:

ON ROTATION, AFT CARGO DOOR OPENED. REPLACED
SPRING ON LOCK PIN AND ADJ PER MM 52-34-12.

Part Name : SPRING
Manufacture Part Number : MS245851290
Part Condition : FAILED
Part/Defect Loc. : AFT CARGO DOOR
Name : FEDERAL EXPRESS CORP
Submitter Code : Carrier
District Office : Southern US office #04

From: John Barry Smith <barry@corazon.com>

Date: January 7, 1998 7:18:52 PM PST

To: FAAOAI

Subject: Wiring before door, door before center tank

Dear Mr. Streeter,

Wiring. Now I know why the door opened.

Time to check the hinge of 800 for overtravel and now check some wire bundles for chafed through to bare evidence, again, just like 811 with it's chafed wire picture in NTSB AAR 92/02.

Full story

emergency landing in Cairo
1998 Eastern

Saudi plane makes

03:25 a.m. Jan 02,

CAIRO, Jan 2

(Reuters) - A Saudi jumbo jet carrying 348 passengers on a flight from Jeddah to London made an

emergency landing at
Cairo airport on Friday after a fire on board, airport sources said.

They said there were
no casualties aboard the Saudi Arabian Airlines Boeing 747,
whose mostly Saudi passengers

disembarked in Cairo.

Some boarded an EgyptAir flight to London. Another plane was
being sent from Saudi

Arabia to pick up the

rest.

The sources said the
pilot had used the plane's emergency systems to extinguish the
fire, which broke out in the

cargo section, and then

asked Cairo airport controllers to let him make an emergency
landing at about 5 a.m.

(0300 GMT).

Airport officials said the fire had been caused by an electrical fault, but gave no details. The Saudi plane would stay in Cairo for repairs, they added.

That makes three, sure would like to know where the fire was.

Suggested new sequence for initial event for TWA 800.

Cold air from air conditioning pack flows into hot humid air of summer New York in forward cargo hold on old airplane that has not had Section 41 retrofit. Water condenses and runs down metal cargo door to pool near chafed wire. Wire is poly x which has chafed through sheath, through insulation, to bare wire from the long term vibration of flight of old airplane. The wire bundle is near clamp which does the wear. The wire bundle houses the EPR info and cargo door motor power and unlatch signal. The water shorts door motor to 'on' to ground and turns door motor on for just a few seconds. Latches try to unlatch. Bottom eight sectors stop the cams from unlatching because of AD 88 12 04. But the midspan latches have no locking sectors so try to unlatch. The torque tubes are stopped by the locking sectors from complete turning but turn enough through wear and tear of old plane to partial unlatch at aft midspan latch. Aft latch ruptures. Door opens. Big hole appears from explosive decompression. 300 knots tears nose off. Nose falls apart, rest of plane falls and disintegrates and fuel vapor and center tank explodes into fireball seconds later and thousands of feet lower when on fire engine

number three or four ignites it.

The final answers as to why door opened were made clear in NTSB exhibits which show chafed wires and two fires in forward cargo hold in the past few years. Also the panel on aging aircraft which showed 800 had poly x wiring and no Section 41 retrofit.

I saw the water cascade out of a cargo hold. And potable water tanks are in there too and the tops explode on those once in a while too, puncturing the floor above.

800 103 and 811 all had about 16000 cycles while flight times were different. 16000 cycles is the danger, not 20000.

EPR problems were reported on all four planes; that's were I got the wire bundle with EPR. The chafing wires were shorting and giving a problem in the cockpit about EPR.

Wiring takes the hit as well as design of outward opening.

Wiring failed because of chafing from vibration, so blame it on vibration. Nose comes off because of 300 knots so blame it on speed.

In a sense 800 crashed because it was flying which has vibration and speed. They killed themselves. Sort of like skiing into tree, not the tree's fault.

It's bare wire and water. Bad combo.

Regards,

Barry Smith

From: John Barry Smith <barry@corazon.com>
Date: January 8, 1998 3:40:21 PM PST
To: FAAOAI
Subject: I'll resend anyway.

Date: Wed, 7 Jan 1998 23:29:40 -0800
From: Mail Delivery Subsystem <MAILER-DAEMON>
Subject: Warning: could not send message for past 4 hours

----- The following addresses had transient non-fatal errors -----
<Lyle.Streeter@faa.dot.gov>

To: Lyle.Streeter@faa.dot.gov
From: John Barry Smith <barry@corazon.com>
Subject: Wiring before door, door before center tank

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In a sense 800 crashed because it was flying which has vibration and speed.

They killed themselves. Sort of like skiing into tree, not the tree's fault.

It's bare wire and water. Bad combo.

Regards,

Barry Smith

From: Lyle Streeter <Lyle.Streeter@faa.dot.gov>

Date: January 8, 1998 1:04:05 PM PST

To: barry@corazon.com (IPM Return requested) (Receipt notification requested)

Subject: Re: Wiring before door, door before center tank

Mr. Smith - latest word in on the Cairo divert is that there was no fire,
but a faulty detection system. Wiring problems are still a potential area of concern.

I have passed your comments along to the investigators in TWA800.

Lyle Streeter

Reply Separator

Subject: Wiring before door, door before center tank

Author: barry@corazon.com at Internet

Date: 1/8/98 10:42 AM

Dear Mr. Streeter,

Wiring. Now I know why the door opened.

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They killed themselves. Sort of like skiing into tree, not the tree's fault.

It's bare wire and water. Bad combo.

Regards,

Barry Smith

barry@corazon.com

<http://www.corazon.com/>

From: John Barry Smith <barry@corazon.com>
Date: January 9, 1998 9:27:55 AM PST
To: Lyle Streeter <Lyle.Streeter@faa.dot.gov>
Subject: Wiring before door, door before center tank, vibration before bare wire.

Mr. Smith - latest word in on the Cairo divert is that there was no fire,
but a faulty detection system.

Ahhh, thank you for info.

Wiring problems are still a potential area
of concern.

My metaphor is multiple sclerosis where the sheath of the nerve bundle is worn away.

My next line of research is to interview baggage handlers and find out how often water cascades out of newly opened forward cargo compartments of Boeing 757s and if it ever happened to a 747.

Then to locate wiring diagrams for 747 in the forward cargo compartment and see if there is a link between the EPR wire and the door motor power on wire. EPR gauge problems were reported on 800 and 182; 103 had EPR blip on FDR just before event while 811 did not list any non door related irregularities in AAR. Too much of a coincidence that EPR problems occur when engines are fine. Sounds electrical and could be one bundle chafed through which contains door motor on and EPR wires.

EPR shows up first as erratic gauge and door motor may or may not turn on because it needs a ground which may be slow in coming until water condenses and pools near chafed bundle.

I'm speculative on this water/chafed/wire/door motor on aspect. This is why door ruptured/opened mystery and is quite complex and requires professionals to confirm. Very certain door ruptured but why. Have evidence of door rupture in exhibits and photographs but scant data on electrical problems in forward cargo hold and consequences other than fire and charring.

I have some anecdotal evidence about TWA 800 wiring from a correspondent:

Non of the pro wire/static/spark in the tank types brought out the facts

that the aircraft was carrying 2 1/2 wiring jobs. TWA's refitters did not

pull the old wires out in the mid 1980, and again in 1989 and 1992. I've

wondered how many old circuits were reused.

Wiring on 800 near center tank and forward cargo hold should be checked inch by torturous inch for chafing to bare wire.

The chafed wire checking exercise can be justified because there was a potential ignition source for center tank explosion one quarter inch from center tank as fire in cargo hold at aft hold bulkhead, which is forward bulkhead for center tank and there has been fire there before.

1. Exhibit 9C, Attachments to the Systems Group Factual Report page 44 45 46:

A. 1996, burning smell in forward cargo compartment, found damaged wiring

shorted to ground, charring found.

B. Oct 12, 1996, Wire bundle arcing and resultant fire at aft bulkhead of

forward lower lobe cargo hold on 747-200 freighter.

C. Nov 1, 1997 Identical problem reported as A above. The fire from shorted

wires in chafed wiring bundle in forward cargo compartment either happened

twice, once in 1996 and once in 1997, as the report states, or it's the

same event reported twice with a wrong date. Probably wrong date and right dates are both 1996.

Oct 12 1996, just a few months after 800...

Mr. Streeter, as a long time pilot, the smell of burning insulation in flight has to be one of the scariest smells in the universe. Start pulling circuit breakers was our reaction.

Thank you again for the info, it quite encourages me to continue.

Best Regards,

Barry Smith

From: John Barry Smith <barry@corazon.com>

Date: January 29, 1998 4:44:17 PM PST

To: FAAOAI

**Subject: NTSB Eyewitness and Cargo door exhibits
published/Part 1**

Lyle Streeter

FAA AAI

Aircraft Accident Investigator

FAA National Headquarters

800 Independence Avenue, S.W

Building FOB 10A, Room 838,

Washington D.C 20591

Dear Mr. Streeter,

Enclosed in text only is part 1 of the latest written hard copy coming your way in the mail and URL for eyewitness NTSB report.

<http://www.corazon.com/TWA800essentials.html>

NTSB Docket SA 516 Exhibit 4A and Exhibit 15c are seen. 4A is the Eyewitness Group Factual Report and 15C is Forward Cargo Door.

Best Regards,

Barry Smith

Sam Farr

Member of Congress

17th District, California

House of Representatives

Congress of the United States

Washington, DC

John McCain III

Member of Congress

Chairman, Committee on Commerce, Science, and
Transportation

United States Senate

Washington, DC

John J. Duncan, Jr.

Member of Congress

House of Representatives

Congress of the United States

Washington, DC

James Hall

Chairman,

National Transportation Safety Board

Robert Francis II

Vice Chairman

National Transportation Safety Board

Bernard Loeb,

Director of Aviation Safety

National Transportation Safety Board

Thomas E. Haueter

Chief, Major Investigations Division

National Transportation Safety Board

Al Dickinson,

Lead Investigator, TWA 800

National Transportation Safety Board

Ron Schleede,
Investigator, TWA 800
National Transportation Safety Board

James F. Wildey II
National Resource Specialist
National Transportation Safety Board

Peter Goelz
Director, Office of Government, Public, and Family Affairs
National Transportation Safety Board

Lyle Streeter
FAA AAI
Aircraft Accident Investigator
FAA National Headquarters

Thomas McSweeny
Director, Aircraft Certification Service
FAA National Headquarters

Doug Kirkpatrick
Aircraft Certification Service
FAA National Headquarters

Ron Wojnar,
Manager
Federal Aviation Administration
Transport Airplane Directorate

James Devany

Acting Manager
Federal Aviation Administration
Transport Airplane Directorate

Darrell Pederson,
Assistant Manager
Federal Aviation Administration
Transport Airplane Directorate,

Bob Breneman,
Aerospace Engineer,
Federal Aviation Administration
Transport Airplane Directorate,

Donald Lawson
Navy Aviation Accident School Instructor
Naval Postgraduate School

Dear Mr. Streeter, 27 Jan 98

I received a letter under the National Transportation Safety Board letterhead and signed by Mr. Jim Wildey, National Resource Specialist-Metallurgy. It's dated January 12, 1998, was sent January 13th, 1998, and was received in my mailbox on January 20, 1998. That's why it's called snail mail and it reads in total:

"Dear Mr. Smith: The Safety Board has received your letter to the Chairman, dated December 30, 1997, concerning the possibility that the TWA 800 accident was related to an in-flight opening of a cargo door. As conveyed to you in previous letters we have sent you, the Safety Board believes that sufficient facts have been gathered to rule out this possibility. Thank you for

your interest in this subject. Sincerely, JF Wildey II Jim Wildey
National Resource Specialist-Metallurgy"

Well, that's it, that's the response. Ninety pages gets three sentences. Another one sentence for cargo door. Well, it's a start. My intellect is engaged.

Below would be the short version response to the 12 Jan 98 letter to me from NTSB:

"Dear Safety Board:

John Barry Smith has received your letter to John Barry Smith, dated January 12, 1998, negating the possibility that the TWA 800 accident was related to an in-flight opening of a cargo door. As conveyed to you in previous letters I have sent you, John Barry Smith believes that sufficient facts have been gathered to rule in this possibility.

Thank you for your interest in this subject.

Listed below are the facts, evidence, and data to rule in the inadvertent rupture of the aft midspan latch of the forward cargo door in flight caused by water shorting bare chafed wires to ground in the forward cargo hold giving power to door motor to unlatch position.

Sincerely,

JB Smith,
Citizen"

Attached list of evidence to rule in probability of door rupture in

flight for TWA 800. Below evidence is consistent with forward cargo door rupture to open to explosive decompression on right side forward of the wing leading to nose off and fireball at 7500 feet when center and other fuel tanks explode.

1. horizontal stab has red paint smear
2. stator blade in right horizontal stab behind engine number 3
3. inward movement top of cargo door matches UAL 811
4. top of door attached to hinge matches UAL 811
5. petal shape of rupture area around aft midspan latch
6. missing pieces of locking handle, latching pins, overpressure relief doors, midspan latches
7. rectangle of explosive decompression zone of outward peeled skin on right side forward of the wing on right side
8. downward movement of floor beams near cargo door
9. hoop stresses found
10. cvr sudden loud sound matches NTSB Chart 12 UAL 811
11. fdr abrupt power cut matches UAL 811
12. TWA 800 matches UAL811 in twenty five similarities
13. TWA 800 matches PA 103 in many similarities
14. TWA 800 matches AI 182 in many similarities
15. red paint smears above cargo door on white paint
16. fire on 4 in UAL 811 for ignition source for fireball/center tank explosion on TWA 800
17. starboard side more damaged than port side.
18. inflight objects hit same things such as right wing fillet in other other accidents
19. poly x is known to be susceptible to chafing and TWA 800 had poly x.
20. section 41 is known to be weak and TWA 800 did not have the retrofit
21. history of cargo door openings in past in various airliners including model and type of TWA 800.

22. EPR problems on aircraft before or during fatal flight.
23. fires in forward cargo hold in the past on Boeing 747s.
24. vertical tears in fuselage skin forward of the wing on the right side match UAL 811
25. singe marks on right side of fuselage show burnt skin, then abruptly at tear line there are no singe marks.
26. red paint rubbed off revealing white paint underneath above cargo door area
27. first pieces off came from forward cargo hold just forward of the wing
28. at least nine missing never recovered bodies, just fragments.
29. initially thought to be a bomb, just like AI 182, PA 103, and UAL 811

Evidence to check to rule in or rule out cargo door involvement.

1. hinge overtravel impression damage to match AAR 92/02
2. aft midspan latch pin for heat damage to match AAR 92/02
3. aft midspan latch for damage
4. put door back together from shattered pieces to show petal rupture
5. stator blade from which engine
6. red paint matching from cargo door area to right horizon stab
7. chafed wire bundles to bare wire in forward cargo hold to match AAR 92/02

Questions that can be answered from powerplant report:

1. Did number 3 engine fall apart from other three engines thus matching the wreckage plots of AI 182 and PA 103?
2. Did stator blade in 800 horizontal stab come from number 3?
3. Was there inlet cowl FOD on number three to match PA 103?
4. Was there fire evidence in number 3 or number 4?

Dear Experts,

Below is the long version:

I know you know sudden jet crashes are not nonsense because it happened to you.

I know you know PA 103 had a relatively mild directed blast that left soot because you read the report, may have even written it.

I know you know about sudden loud sound followed by abrupt power cut on 811 because you read the report, may have even listened to the actual sound on tape.

I know you know about the decompression rectangle forward of the wing with outward peeled skin for 811 because you have seen the photograph, may have even taken the picture.

I know you know about what I'm talking about with CVR, FDR, FOD, TWA, PA, UAL, AI, CG, PSI, EPR, MSL, KCAS, Poly-X, AD, AAR, DC-10, 747, AAIB, TSB, P&W, JTD, because you have read the reports and may have even written the acronyms.

I have read your reports, I have listened to your testimony in hearings on TV and in person, I have read your exhibits, I have looked at your pictures in newspapers, magazines, on TV, on CD-ROM, and on easels. I have read your letters and emails. I consider you the experts.

I solicit the experts' opinions:

Senator McCain, what is your opinion of my destruction sequence of TWA 800? You have been in a sudden jet crash, your

opinion counts on this sudden jet crash.

Chairman Hall, what is your opinion of my destruction sequence of TWA 800? You are the boss, your opinion counts.

Vice Chairman Francis, what is your opinion of my destruction sequence of TWA 800? You were involved with PA 103 and were there early on for TWA 800, your opinion counts.

Investigator Haueter, what is your opinion of my destruction sequence of TWA 800? You are in charge of all accident investigations for the NTSB, your opinion counts.

Investigator Dickinson, what is your opinion of my destruction sequence of TWA 800? You are the lead investigator for TWA 800, your opinion counts.

Investigator Schleede, what is your opinion of my destruction sequence of TWA 800? You were the lead investigator on UAL 811 and assisted with TWA 800, your opinion counts.

Investigator Streeter, what is your opinion of my destruction sequence of TWA 800? You are a federal aircraft accident investigator and represented FAA as a party to TWA 800, your opinion counts.

Mr. McSweeny, what is your opinion of my destruction sequence of TWA 800? FAA considered carefully the outward opening doors, your opinion counts.

Metallurgist Wildey, what is your opinion of my destruction sequence of TWA 800? You know about PA 103 and wrote a breakup sequence for TWA 800, your opinion counts.

Lieutenant Commander Lawson, what is your opinion of my destruction sequence of TWA 800? You've investigated many jet crashes, your opinion counts.

What is the FAA's opinion of my destruction sequence of TWA 800? The FBI, the CIA, the lawyers, and the press have all given opinions which have been seriously considered, the opinion of the Federal Aviation Administration counts.

Sequence of Destruction for TWA Flight 800

Hot humid air in forward cargo compartment was subjected to cold conditioned air after takeoff on hot summer evening near New York on July 17, 1996. Condensation was precipitated out and formed on cold metal fuselage skin. Poly-X wire bundle which held cargo door motor on power was chafed by the friction of continuous vibration against clamp or many door openings and closings on it. Sheath around bundle was worn through to insulation and then worn through to bare wire. Condensed water met the bare wire and shorted against fuselage metal charring wires and powering on door motor which attempted to turn all ten cam sectors to unlocked position. At 13700 feet MSL and 300 KCAS, the eight lower cam sectors were prevented from unlocking because of strengthened locking sectors. However, the two midspan latches have no locking sectors. The slack in bellcranks, torque tubes, and high time worn cam latches allowed the aft midspan latch to rotate just past center allowing the 3.5 PSI internal pressure to rupture outward the forward cargo door at the aft midspan latch.

The nine foot by eight foot squarish door burst open at midspan latch sending the latch and door material spinning away in the

setting sun which reflected upon the shiny metal as it spun away erratically and appeared as red-orange streak to ground observers moving all which ways. The aft door frame was clean of attachment to door and bulged outward. Fuselage skin was torn vertically. The door fractured and shattered. The bottom eight latches held tight to the bottom eight latch pins on bottom sill while bottom external skin of door blew away. The top piece of red topped cargo door opened out and up smashing into the white fuselage skin above it leaving the red paint of the door on the white paint between passenger windows above. The red paint of the trim was rubbed away showing the white paint underneath. The top piece of the door took the hinge with it and fuselage skin as it is tore away. The loose red painted trim piece and top of door flew directly aft and impacted the right horizontal stabilizer leaving a red paint transfer mark on it. The hinge still appears to be working normally likely having overtravel impression marks on the opposite hinge when door overextended to slam on fuselage above. The top piece of the door shows inward damage when it hit fuselage above.

The explosive decompression of the thirty eight thousand pounds of internal force on the door blew out a large hole about twenty feet wide and forty feet high on the right side of the nose forward of the wing. Parts of the cargo hold structure were the first parts to leave the aircraft. The now uncompressed air molecules rushed out of the huge hole equalizing high pressure inside to low pressure outside while making a very loud noise. Fuselage skin was peeled outward at various places on the right side of the nose. The sudden rushing air was recorded on the Cockpit Voice Recorder as a sudden loud sound. The explosive decompression of the forward cargo hold severely disrupted the nearby main equipment compartment which housed power cables and abruptly shut off power to the Flight Data Recorder.

At least nine passenger's bodies were never found, only bone fragments. The number three engine also ingested metal in baggage and started on fire from inefficient burning of fuel. The number three engine with pylon started to vibrate and a stator blade from the engine was spit out and impacted directly behind it in the right horizontal stabilizer.

The floor beams above the cargo hold were bent downward, fractured and broken from the sudden decompression. The main structural members of door and frame were gone and compromised. The flight attitude of the aircraft was askew to the left from reaction of explosive decompression to the right. Air rushed into the hole and weakened other skin and frame peeling skin outward. The 300 knots of air pressed upon the weakened nose and crumpled it into the large hole. The nose tore off and landed in a dense debris heap apart from the rest of the plane.

The port side forward of the wing was smooth and unshattered while the starboard side forward of the wing was shattered, torn, and frayed at ruptured cargo door area and severely disturbed over twenty feet by forty foot explosive decompression zone. Outward petal shaped fuselage skin appeared at aft midspan latch from rupture. Aft midspan latch was blown away. Outward peeled skin appeared from blowout. Fuselage skin remained smooth next to blown out skin.

The rest of the plane without the nose suddenly decelerated from 300 knots and caused whiplash injuries to passengers. Passengers inside fuselage had baro-trauma to eardrums which ruptured trying to equalize middle ear pressure. The plane maneuvered with huge gaping wound in front increasing drag. The wind force disintegrated the fuselage and wings. Fuel poured out of ruptured

tanks as wreckage fell. The broken fuselage, the ruptured wings, the fuel cloud, the center tank, and the spinning, on fire engine number three met at 7500 feet and exploded into a bright loud fireball putting singe marks on the fuselage skin while leaving earlier departed nose burn and singe mark free. The center tank exploded as well as other nearby fuel tanks. Forward passengers were not burned because they were in the earlier separated nose. The debris fell and spread out from 7500 feet to sea level in windblown southeast direction, leaving a wide debris field.

Ground observers heard the fireball explosion of the center tank and other fuel and looked up. They saw fire and smoke and falling debris.

Explosive decompression at the forward cargo hold led to suspicion of bomb in cargo compartment but bomb later ruled out. Debris ejected to the right from explosive decompression led to suspicion of missile exploding on left side of nose. Streak of shiny metal object spinning away reflecting evening sun to ground observers led to suspicion of missile exhaust but later ruled out.

Fire/explosion of center tank into fireball led to suspicion of center tank explosion as initial event. There were difficulties in determining ignition source, fuel volatility, unheard fuel explosion sound on CVR, unilateral fuselage damage, singe marks, and other evidence needed to corroborate center tank explosion as initial explosion.

Fuselage rupture at aft midspan latch of forward cargo door in flight is initially rejected because bottom eight latches are found latched around locking pins while two midspan latches are unexamined and status unreported.

Questions about center tank explosion as initial event which evidence raises.

1. Sudden loud sound on Cockpit Voice Recorder is described as start of aircraft breakup but not sound of explosion. Sound on CVR does not match other staged Boeing 747 center tank explosion. How can an explosion in the center tank be powerful enough to start the aircraft breakup and blow off nose of Boeing 747 and not be heard on CVR?

Sudden loud sound is sound of explosive decompression which gives a sudden loud sound when forward cargo door ruptures/ opens in flight. The TWA 800 sudden loud sound was linked to PA 103 sudden loud sound on CVR which was linked to AI 182 sudden loud sound on CVR which was linked to DC-10 cargo door explosive decompression on CVR. UAL 811 had a cargo door rupture/open in flight and recorded a sudden loud sound on the CVR. The sound is the sudden rushing of air molecules which were compressed now moving fast outward to equalize with the lower pressure outside air.

2. Center tank explosion would be spherical, not directed, and would either give no damage forward of the wing or about equal damage on both sides of the fuselage of TWA 800. The wreckage reconstruction shows smooth skin with little damage forward of the wing on the port/left side yet severe, shattered, torn, and frayed damage on the starboard/right side of the fuselage in the cargo door area. How can a center tank explosion cause unilateral damage only on starboard side?

Explosive decompression and rupture of forward cargo door area when aft midspan latch ruptures would give shattered, torn and

frayed, damage to cargo door area while leaving port/left/ opposite side smooth and light damage. Cargo door rupture would give the unilateral damage on starboard side as shown by TWA 800 wreckage.

3. TWA 800 wreckage reconstruction shows outward peeled skin, outward rupture hole, and paint transfers. Water impact damage would be inward, not outward. How could water impact damage produce outward peeled skin, outward rupture hole, and paint transfers?

Explosive decompression in nose of TWA 800 would give outward peeled skin in nose, outward rupture hole, and paint transfers as internal high pressure rushes outward to equalize with the low outside pressure.

4. TWA 800 wreckage reconstruction shows red paints smears only above the forward cargo door area and nowhere else on both side of the Boeing 747 fuselage. This indicates that the red painted door below ruptured/opened outward, slammed upward, and smashed into the white painted area above and transferred red paint from door onto white paint between windows. How did red paint smears get where they are?

After the rupture at aft midspan latch the door fractured and upper piece of the red painted door was pushed outward, rotated on its hinge, slammed upward and smashed into the white painted fuselage skin above, transferring red paint to the white painted area between the passengers windows, as shown by the TWA 800 reconstruction. UAL 811 also had paint transfer from door to fuselage when its door opened in flight.

5. A center tank explosion would be far enough away from power

cables to allow the Flight Data Recorder to record longer than the abrupt power cut it suffered. How can a center tank explosion which is not loud enough to be heard on the CVR and some distance away be strong enough to abruptly cease power to the FDR?

The explosive decompression in the cargo compartment would severely disrupt the cargo hold floor and the adjacent main equipment compartment in which the FDR and power cables are located. The severe disruption would abruptly cease power to the FDR. UAL 811 also had abrupt power cut when its cargo door opened in flight.

6. How could forward cargo door rupture/open when bottom eight latches are latched and locked in TWA reconstruction?

The forward cargo door of Boeing 747s is about nine feet by eight feet square. It has a hinge on the top and eight cam latches on the bottom. On each nine foot side is one midspan latch. The bottom eight cam latches go around eight latching pins. Over each cam latch is a locking sector. The two midspan latches have no locking sectors. The forward cargo door could rupture at the midspan latch and the hinge and bottom eight latches could still be attached to fuselage skin. The top of the door with hinge attached would tear off with the fuselage skin and spin away. The bottom eight latches could stay attached to bottom sill and continue down to the sea with the nose. The middle of the large door can still be ruptured/opened while the lower part stays attached to airframe. Doors can open/rupture with most or all latches latched. TWA 800 reconstruction shows aft mid span latch missing which implies it became unlatched. The aft door frame sill is smooth and not attached to door which implies door opened in that area.

7. How could forward cargo door rupture cause center tank explosion?

When cargo door ruptures in flight a huge hole is created in nose which the 300 knot slipstream tears off. The falling, noseless, structurally compromised aircraft disintegrated into wings of rupturing fuel tanks, fuselage pieces including center tank, and spinning hot on fire jet engine. When falling debris reached about 7500 feet, the fodded on fire engine number three ignited the fuel cloud and center fuel tank into a fireball. Center tank fire/explosion occurred but later and lower than forward cargo door rupture initial event.

Event, consequence, significance, source for destruction sequence:

1. Hot humid air in forward cargo compartment was subjected to cold conditioned air after takeoff on hot summer evening near New York on July 17, 1996.

NTSB exhibits gave takeoff time and temperatures plus the airconditioning system in Boeing 747s.

2. Condensation was precipitated out and formed on cold metal fuselage skin.

Water was available to ground any bare wires to fuselage skin. Observation made of water cascading out of forward cargo hold of Boeing airliner by John Barry Smith standing in concourse at San Francisco Airport on December 6, 1997.

3. Poly-X wire bundle which held cargo door motor on power

was chafed by the friction of continuous vibration against clamp or many door openings and closings on it. Sheath around bundle was worn through to insulation and then worn through to bare wire.

Bare wires can be shorted to ground causing power to go to door motor. NTSB exhibits list two forward cargo hold charred wiring fires. NTSB hearing on aging aircraft detailed problems with poly-x wiring chafing from vibration. NTSB AAR 92/02 detailed problems with chafing wires causing door motor to turn on. TWA 800 had poly-x wiring.

4. Condensed water met the bare wire and shorted against fuselage metal charring wires and powering on door motor which attempted to turn all ten cam sectors to unlocked position.

Event explains how door motor got power to turn on. NTSB exhibits list two previous cargo hold charred wire fires. NTSB AAR 92/02 lists two uncommanded cargo door opening on Boeing 747s caused by electrical problems, UAL preflight and UAL 811.

5. At 13700 feet MSL and 300 KCAS, the eight lower cam sectors were prevented from unlocking because of strengthened locking sectors. However, the two midspan latches have no locking sectors.

The eight bottom latches held tight to locking pins because of AD 88-12-04 which strengthened all the eight locking sectors. NTSB AAR 92/02 describes the AD, door, and all latches.

6. The slack in bellcranks, torque tubes, and high time worn cam latches allowed the aft midspan latch to rotate just past center

allowing the 3.5 PSI internal pressure to rupture outward the forward cargo door at the aft midspan latch.

UAL 811 had small rupture at aft midspan latch as shown in photograph in NTSB AAR 92/02. NTSB exhibit lists 3.5 PSI pressure differential. TWA 800 was extremely old aircraft with over 93000 flight hours.

7. The nine foot by eight foot squarish door burst open at midspan latch sending the latch and door material spinning away in the setting sun which reflected upon the shiny metal as it spun away erratically and appeared as red-orange streak to ground observers moving all which ways.

Press reports reveal eyewitnesses say different colored streaks going every which way from all directions. Time of 8:31 PM and angle of low sun to aircraft in east and observers to the west had to be perfectly aligned for spinning falling shiny piece of metal to reflect as streak to observers.

8. The aft door frame was clean of attachment to door and bulged outward.

Aft midspan latch blown away at rupture time and caused outward bulge. NTSB reconstruction photograph shows bulge and missing latch.

9. Fuselage skin was torn vertically.

Explosive decompression bursts outward limited by stringers and bulkheads which are vertical and match the other cargo door accident, UAL 811. NTSB photograph shows the vertical tears of TWA 800.

10. The door fractured and shattered.

NTSB photograph shows the damage. 38000 pounds of force were suddenly released onto now weakened door and it burst apart. 99 inches times 110 inches times 3.5 PSI equals 38115 pounds of force on the ten latches and hinge.

11. The bottom eight latches held tight to the bottom eight latch pins on bottom sill while bottom external skin of door blew away.

The bottom of large door held tight while middle of door ruptured in a troublesome section of a high time Boeing 747, Section 41 and Section 42. TWA 800 had not yet had the Section 41 retrofit. NTSB exhibit states bottom eight latches latched.

12. The top piece of red topped cargo door opened out and up smashing into the white fuselage skin above it leaving the red paint of the door on the white paint between passenger windows above. The red paint of the trim was rubbed away showing the white paint underneath. The top piece of the door took the hinge with it and fuselage skin as it is tore away.

The loose red painted trim piece and top of door flew directly aft and impacted the right horizontal stabilizer leaving a red paint transfer mark on it.

The hinge still appears to be working normally likely having overtravel impression marks on the opposite hinge when door overextended to slam on fuselage above.

The top piece of the door shows inward damage when it hit

fuselage above.

Sequence of door opening out and up and transferring paint above is described in text and drawing in NTSB AAR 92/02. Inward movement of top of door is described in AAR 92/02. Normal working hinge attached to top of door is described in AAR 92/02. Overtravel impression damage is described in text and picture in AAR 92/02.

13. The explosive decompression of the thirty eight thousand pounds of internal force on the door blew out a large hole about twenty feet wide and forty feet high on the right side of the nose forward of the wing.

NTSB photograph shows decompression rectangle zone on right side of nose.

14. Parts of the cargo hold structure were the first parts to leave the aircraft.

The first parts of plane to depart indicate trouble started there. NTSB exhibits show first parts to leave were from cargo structure.

15. The now uncompressed air molecules rushed out of the huge hole equalizing high pressure inside to low pressure outside while making a very loud noise.

NTSB AAR 92/02 states crew of UAL 811 heard a 'tremendous explosion,' when door opened in flight.

16. Fuselage skin was peeled outward at various places on the right side of the nose.

Outward peeling indicates force from within, not without. UAL 811 had same outward peeling of fuselage skin in cargo door area.

17. The sudden rushing air was recorded on the Cockpit Voice Recorder as a sudden loud sound.

Sound matches other Boeing 747 sudden loud sound of explosive decompression and a DC-10 cargo door decompression sound according to NTSB chart.

18. The explosive decompression of the forward cargo hold severely disrupted the nearby main equipment compartment which housed power cables and abruptly shut off power to the Flight Data Recorder.

Cables for power and signal run through the forward cargo hold to the adjacent MEC. The cargo floor is severely disrupted when explosive decompression occurs in cargo hold according to AAIB 2/90 report and will cut off power abruptly.

19. At least nine passenger's bodies were never found, only bone fragments.

Where did those bodies go? What happened to them to reduce them to bone fragments requiring DNA analysis to identify? At least nine bodies always disappear when explosive decompression occurs in high time Boeing 747s according to AAIB, NTSB, TSB and Indian reports.

20. The number three engine also ingested metal in baggage and started on fire from inefficient burning of fuel. The number three

engine with pylon started to vibrate and a stator blade from the engine was spit out and impacted directly behind it in the right horizontal stabilizer.

NTSB AAR 92/02 describes the sequence of FOD into number three and also number four and the subsequent vibration and fire.

21. The floor beams above the cargo hold were bent downward, fractured and broken from the sudden decompression. The main structural members of door and frame were gone and compromised.

AAR 92/02, AAIB 2/90, and NTSB TWA 800 exhibits describe the downward movement of the floor beams above cargo compartment.

22. The flight attitude of the aircraft was askew to the left from reaction of explosive decompression to the right. Air rushed into the hole and weakened other skin and frame peeling skin outward.

AAR 92/02 describes the actions of the aircraft after door opened in flight.

23. The 300 knots of air pressed upon the weakened nose and crumpled it into the large hole.

AAIB and TSB/Indian reports describe how nose came off after explosion in forward cargo hold at 300 KCAS of two Boeing 747s.

24. The nose tore off and landed in a dense debris heap apart from the rest of the plane.

AAIB 2/90, TSB/Indian Court, and NTSB TWA 800 exhibits describe the dense nose debris field present when nose comes off in flight of three Boeing 747s.

25. The port side forward of the wing was smooth and unshattered while the starboard side forward of the wing was shattered, torn, and frayed at ruptured cargo door area and severely disturbed over twenty feet by forty foot explosive decompression zone. Outward petal shaped fuselage skin appeared at aft midspan latch from rupture. Aft midspan latch was blown away. Outward peeled skin appeared from blowout. Fuselage skin remained smooth next to blown out skin.

AAIB 2/90, TSB/Indian, and NTSB photographs describe the lesser damage port side nose compared to the more severely damaged starboard side as well as the outward peeled skin on nose of three Boeing 747s.

27. The rest of the plane without the nose suddenly decelerated from 300 knots and caused whiplash injuries to passengers. Passengers inside fuselage had baro-trauma to eardrums which ruptured trying to equalize middle ear pressure.

Passenger injuries are described in NTSB exhibits, TSB/Indian report, AAIB 2/90, and NTSB exhibits.

28. The plane maneuvered with huge gaping wound in front increasing drag. The wind force disintegrated the fuselage and wings. Fuel poured out of ruptured tanks as wreckage fell. The broken fuselage, the ruptured wings, the fuel cloud, the center tank, and the spinning, on fire engine number three met at 7500 feet and exploded into a bright loud fireball putting singe marks

on the fuselage skin while leaving earlier departed nose burn and singe mark free. The center tank exploded as well as other nearby fuel tanks. Forward passengers were not burned because they were in the earlier separated nose. The debris fell and spread out from 7500 feet to sea level in windblown southeast direction, leaving a wide debris field. Ground observers heard the fireball explosion of the center tank and other fuel and looked up. They saw fire and smoke and falling debris.

NTSB exhibits describe the breakup sequence and NTSB video shows fireball seconds later and thousands of feet lower than initial event. Engine number three was on fire for AAIB 2/90 and number four was on fire for NTSB AAR 92/02 after cargo hold ruptures.

29. Explosive decompression at the forward cargo hold led to suspicion of bomb in cargo compartment but bomb later ruled out.

Debris ejected to the right from explosive decompression led to suspicion of missile exploding on left side of nose.

Streak of shiny metal object spinning away reflecting evening sun to ground observers led to suspicion of missile exhaust but later ruled out.

Fire/explosion of center tank into fireball led to suspicion of center tank explosion as initial event.

Press reports, FBI reports, and NTSB reports describe the bomb, missile and center tank explanations.

30. There were difficulties in determining ignition source, fuel

volatility, unheard fuel explosion sound on CVR, unilateral fuselage damage, singe marks, and other evidence needed to corroborate center tank explosion as initial explosion.

NTSB public hearing reveals the gaps in the center tank as initial event explanation.

31. Fuselage rupture at aft midspan latch of forward cargo door inflight is initially rejected because bottom eight latches are found latched around locking pins while two midspan latches are unexamined and status unreported.

The above was the wiring/latch/door/explosive decompression explanation which was evoked when I read the 12 Jan 98 NTSB letter to me. Let me analyze carefully that recent letter from the 'Safety Board' to me:

"Dear Mr. Smith: The Safety Board has received your letter to the Chairman, dated December 30, 1997, concerning the possibility that the TWA 800 accident was related to an in-flight opening of a cargo door. As conveyed to you in previous letters we have sent you, the Safety Board believes that sufficient facts have been gathered to rule out this possibility. Thank you for your interest in this subject. Sincerely, JF Wildey II Jim Wildey National Resource Specialist-Metallurgy"

1. "Thank you for your interest in this subject." You're very welcome, Safety Board, in your thanks to me for my interest in this subject. Let me thank you for your interest in this subject. Thank you, thank you, thank you.

2. "...the possibility that the TWA 800 accident was related to an in-flight opening of a cargo door."

a. 'A' cargo door? No, not 'a' cargo door, 'the forward' cargo door. Never has any of the other possible four cargo doors been raised as a possibility of causing TWA 800. The other cargo doors were brought into it when the Chairman said all doors were all latched and all locked and all doors intact at water impact. Mr. Wildey II knows it is the forward cargo door in question because he wrote Exhibit 15C, Forward cargo door exhibit. There could be a nose cargo door, a port main side cargo door, an aft cargo door, and the starboard aft and forward cargo doors; five large cargo doors which are non-plug outward opening cargo doors. Only the forward cargo door is implicated in TWA 800. TWA 800 did not have the nose door, or the port main door, or the port aft door, only the starboard forward and aft cargo doors. The bulk door is not the same in function as the outward opening doors. So, for TWA 800, the choice is one of two, forward or aft. It's 'the forward' cargo door, not 'a' cargo door. The implication is that I am vague and unfocused in pinpointing the problem. Not true. Not only the forward door but the midspan latch, not only the midspan latch but the aft midspan latch. And then to get to chafed to bare wire bundle in forward cargo hold with door motor power in it is very specific.

b. Possibility? I do not say 'possibility,' I say 'probability,' as in 'probable cause' probability. I've been misquoted or misunderstood if 'possibility' is implied. It's 'probable the forward' cargo door is the cause, not it's 'possible a' door is the cause. And in fact, the forward door is just another innocent bystander who got caught, just like the center tank. The door was doing what it was told to do, open, when the door motor power came on. The culprit is chafed wiring being shorted to ground giving power to motor. To quote as 'possible' is to imply less certainty of probable cause of the forward cargo door rupture/opening in flight.

3. "As conveyed to you in previous letters..." That's not a note of

exasperation in the tone, is it? Is it like I'm stupid and you have to tell me several times such an obvious thing before I get it? As I've told you in my previous letters, eight is not ten. Why was this repetition mentioned? Thank you for your previous letters, Safety Board. I am analyzing a current letter from you and I look forward to your future letters.

4. "...the Safety Board believes that sufficient facts have been gathered to rule out this possibility." Ah, the meat, a tiny morsel, but still meat.

1. Who is the 'Safety Board'? Is it a person? Is it the whole Board? Did Mr. Francis agree to that statement? Mr. Goglia? I don't think so. Who signed the letter speaking for the Board? A metallurgist? Is a metallurgist saying sufficient facts have been gathered to rule out 'an in-flight opening of a cargo door in an aircraft accident?' Speaking of metal, the rectangle explosive decompression zone on the starboard side of TWA 800 forward of the wing is like a high speed photograph of a drop of milk into a cup. The metal shards are frozen in time as they burst outward like a flower petal. In fact, I electronically reversed time and put the pieces back the way they were. The pieces fit perfectly at the rupture zone of aft midspan latch. (Pictures at end of this letter.) The upper outward burst metal skin is like the milk drop frozen by the camera, peeling back in a nice curve. The TWA 800 metal aft midspan pin will probably show heat and stress damage on the metal as the aft midspan pin did on UAL 811. The TWA 800 metal hinge will show metal overtravel impression damage, just like UAL 811. The metal stator blade in the metal horizontal stabilizer of TWA 800 will probably come from the metal P&W JTD-9. Metal is nice because it is real and can be examined. Easy to do with the TWA 800 reconstruction metal door hinge and metal aft latch and pin. Cheap, quick, easy, and so important. Why hasn't that been done? NTSB must not only be above reproach in lack of diligent effort to find probable cause, NTSB

must be above the appearance of reproach. To not pick up the phone, call someone at Calverton to drag the stepladder over to the hinge and see if there is overtravel damage on the hinge gives the appearance of not being diligent when it is so easy to do.

2. A structural engineer, Mr. Breneman, and a metallurgist, Mr. Wildey II, have both given opinions about aircraft accident evidence and how it came to be. Fine. Where are the aircraft accident investigators in this aircraft accident? When an intact round fuselage lands on flat water the impact makes an oval, not a rectangle. Saying the clear shattered rectangle on the starboard side of TWA 800 forward of the wing with the outward peeled skin is water impact damage is funny, especially when it matches in text, drawing and photographs of other rectangle explosive decompressions forward of the wing on the right side, AI 182, PA 103, and UAL 811. It's equal to the CIA saying a nose off Boeing 747 climbs three thousand feet in twenty seconds. It's equal to a lawyer saying the streak was leaking fuel on fire. It's equal to a detective saying a strange radar blip is a P-3. It's equal to educated persons saying eight is ten.

Where are the aircraft accident investigators?

An aircraft person, not a cop or lawyer or engineer or analyst, would say, leaking fuel does not look like streak to persons ten miles away, it's something else; he would say water impact causes inward damage not outward; he would say a plane with no nose, declining power and heavy after takeoff descends, not climbs; he would say the radar blip of the P-3 was always identified and the mystery blip must be something else; he would say eight is not ten, ten is ten.

I'm an aircraft person and I say those things.

Another different thing about this NTSB 12 Jan 98 letter is the style and tone. I watched and listened to Mr. Wildey for hours at the hearing. I have read his sequencing reports and transcripts of testimony at the hearing. We have exchanged emails. Mr. Wildey is polite, informative and precise, not cold, reticent and vague, as this letter is. The style of an opening sentence giving background, middle sentence making statement, (never asking questions) and final sentence of polite but insincere thanks is reminiscent of other emails and letters I have received from NTSB, but not Mr. Wildey. The only thing missing is the phrase, "Let me reassure you..." This letter from NTSB shows that the author is unclear on the concept of the relationship of civil servant to citizen. This letter is similar to WC Fields shaking off a distraction with the words, "Go away, kid, you bother me." This brushoff letter from NTSB is fine for a well meaning hourly worker who has an idea and scribbles a short note to an official address he found someplace. It is not appropriate for a aviation crewman, technician, navigator and pilot who has conducted nine years of research and sent several hundred pages of analysis supported by enclosed documentation to specific involved officials.

We are involved.

I am not out to hurt the government as the missile guys are when they say US Navy shot down TWA 800 and are covering it up and yet the missile guys get detailed rebuttals. I am not out to increase my budget as the bomb guys are when they say more stringent security is needed yet they get detailed rebuttals. I am on the government's side, I am on Boeing's side, I am on the side of the passengers of the future, just like NTSB. I am an ally, not an enemy. I do not like this adversary relationship which is similar to court trials. This is not a trial but an investigation.

Investigations have questions. Where are the questions?

I agree with NTSB on TWA 800 with center tank explosion. I use NTSB documents, text, photographs, and testimony to backup the the initial event from fireball to center tank explosion to engine number three or four ignition source to falling wing, to nose off to explosive decompression to rupture at aft midspan latch of forward cargo door, to unlatch motor on from short to chafed bare poly-x wire to ground via condensed water. And yet I get cursory, vague, and abrupt rejections of supported ideas. Cargo door rupture/opening/chafed wiring explanation deserves better.

Where the water came from is conjecture but water in the hold is true because I saw it. It could come from thunderstorm, leaking cargo, popped potable water tank or other unknown. I use the three other accidents for clues. Three took off in hot humid conditions and climbed up high where it is cold. Condensation is the one explanation that holds true for most. Aft latch rupture is probable because of the photo evidence, water source for shorting chafed wire is possible and needs confirmation.

4. If a patient goes to the doctor and presents with blood in urine which might be a kidney problem and the doctor examines one normal kidney and says, 'No problem, I have gathered sufficient facts to rule out that possibility,' would you say, 'Hey doc, check the other kidney?' Or would you say, 'What the hey, one is two, close enough.' I don't think so. You would say 'Check all my kidneys' as I say 'Check all the latches.' And I've added 'Check all the wiring in the forward cargo hold for chafed through to bare wire.' (What you might really say to the physician is, "Am I going to die? Can you fix it? How much longer to I have to live? Tell it to me straight.")

5. Enough about facts and specifics, let's get back to unsubstantiated generalities as shown by the 12 January letter. "...sufficient facts have been gathered..." Huh? Sufficient? How many? What facts? Gathered where? Can I see them? As I have researched the facts regarding cargo door in high time and cycle Boeing 747s for years and have about two thousand pages of text compared to two sentences, my opinion is that insufficient facts have been gathered to rule out possibility of door open in flight and sufficient facts have been gathered to rule in the probability. My list of sufficient facts was listed earlier and will be revised as my investigation continues. I'm showing you mine, will you show me yours...and I've already seen the bottom eight latches latched. What else do you have?

Here are the three official stated facts regarding cargo door from NTSB:

1. "Examination of the lower lobe forward cargo door showed that all eight of the door latching cams remain attached (along with pieces of the door itself) to the pins along the lower door sill." in Exhibit 15C signed by Mr. Wildey.
2. "The examinations of the TWA airplane, however, conclusively show that this door was latched and locked along its bottom edge through the entire break-up sequence." in testimony by Mr. Wildey at public hearing.
3. "...the Safety Board believes that sufficient facts have been gathered to rule out this possibility." in 12 January 98 letter signed by Mr. Wildey.

Not sufficient! Insufficient. Eight is not ten and never will be.

There may be sufficient wishful thinking to rule out cargo door rupture/open/explosive decompression but not sufficient facts.

Here's a clue that reveals the wishful thinking bias against door. If you lose your wallet and you think where may it be and you deduce it could be in the glove compartment of your car and you go running out to the garage to the car, open the door, open the glove compartment and look in to the mess and don't see the wallet, you don't feel relief, you feel disappointment and continue to rummage around the junk in there to look for the wallet possibly hidden by stuff like maps and glass cases and candy and pens.

When Mr. Breneman examined the pieces of twisted metal called the wreckage of TWA 800 looking for the forward cargo door because he suspected it might be the cause and found the bottom eight latches latched, he told me he felt relief. He was glad he was wrong at his suspicion of door problems. He did not want the wallet to be in the glove compartment. He did not want the door to be the problem so he wishfully thought that eight latches latched means they all must be latched and therefore the door was locked and all the shattered pieces of the door must have occurred at water impact. Wishful thinking ruled then and it rules now. It's a pleasant dream, not the unpleasant truth. Truth hurts; lies kill.

Let Mr. Breneman be the hero. He was there first with the suspicion the door was involved. He braved poor and dangerous working conditions to locate and identify very difficult to see dirty pieces of wreckage among many. He correctly evaluated the obvious problem based upon past accidents, the lower eight latch condition as latched and locked. He promptly reported his results to authority. He did everything that was asked of him under pressure conditions. There is now the luxury of time to review the past conclusions.

Explosive decompression has caused a lot of problems for jet airliners and the people connected with them from designers, manufacturers, operators, and investigators. Comet caused big problems to an entire industry, DC10 caused problems with manufacturer, UAL 811 caused problems for the investigators who got it wrong the first time but came back and corrected the error. It's understandable that the cargo door causes fear and is to be avoided and wishful thinking makes it go away when eight of the ten latches were latched.

More logic: Why the reluctance to consider this known killer of nine who left early the scene of the crime? Why not say the center tank exploded and blew the door open? Why the adamant nonsense of a now shattered door being intact at water impact while the reconstructed shattered skin is peeled outward? Why ignoring the many red paint smears that are easily visible and consistent with door open and slamming upward? Why ignoring stator blade? Why ignoring all the evidence which indicates door opened in flight when you could say, yes, the center tank explosion blew it open? Why ignore the two real fires a quarter inch from the center tank as ignition source when chafed wiring caused fires in two forward cargo holds of Boeing 747s? Why ignore the forward cargo hold, the cargo door, and the fuselage skin around it?

Only to avoid getting into the black hole of pressurized fuselage rupture in flight, that's why.

The Comet airliner crashes: After several inflight ruptures in which a bomb was thought to be the cause, the fleet was grounded and an investigation was begun on why the pressurized fuselage ruptured in flight. After a while, the ban was lifted and

flights resumed. Another fuselage ruptured and all died. An industry was hurt and never recovered.

The DC-10 airliner crashes: After an aft cargo door opened in flight and almost killed all on board over Ontario, Canada in 1972 an investigation was started. Then another aft cargo door opened in 1974 and killed all on board. The DC-10 was hurt and never recovered, in fact, MacDac never recovered and recently merged. The investigation revealed memos concerning the risk of the open cargo door was known to officials but nothing was done.

Boeing 747 airliner crashes: After a forward cargo door opened in flight in 1987 on Pan Am 125, changes were ordered to prevent it happening again. It happened again. UAL 811 lost the door in 1989 and killed nine. The manufacturer, the airline, the FAA were all excoriated by NTSB for failing to do this and that and too slow too. Then NTSB got the cause of the door opening wrong, retrieved the evidence of the actual door, and wrote another AAR, 92/02 with the correct cause, electrical short to door motor to unlatch to rupture to open to explosive decompression and not improper latching, much to the relief of the baggage handler who had been blamed for the deaths. Boeing 747s are being sold off to foreign airlines and other airlines are cancelling orders. If another 747 mysteriously crashes, its reputation and Boeing's may never recover.

The two crash rule has been fulfilled for cargo door on high time Boeing 747s. The tombstone regulations didn't work.

Boeing may believe it is in their best interest to call TWA 800 a missile shutdown or even to take the full blame for a center tank explosion rather than take the partial blame for several cargo

door caused accidents, AI 182, PA 103, and TWA 800. It's wrong thinking, as the best selling airplane is the one that doesn't mysteriously crash every few years, but that's their shortsighted call.

TWA may hope for missile or center tank as it exonerates them as the cause. Cargo door indicates operator error so would be avoided by the airline. It's shortsighted as the cargo door problem happens to all airlines and all airports, the common link is high cycle Boeing 747s.

Pilots, crew, and passengers may want to believe missile or bomb because then they can consider it a fluke and unlikely to happen again while a mechanical problem can reappear. It's hard to enjoy flying when you think the airplane may come apart mysteriously at any time.

The engine manufacturer may want to steer clear of any involvement of a disaster to avoid guilt by association but they should be volunteering to help, such as noting their stator blade is not where it should be and stating exactly which engine and where in the engine did the stator blade come from.

The lawyers and their clients may want to hope it's not the cheap guys' fault, the airline with limited liability, and hope for the deep pocket manufacturer's fault with unlimited liability.

The makers of the mystery ignition source, probes and pumps, will be interested eventually in any reasonable explanation supported by facts and official documents which clears them of responsibility but that will be much later during trials. There is not time to wait for the judicial process to uncover and examine alternative reasonable explanations for the fireball and initial

event. Three noses have come off Boeing 747s in flight within eleven years, 1985 to 1996. That's one every four years at best. It's been a year and a half since TWA 800 and trials will not begin for a few more years.

NTSB and FAA may hope it's not the cargo door which will dredge up the UAL debacle but in fact it shows that NTSB is determined to find the cause of a crash regardless of fallout from the discovery. NTSB has shown that it is deliberate and comprehensive in the past with UAL 811. The accident happened in February 1989 and the final corrected report came out in 1992, about four years later. With TWA 800, NTSB has only had the full responsibility of the investigation for a month, from December 1997 to January 1998. The hasty competitive race to find the cause against the FBI bomb or missile explanation led to hasty ruling out of forward cargo door and hasty ruling in of center tank explosion as initial event. Yes, the door popped for UAL 811, but why. NTSB got it wrong the first time and corrected themselves with additional evidence. Wasn't it the instigation of a citizen that persuaded NTSB to retrieve the 811 door? Who remembers his name? No one. Who remembers that the NTSB got an aircraft investigation right? Everyone. What's important? Getting the aircraft investigation probable cause right is what's important. Recheck 800 door as you did with the 811 door. You looked closely at the 811 door. Do it again with TWA 800. Please. Now. I beg you. Just once. Hinge, pin, paint, stator, cvr, explo decom rectangle, petal shape at aft latch.

NTSB and FAA were first on the scene to suspect the door as stated by Mr. Breneman who was asked by NTSB to examine the cargo door. The prime suspect was promptly interviewed. An initial evaluation was made based upon correct suspicions of the officials. NTSB and FAA did not miss the door explanation, they

are just deliberate in their examination. Cargo door is not going anywhere. It is there for examination. NTSB has only had the total official investigation for just a month. It is an active investigation. Evidence is still being collected, sorted, and evaluated. To change position in the middle of an investigation is normal. To go back and check out old clues and hypotheses is normal. To respond to citizens answering a call for help from officials to the public in a public appeal is normal. To check out hard evidence such as hinges, pin, paint, stator, cvr, explo decom rectangle, petal shape at aft latch when the evidence is close by is normal.

Yes, the center tank exploded for TWA 800 but why. NTSB has it not exactly correct the first time with a mystery spark but will get it exactly correct with help from additional evidence, the wreckage reconstruction at Calverton. The evidence is the shattered door hanging there with missing latches, puffed out skin, and a red paint smeared hinge and an ignition source of a fodded engine number 3 which came apart and left stator blade behind it. To rewrite exhibits, to add an addendum to Exhibit 15C, to modify a sequencing report is normal during an extended investigation. It is better to make the minor adjustments now than to have to issue another entire AAR later on.

Do we agree on that?

Let's disagree on something.

There is supposed to be an independent agency which objectively looks at all possibilities of an accident regardless of political implications. That's the NTSB for TWA 800. The United States National Board of Transportation. All eyes look to NTSB when a plane crashes. It is an awesome responsibility. NTSB is supposed

to be fair. NTSB is supposed to be forthright. NTSB is supposed to be quick. NTSB is supposed to be precise.

Personally, I don't see it. I saw a biased prosecution of a hastily decided cause of center tank explosion made within weeks of the accident and has held firm ever since in the face of ignored contrary evidence. Within eighteen hours it was known there was a fireball, soon thereafter the wreckage showed center tank had fire and explosion damage. So, it exploded. What happened just before it exploded? When an ignition source was not found, another explanation should have been considered but wasn't. The misfitting puzzle piece of center tank as initial event has been pounded into place with computer models, small size actual models, and blown up real 747s, and it still doesn't fit. It doesn't fit as initial event because it was not the initial event.

NTSB has not been fair and given all reasonable explanations a hearing as shown by three sentences for cargo door. NTSB is supposed to be upfront but suppresses already researched and written exhibits on eyewitnesses, power plants, and wreckage plot. NTSB was supposed to have public docket ready within a few months yet took a year and a half to produce a bowdlerized version. NTSB is supposed to be exact yet continues to insist eight latches checked of ten available means total.

Cargo door explanation has been avoided because it has a track record of hurting everyone one it touches, including me. It appears officials are afraid of getting burned again. Gentleman, of course we are going to get burned again. That's just the way it goes. That's life in the mystery world of aircraft crash investigation dealing with hundreds of millions of dollars and intense grieving emotions. We have blood on our teeth for the event happening on our watch. We will have burned fingers when

all the stories are written and statements are misquoted and biased opinions are stated as fact. And we will have gold in our hair when the correct explanation is determined. Any errors or lapses will be forgotten with success but remembered with failure.

The opinion of NTSB regarding a cargo door problem for a high time Boeing 747 that occurred shortly after takeoff and left a sudden loud sound on the CVR and an abrupt power cut to the FDR was wrong in 1989 and was later corrected with AAR 92/02. Now in this 12 January letter 98 from NTSB to me, Mr. Wildey II wants me to accept the opinion of NTSB negating a cargo door problem for a high time Boeing 747 that occurred shortly after takeoff and left a sudden loud sound on the CVR and an abrupt power cut to the FDR. With no facts, just a vague opinion from anonymous officials. No can do. I determine truth by responding to facts, evidence, and data, not opinion. As I ask you to do, put little value in my opinion but much in facts, evidence, data. Disregard the messenger and pay close attention to the message: Water, wire, ground, power, poof, pop, boom, splat.

I am never rebutted with facts, only opinions from persons with made up minds from long ago.

Here's the sequence of thought and reactions to the cargo door explanation by closed minds:

1. No.
2. You're wrong.
3. Your'e crazy.
4. Ignore.
5. Go away.
6. Intimidation.

7. Ask questions.

I've been getting '1' all along. This 12 Jan 98 letter is a '2.' The Chairman's opening statement putting cargo door along with laser beam cause is a '3.' A few letters and two sentences in response to hundreds of letters and thousands of sentences is '4'. Exasperated statements implying I'm bothering officials who have already told me about the door is a '5'. Being visited by armed strangers authorized to shoot to kill in civilian clothes in a civilian car unannounced and uninvited to my front door to interrogate me based upon a contrary opinion is '6'. The question of 'why so few burned passengers' is a 7.

Who asked that question and I know the answer to who asked and why so few passengers burned. James Hall, Chairman of the National Transportation Safety Board asked that question several times at the hearing.

(Jim 1, as I think of James Hall, Jim 2 is James F. Wildey the II, Jim 3 is James Kallstrom, and Jim 4 is James Devany. I note similarities and detect patterns, just like AI 182, PA 103, UAL 811, and TWA 800 all have SLS on the CVR, sudden loud sound on the cockpit voice recorder.)

To get officials to number seven is my goal. It is very difficult. I recognize state '7' questions right away. One was 'any hoop stresses found?' Another is NTSB Chart 12 which lists AI 182, PA 103, UAL 811, and TWA 800 sudden loud sounds with abrupt stops. What does Chart 12, Exhibit 12B, say, is the state 7 question.

The six main open minded questions asked often are listed below and answered later in an included letter.

1. How and why does forward cargo door open in flight?
2. How does open door in flight cause nose to come off for AI 182, PA 103, and TWA 800?
3. Why did nose of UAL 811 stay on?
4. AI 182 and PA 103 not a bomb?
5. TWA 800 not center tank as initial event?
6. Explosive decompression enough to tear nose off?
7. Is there a conspiracy to keep cargo door explanation quiet?

End Part 1

From: John Barry Smith <barry@corazon.com>

Date: January 29, 1998 4:44:36 PM PST

To: FAAOAI

Subject: Part two of text version of letter

Lyle Streeter

FAA AAI

Aircraft Accident Investigator

FAA National Headquarters

800 Independence Avenue, S.W

Building FOB 10A, Room 838,

Washington D.C 20591

Dear Mr. Streeter,

Enclosed in text only part 2 is the latest written hard copy coming your way in the mail.

Best Regards,

Barry Smith

The below is from testimony at the hearing:

WITNESS WILDEY: "I can safely say that this is some of the most examined metal there is anywhere in the world, especially between the nose section and the aft section. Every -- literally, ever inch, every quarter inch of the fracture in the fuselage skin and the frames and the stringers and the center fuel tank in the wing center section, every inch of that structure has been examined in great detail."

JBS>Great! What about the overtravel impression damage on the forward cargo door hinge? What about the aft midspan latch pin heat damage? What about the smooth door frame and missing aft midspan latch? What about the red paint smears? What are your examination results?

Mr. Wildey> "Similarly, the forward cargo door which is just aft of station 520 on the lower side of the airplane has had some latching problems in the past. The examinations of the TWA airplane, however, conclusively show that this door was latched and locked along its bottom edge through the entire break-up sequence."

JBS>Great! The bottom eight latches were latched. Fine. Now, about the other two...were they latched at water impact? And the locking handle, locked? How about the two overpressure relief doors, open? And the torque tubes, and pins and skin, where are

they? Why not hung on reconstruction? Latching problems in the past? Yes, problems in the past.

Mr. Wildey|>"This

was brought to our attention, and the reason that we examined this was that three of the four nose landing doors had a red tag and were recovered from the earliest part of the debris field and, similarly, around the nose landing gear area there were some fuselage pieces that were recovered that had a red tag on it and were supposedly recovered from the red << the red << earliest debris field.

Of course it became a very distinct question, well, what happened up there, how did these pieces, the fuselage pieces in the doors get into the red zone?

Well, our group took this as a task to look at. We made a report on it and we determined that, for example, on the doors themselves that, yes, those doors apparently did come off the airplane.

They had a lack of damage on them that was consistent with early departure. We developed some hypotheses and scenarios that could allow the doors to depart from the airplane very early in the sequence, and it is consistent with the factual observations we have made.

so, for the doors we said, yes, it appears as though we have a sequence that could account for the doors to come off early, and we also examined the fuselage pieces right around there that had red tags on them, and we looked at all the features we could find, and for the fuselage pieces around there we said we find no physical evidence to suggest that those particular pieces actually departed the airplane early

on in the sequence.

I think, if I remember our report, we said we believed that those particular pieces should be treated as yellow zone parts because we don't find any way that they could possibly have come off the airplane early in the sequence and actually have been found in the red debris field.

Just as a side note, I am aware that the tags on those particular fuselage pieces from around the nose area are the so-called 2,000 series tags, and that is not my area of expertise, but these are the << these tags had some questions about their pedigree, if you will.

But, that is really not our concern. We are saying, and our group said that we don't believe those are red zone parts and we would treat those as yellow zone parts for the purposes of analyzing the break-up sequence."

JBS>That's amazing testimony. That's changing the territory to fit the map. The pieces were in the red zone because they came off first not because they were wrongly tagged. They came off first because the area around the nose gear is near the forward cargo door and that went first during the explosive decompression. The access door and the nose doors and the fuselage pieces around the nose gear doors all left first because that is consistent with explosive decompression when forward cargo door ruptures. It is not consistent with center tank as initial event. To change the status of evidence, to disregard location of evidence to fit theory, is wrong. To put yellow tags on pieces of fuselage that were originally red zone is wrong. It is like filing the edges of a puzzle piece to get it to fit.

What the transcript reveals is a prosecution of the center tank to the extent of adjusting evidence by changing location status. Red zone pieces were considered yellow zone to fit the center tank explanation. Not good.

Mr. Wildey II> "I think, if I remember our report, we said we believed that those particular pieces should be treated as yellow zone parts because we don't find any way that they could possibly have come off the airplane early in the sequence and actually have been found in the red debris field."

JBS>Well, there is a way, Mr. Wildey; cargo door rupture to door open to explosive decompression to nose off. If your facts don't fit the explanation, find another explanation, don't change your facts. You have changed the facts by calling red zone pieces of fuselage skin near the forward cargo door yellow zone pieces. And then to buttress the violation of investigative technique, the capability and accuracy of the recovering forces is questioned, but not your initial event explanation of center tank explosion. 'Blame the other guy' is not right, especially since they were not there to defend themselves of the accusation of sloppy work.

Ah, if only all jurors could change the evidence location to fit their biased view of the defendant. They would be happy. It is sort of like saying a bloody glove, although found over here, should really be over there, so let's say it was and consider it as such. It leads to false conclusions and injustice.

NTSB with TWA 800 has one accident to find a consistent explanation; I have four, AI 182, PA 103, UAL 811, and TWA 800. I can't change location of pieces of wreckage to fit cargo door explanation in any of those accidents and haven't.

Whenever I have a piece of the puzzle I have to find out where it fits in four 747 accidents. NTSB only has one with TWA 800. My model of course is AAR 92/02, UAL 811. I always go back to it. The extra effort put forth in 1992 to issue another AAR superseding a previous one now bears fruit six years later. It was worth the effort to retrieve the UAL 811 door and reconsider the conclusions based on new evidence. It put the clue of chafed wiring in the forefront and ruled out improper latching. It was worth the effort to reconstruct TWA 800 and to reconsider the earlier conclusions based on new evidence.

All my puzzle pieces fit into four accidents and are documented by official government accidents reports. Zany far out newspapers or underground ezines are not used, only NTSB, AAIB, Canadian and Indian government aviation documents. To read AI 182 report is to match TWA 800. To read AAIB PA 103 is to match UAL 811. All reports are available on web site www.corazon.com.

The facts and evidence about wiring/cargo door are repeated because apparently they are not being taken seriously. I am as serious as seeing my dead pilot lying on the ground all crumpled up as if someone had thrown an old flight suit in the corner, and he was in it.

Am I funny? Is cargo door weird? To me, to say documented events which have happened before happened again to TWA 800 is not weird but common sense. To say a door did something it wasn't supposed to do is normal; it happens every day in cars, ferries and spaceships. They either jam open or closed or pop open or snap closed unexpectedly all the time. Doors have opened routinely in flight in pressurized airliners for years. It's normal to say a door popped, not weird. To say a door popped

again in a high time Boeing 747 shortly after takeoff is normal if supported by facts.

To hear others say an event which has never happened before, a center tank explosion on a 747 in flight, or a missile shootdown of an airliner in US territory, happened to TWA 800 is weird. Tank fires and explosions have been designed against ever since the first flight over ninety years ago. They very rarely happen and even rarer with no clear ignition source. To match a new 737 on the ground to an old flying 747 for initial event is weird. To match an old flying 747 to an old flying 747 when both have an event occurring shortly after take off near the leading edge of the wing which killed nine people and left a sudden loud sound on the CVR and an abrupt power cut to the FDR is normal.

I think it's time you stop making fun of me, trying to brush me off, disregarding my conclusions, and treat this survivor of a sudden night fiery fatal jet plane crash with respect.

Or not. Your call.

The two most common causes of airliner crashes are mechanical problem or pilot error. Pilot error has been ruled out in TWA 800 because even if the pilot wanted to do what the evidence showed happened to TWA 800, he couldn't. Mechanical problem is then the most likely. Yet for a year and a half most effort was expended on the least likely event, bomb or missile. To look for something important which is where it always has been is smart but to look in places it has never been is weird. It's detached from reality thinking. It's denial of unpleasant truth. It's dreaming. It's wishful thinking.

Whenever mechanical cause was offered, only one was

suggested, center tank explosion. There are lots of possible mechanical problems to go wrong on a 747, and have happened before, such as aft pressure bulkhead rupture, engine and pylon falling off, to cargo door opening in flight, yet only one was investigated thoroughly, center tank explosion as initial event which has never happened before.

I take the insults of being called names, being made fun of, brushed off with cursory letter from officials, and visits by armed agents because I have to. It's life or death and I've been there. I know the fuselages of high time Boeing 747s are rupturing in flight and I know why. I want to stop it from happening again. The water must not meet the bare chafed poly-x wiring to turn on door motor to unlatch aft midspan latch to cause rupture then opening of door to explosive decompression to nose off to center tank explosion in fireball to water impact.

It's worth the risk to rule in or rule out the door and then to pursue the problem to fix it. It turns out not to be the door fault entirely but wiring, old faulty poly-x wiring that chafes to bare wire when subjected to prolonged vibration. And has several times before and has done it again.

AD of strengthened locking sectors was a partial band aid that didn't cover all the wound, it missed the two midspan latches. The symptom of unlatching in flight was treated but not the underlying cause, door motor power came on inadvertently.

I understand all the reasons for hoping against hope the cargo door is not implicated in TWA 800 crash. Hopes are rebutted by facts. The door is involved. It is shattered, pieces near it left first, latches are missing, petal shaped rupture is seen, and it's happened before.

There is a brave and also principled aircraft investigator out there. He will want to know just what the hell it was that crashed TWA 800 and he wants every 't' crossed and every 'i' dotted. He wants it explained and let the chips fall where they may. That investigator will be known by the questions he asks. They will be questions asked to which he will not know the answer but wants to know.

The following letter was sent to Mr. Wildey II and Mr. Streeter on 19 December 1997. It is worth repeating to all.

Lyle Streeter
FAA AAI
Aircraft Accident Investigator
FAA National Headquarters
800 Independence Avenue, S.W
Building FOB 10A, Room 838,
Washington D.C 20591

James F. Wildey II
National Resource Specialist
National Transportation Safety Board
490 L'Enfant Plaza East, SW.
Washington, DC 20594

I address you both as representing the United States government. You are officials and have the education, experience, and desire to investigate an aircraft accident of national importance. I know the differences between legislative branch and executive branch and NTSB and FAA, but

in a matter
of life and death, which this is, I prefer to address open minds,
not fixed
titles.

Mr. Streeter and Mr. Wildey, both of you asked a question
regarding the
cargo door rupture explanation for TWA 800 during the recent
public
inquiry. They were important questions and revealed an interest
in an
answer not yet known.

The formal question from Mr. Streeter to Mr. Wildey was, "Were
there hoop
stress fractures found on the wreckage of TWA 800 near the area
of damage?"
or words to that effect. The answer from Mr. Wildey was "Yes,
and around
stringer 40R," or words to that effect.

The informal question from Mr. Wildey to me was, "What did
you think of the
cargo door presentation?" or words to that effect. My answer to
Mr. Wildey
was "Very interesting, I wish to correspond with you about it."

I am now corresponding. I believe that discussion between an
informed
member of the public and officials about a matter of national
importance,
testimony on the public record, released public docket exhibits,
and

previously released government accident reports is appropriate and acceptable, even necessary sometimes. It takes everyone to help solve this mystery. FAA web page states, "The Office of Accident Investigation (AAI) is the principal organization within the FAA with respect to aircraft accident investigation and all activities related to the National Transportation Safety Board (NTSB)."

We were all at the TWA 800 fact finding inquiry in Baltimore. Were facts found? I certainly found some, important ones. I've put them together to attempt to persuade you that the forward cargo door aft midspan rupture explanation is a worthy line of investigation. The first goal is a comprehensive professional examination of that forward cargo door area to rule in or rule out rupture at aft midspan latch.

You can do that; I can't.

Specific suggestions:

1. Examine aft midspan latch pin for damage as was observed on UAL 811, NTSB AAR 92/02 page 33, "The forward midspan latch pin was relatively undamaged. The aft midspan latch pin had definite areas of damage. Both pins had wear areas where the cams would contact the pins during latching.

(Encl 1)

2. Examine the TWA 800 door hinge for damage as was observed in AAR 92/02,

page 35, "Several areas on the hinge sections, such as the fuselage hinge

sections, showed evidence of contact from the door during overtravel (See

figure 14.) In addition the fuselage forward hinge sections were slightly

bent." (Encl 2) Figure 14 is on page 40 and shows photograph of the hinge

overtravel damage. (Encl 3)

3. Examine two midspan latches from forward cargo door for damage. The

criterion for determining if latches latched was to check to see if still

locked and attached to adjacent fuselage sill or frame. The bottom eight

latches of TWA 800 door were attached to sill so conclusion latched. The

two midspan latches are unattached to frame so conclusion unlatched. The

door frame is smooth where the aft midspan latch is supposed to be attached

but isn't.

4. Examine forward and aft pull-in hooks of TWA 800 for compression and

smearing damage as was observed in AAR 92/02, page 45. (Encl 4)

5. Examine door and fuselage for paint transfer from one to the other as

was observed in AAR 92/02, page 41. (Encl 5) Red paint smears on TWA 800 on

white paint between passenger windows above cargo door may have come from red paint on top of cargo door. The red paint smears are large and frequent only along the top of the cargo door area and not found on the other 460 feet of fuselage trim. This indicates door below opened outward and slammed upward into fuselage, giving overtravel over 143 degrees on the hinge and transferring red paint from door onto white paint between passenger windows. The opening door with hinge attached took red trim fuselage skin with it and that may have slammed upward also onto white painted skin. Red paint smears are not scraped away white paint revealing red underneath but red paint on top of white paint. White paint scraped away reveals green primer.

6. Examine outer skin contour of the upper door piece for inward crushing as was observed in AAR 92/02, page 41. (Encl 5) Door blows outward and top of door smashes into fuselage above giving inward crushing not by water impact. Photo of TWA 800 top door piece shows such damage. (Encl 6)

7. Examine master latch lock handle housing and trigger for position. AAR 92/02, page 41, found it relatively flush with door outer skin. (Encl 5)

8. Examine floor beams again of TWA 800 to confirm statement in Docket No. SA-516, Exhibit No. 18A, Sequencing Study, page 20, "Downward separation directions were noted at STA 900, 880, 840, 820, 800, and 780..." and "The initial opening of the fuselage lower lobe (e.g. LF6A) would have the expected result of rapid depressurization accompanied by collapse of the main deck floor for some distance forward of STA 1000. The red area recovery of interior components as far forward as STA 600 would not be inconsistent with this floor collapse and associated structural breakup."

(Encl 7) This observation matches downward buckling as was reported in AAR 92/02, page 4, "The floor beams adjacent to and inboard of the cargo door area had been fractured and buckled downward." (Encl 8)

9. Confirm evidence on TWA 800 of direct circumferential tension or hoop stress tension found on lower right side skin in the red zone only, as stated in Docket No. SA-516, Exhibit No. 7A, Structures Group Chairman's Factual Report of Investigation, page 11. (Encl 9) This observation coincides with AAR 92/02 which states on page 11, "The cargo door and its associated hardware are designed to carry circumferential (hoop) load

arising from pressurization of the airplane." (Encl 10) If cargo door was fully latched and intact until water impact then there should be no hoop tension fractures. If the door was missing in flight, hoop tension fractures could be expected to be found and they were on TWA 800 leading to conclusion door was missing in flight.

10. Confirm door frame of TWA 800 which abuts aft edge of door is curved outward in petal shaped bulge indicating outward force rupture. Aft midspan latch is unattached to aft midspan latch pin halfway up the door frame.

Edge of door frame is smooth indicating door not missing by force but by unlatching of aft midspan latch. (Encl 6)

11. Establish large round rupture hole in TWA 800 photo centered at aft midspan latch is in fact a hole or something otherwise. (Encl 6)

12. Confirm outward peeled skin on TWA 800 upper skin as shown in photograph (Encl 6) which indicates outward force which matches AAR 92/02, page 6 photograph of peeled upper skin in same location. (Encl 11)

Essentially, Mr. Wildey and Mr. Streeter, TWA 800 can be matched to UAL 811 through NTSB AAR 92/02 and the TWA 800 public inquiry exhibits. UAL 811 was an inadvertent opening of the forward cargo door in flight. TWA 800 may be

also. A complete examination of the TWA 800 cargo door area should be done to compare with the UAL 811 cargo door area as reported in AAR 92/02. There are other things to examine in that TWA 800 door such as two overpressure relief doors for open or closed, torque tubes for bending, and viewing ports for direction of damage similar to AAR 92/02, page 44. (Encl 23)

Mr. Wildey, a complete examination of TWA 800 cargo door area requires more than the sentence from "Docket No. SA-516, Exhibit Number 15C, Report Number 97-82, Section 41/42 Joint, Forward Cargo Door, page 1, "Examination of the lower lobe forward cargo door showed that all eight of the door latching cams remain attached (along with pieces of the door itself) to the pins along the lower door sill." (Encl 12) The door is a known killer near the scene of its specialty crime, pressurized hull rupture. Exonerating cargo door requires more than a cursory analysis.

Eight latches is not enough when ten exist. Twenty percent of door material is not enough when 100% exists. The incomplete early examination of the cargo door before reconstruction was completed has resulted in three

distinct misinterpretations which continue to this day:

1. Entire door latched after initial event.
2. Door intact and attached to nose at water impact.
3. Water impact caused initial shattering of cargo door area.

Cargo door explanation proposes the door was not fully latched at water

impact, it was mostly latched, only 80%. The door was not totally intact at

water impact, it was partially intact; only the bottom 10% was attached to

bottom sill of frame. The aft midspan rupture gave outward force to

fuselage and door frame skin which burst outward. Explosive decompression

and subsequent tearing off of nose caused initial shattering of cargo door

area. The water impact gave any inward crushing damage to already shattered

cargo door area.

Mr. Wildey, I noticed your name is author of report, No 97-82 of Docket No.

SA-516, Exhibit No. 15C, Section 41/42 Joint, Forward Cargo Door, although

you must have relied on investigator Al Dickinson, AS-10 for input. The

report is dated April 22, 1997, a month before the reconstruction was

completed and the red paint smears, outward bulge at aft midspan latch and

general shattered effect became apparent. Mr. Ron Schleede of NTSB was kind

enough to report the cargo door was locked and latched to me in an email on

August 11, 1996, ten months before reconstruction completed.

(Encl 13)

Cargo door area was among the last parts to be reconstructed according to

the pictures on the CD-ROM from NTSB about TWA 800.

It is apparent a hasty conclusion was reached about the status of the

forward cargo door based upon incomplete evidence available at the time of

only eight bottom latches latched and that hasty conclusion has not been

modified. In Docket No. SA-516, Exhibit No. 18A, Sequencing Report, page

30, you write: "It is therefore possible that new scenarios

(sequences) may

emerge as new information is acquired whether it be from newly identified

parts, or simply a new interpretation of current information." (Encl 14)

Mr. Wildey, Yes, Yes, Yes! Can you do that? Can you write a new sequence as

new information and new interpretation is acquired? Can you add an

addendum/correction/errata sheet to Exhibit 15C, Section 41/42

Joint,

Forward Cargo Door? It would be written after the reconstruction was

completed in May which showed new evidence such as red paint smears which

have allowed for a new interpretation of events. A further examination of the forward cargo door area is now warranted.

Mr. Streeter, as an accident investigator I believe you put value in finding similar accidents to the one under current investigation from which similarities may be observed and conclusions drawn. The NTSB has done that for TWA 800: Docket No. SA-516, Exhibit No. 12-B, Sound Spectrum Study, page 21, Chart 12. (Encl 15) The sudden loud sound on the CVR which is followed by an abrupt power cut which occurred on four high time Boeing 747s is displayed for comparison. TWA 800, Pan Am 103, Air India 182, and United Airlines 811 are plotted together in that sequence by the NTSB. In addition, a Philippines 737 sound is added at the bottom.

The linchpin of the cargo door explanation is the sudden loud sound on the CVR. I believe that to be the sudden rushing sound of the air molecules as they push outward to equalize the higher inner pressure to the lower outside pressure. (The Air India 182 CVR sudden loud sound is matched to the CVR sudden loud sound on the DC-10 cargo door crash in the Canadian government accident report. (Encl 16))

It is apparent to me that the four Boeing 747 accidents shown in Chart 12 match in everything but duration and that is measured in microseconds. All are less than a second. All are followed by an abrupt power cut. The cargo door explanation states all Boeing 747 sudden loud sounds are produced by explosive decompression followed by severe disruption of the adjacent main equipment compartment cutting off power to FDR and CVR. The initial disruptive force is the explosive decompression but the ultimate destructive force is the 300 knots slipstream tearing off the entire nose.

The sudden loud sound does not match bomb or center tank explosion and is left as unexplained or called a vague structural breakup sound. A decompression air rushing sound would explain the sound spectrum of rise time, frequency components and amplitude. The abrupt power cut could be explained by nearby cables in adjacent main equipment compartment disrupted by the explosive force of the decompression.

Gentlemen, another clue to accident cause is the sequence of breakup and that is determined from wreckage plot. What departs the aircraft first may well be near the initial event. The NTSB has provided a study:

Docket No.

SA-516, Exhibit No. 22B, Trajectory Study Supporting Material,
page 45 in

faded numbers and page 30 in dark numbers. (Encl 17) Among
all the charts

of pieces of the plane coming off and when, there is one chart
that shows

the first to go, that is page 30 chart, Forward cargo door
trajectories.

The first item is A489, fwd lower cargo bay struct, FS 900. That
item left

even before the last ASR radar beacon to Islip radar. The next
item to go

before anything else in the entire plane is A470, R fwd lower
cargo bay

struct, FS 820. There are five other forward cargo bay structures
which are

plotted and leave soon thereafter. On dark page number 29 lower
frame

stringer 40L-42R is shown to leave very early. (Encl 18)

The overall appraisal was made by Docket Number SA-516,
Exhibit No. 22A,

Trajectory Study, page 3: "The wreckage distribution shows that
parts were

initially shed from the area just forward of the wing." (Encl 19)

Please

carefully agree, gentleman, cargo door is just forward of the
wing and the

center tank is not.

There is another interesting observation in an exhibit: Docket
No. SA-516,

Exhibit No. 7A, Structures Group Report, page 33: "5.1

Horizontal

Stabilizer, "Some of the items found in the horizontal stabilizer are

sections of seat track, a stator blade from turbine section, and glitter."

(Encl 20) On 5.1.1 Right Horizontal Stabilizer, page 34, "An engine stator

blade from turbine section penetrated the upper honeycomb surface near the

outboard trailing edge. (Encl 21)

Engine number three is on the right side inboard and would be the engine to

throw off a stator blade to penetrate the right horizontal stabilizer.

Engine number four is too far outboard of stabilizer. The left side stabilizer had no such engine part penetration.

Cargo door explanation relies heavily on engine number three data. It is

the one to catch on fire, lands apart from the other three, throws off FOD

into number four, ingests humans, and is heavily damaged upon retrieval.

Engine number three may well be the ignition source for the center tank

fire/explosion according to the cargo door explanation. The door ruptures/opens out and tears off, big hole appears, starboard engines

ingest foreign objects, 300 knots tears nose off, wings and fuel tanks and

fuselage fall and disintegrate and foddred on-fire engine number

three or
four ignites fuel vapor cloud and center tank at 7500 feet many
seconds and
thousands of feet lower after initial event of door rupture.

The four engines hold vital accident clues. To ignore and omit
that
information is wrong. They are four vacuum cleaners at the scene
of the
crime. The door rupture or center tank explosion would send
debris into the
engines. How much debris, what kind it is, what did the engines
do, and
what happened to them is vitally important. Blade tip rubs and
inlet
cowling damage reports are extremely relevant. Pratt and
Whitney was not
even a party to the investigation and no exhibit item was released
of the
engine breakdown. This is a grievous error, gentleman, can you
correct it?

A stator blade was embedded in the right horizontal stabilizer
right behind
engine number three. This indicates engine number three was
fodded early on
and threw off pieces which is consistent with cargo door
explanation and
inconsistent with center tank explosion in which engines
windmill and fall
intact to water.

NTSB AAR 92/02, page 2, has engine number three fodded by

baggage debris
and throwing off fod into engine number four which caught fire.
Both
engines had to be shut down. (Encl 22) Early news reports had
TWA 800
engine number three fodded with inlet cowl material and the only
engine to
show burn damage. UAL 811 had dents in right horizontal
stabilizer and
torn, punctured, and dented inlet cowl material according to AAR
92/02,
page 7. (Encl 24)

The engine breakdown report is vital and is connected to the
TWA 800
investigation by the stator blade in right horizontal stabilizer. The
engines are involved; they are not innocent bystanders. Engine
number three
may be the center tank mysterious ignition source. Can you get
powerplant
breakdown report exhibit released? Can you confirm for
yourselves engine
number three burnt, fodded, or otherwise different from 1, 2, or
4?

The cargo door rupture explanation is very detailed and explains
the
evidence, from streak to red paint smears to center tank
explosion. Please
inquire for more details or peruse www.corazon.com. At this
stage I believe
you gentlemen are not yet that interested in 'how' but 'if' door
shattered

in flight or on water impact. We agree door area did shatter but 'when' is the question. We agree the center tank exploded but 'when' is the question.

NTSB currently has center tank explodes first, then door shatters later, I suggest door area shatters first, then center tank explodes later. Door, then tank; or tank, then door? There is our item of difference in a concise sentence.

I offer hard evidence to support 'yes, door did rupture/open in flight for TWA 800.' (When center tank exploded is for later.)

1. Floor beam downward movement.
2. Hoop stress fractures.
3. Red paint smears.
4. Curved outward smooth door frame at aft edge of missing door piece.
5. Outward peeled skin.
6. Petal shaped outward rupture hole at aft midspan latch.
7. Aft midspan latch not attached to latch pin.
8. Inward crush of top piece of door.

Possible hard evidence of door rupture in flight:

1. Hinge overtravel impression damage.
2. Aft midspan latch pin damage.
3. Other matching items to confirmed cargo door opening, UAL 811, may be discovered with exhaustive examination of cargo door area.

Mr. Streeter and Mr. Wildey, here is my big picture overview:

(Everybody means us.)

1. Everybody knows the poly-X wiring in early model Boeing 747s, including TWA 800, had problems of easily chafing in vibration in the past. Cargo

door explanation says that happened again to TWA 800.

2. Everybody knows that chafed wiring can cause a forward cargo door motor to go to the unlatched position with UAL 811. Cargo door explanation says that happened again to TWA 800.

3. Everybody knows that high cycle Boeing 747s have a weak structural area aft of the flight deck and forward of the wing called Section 41 which requires retrofit of structural strengthening after 20000 cycles.

Cargo door explanation says TWA 800 at 18000+ cycles had not had that retrofit and cargo door area was thus weak.

4. Everybody knows that a forward cargo door opening on an (1) aged (2) high flight time/high cycles (3) early model Boeing 747, UAL 811 (4) which took off in dusk or darkness (5) running late (6) and during climb (7) experienced a sudden initial event near the leading edge of wing in fuselage which left a (8) short (9) sudden (10) loud (11) sound on the cockpit voice recorder, an (12) abrupt (13) power cut to the flight data

recorder, (14) foreign object damage to starboard engine #3, (15) more severe inflight damage on starboard side, (16) nine never recovered bodies, (17) port fuselage side forward of the wing relatively undamaged, (18) shattered, torn, and frayed skin in forward cargo door area on starboard side, (19) unusual paint smears in forward cargo door area, (20) rupture appearance of skin at aft midspan latch of the forward cargo door, (21) outward peeled skin on upper forward fuselage, (22) vertical fuselage tear lines forward of the wing and aft of forward cargo door, (23) had hinge stay attached to top piece of forward cargo door, (24) and destruction initially thought to be have been caused by a bomb but (25) later conclusively ruled out. Cargo door explanation says that all twenty five happened again to TWA 800.

Everybody knows an aged aircraft, TWA 800, with problem wiring, poly-X, with a weak area, Section 41, which had a previous fatal electrical fault cargo door opening in same model and type, UAL 811, could have a similar problem. AAR 92/02, page 92. (Encl 25) Cargo door explanation and evidence says that happened again to TWA 800. But only one believes it. And now

maybe you two gentleman.

At least believe the evidence enough to complete an exhaustive examination of the forward cargo door of TWA 800 on the wreckage reconstruction. Thank goodness it's there. The landing gear doors, which have never killed anyone, got twenty two paragraphs of damage description in Exhibit 7A; the forward cargo door which has nine confirmed kills, got one sentence in Exhibit 15C.

At least believe the evidence enough to request that the powerplant breakdown exhibit be released as part of the public docket so that the results may be examined and compared with other engine breakdown reports of similar accidents, UAL 811, AI 182, and PA 103, a grouping suggested by NTSB document Chart 12 in Exhibit 12-B.

At least believe the evidence enough to pursue the cargo door explanation by going to www.corazon.com and reviewing analysis of government accident reports and contact me at barry@corazon.com.

At least believe the current evidence enough to personally examine possible new evidence such as hinge and latch pin of TWA 800 door

hanging on
wreckage reconstruction.

Mr. Wildey, there were three large poster photographs of TWA 800 reconstruction behind you on the platform during the inquiry hearing. One was of hundreds of pieces of wreckage, one was of starboard side and one was of port side of wrecked aircraft. We three all saw those three pictures every day. They were real and included real things. I have discussed real things that were in those three pictures so close to us at the hearing: 1. Hinge, 2. Pins, 3. Peeled skin, 4. Door frame, 5. Red paint smears, 6. Round rupture hole, 7. Bottom latches, 8. Missing door material, 9. Downward floor beams, 10. Hoop stress fractures, 11. Shattered starboard skin, 12. Smooth port skin, 13. Door manual locking handle, 14. Door pull in hooks. 15. Center tank, 16. Vertical tears, 17. Right horizontal stabilizer.

During the hearing on the other side of the stage were rotated large poster photographs. For the first few days one photograph was of the CVR sudden loud sound showing rise time and frequency analysis. I have discussed that real thing and the real things connected to it by NTSB Chart 12

in Exhibit

12-B, which groups UAL 811, PA 103, and AI 182 and TWA 800 together.

The three photographs of wreckage showed a hangar floor with parts and

reconstruction. Nearby were other rooms with real things in them. I have

discussed those real things:

1. Flight Data Recorder, 2. Engines. 3. Cabin interior.

At the inquiry in front of us on tables were reams and reams of paper

compiled into exhibits for review and analysis. I have discussed those

exhibits:

1. Docket No. SA-516, Exhibit No. 18A, Sequencing Study, page 20, "Downward

separation directions were noted at STA 900, 880, 840, 820, 800, and

780..." and ""The initial opening of the fuselage lower lobe (e.g. LF6A)

would have the expected result of rapid depressurization accompanied by

collapse of the main deck floor for some distance forward of STA 1000. The

red area recovery of interior components as far forward as STA 600 would

not be inconsistent with this floor collapse and associated structural

breakup."

2. Docket No. SA-516, Exhibit No. 7A, Structures Group Chairman's Factual

Report of Investigation, page 11 which discusses direct circumferential tension or hoop stress tension found on lower right side skin in the red zone only.

3. Docket Number SA-516, Exhibit No. 15C, Report Number 97-82, Section 41/42 Joint, Forward Cargo Door, "Examination of the lower lobe forward cargo door showed that all eight of the door latching cams remain attached (along with pieces of the door itself) to the pins along the lower door sill."

4. Docket No. SA-516, Exhibit No. 18A, Sequencing Report, page 30: "It is therefore possible that new scenarios (sequences) may emerge as new information is acquired whether it be from newly identified parts, or simply a new interpretation of current information."

5. Docket No. SA-516, Exhibit No. 12-B, Sound Spectrum Study, page 21, Chart 12. The sudden loud sound on the CVR which is followed by an abrupt power cut which occurred on four high time Boeing 747s is displayed for comparison. TWA 800, Pan Am 103, Air India 182, and United Airlines 811 are plotted together in that sequence.

6. Docket No. SA-516, Exhibit No. 22B, Trajectory Study Supporting Material, page 45 in faded numbers and page 30 in dark

numbers. One chart that shows the first items to go, that is page 30 chart, Forward cargo door trajectories. The first item is A489, fwd lower cargo bay struct, FS 900.

The next item to go before anything else in the entire plane is A470, R fwd lower cargo bay struct, FS 820. There are five other forward cargo bay structures which are plotted and leave soon thereafter. On dark page number

29 lower frame stringer 40L-40R is shown to leave very early. 7. Docket Number SA-516, Exhibit No. 22A, Trajectory Study, page 3: "The

wreckage distribution shows that parts were initially shed from the area just forward of the wing."

8. Docket No. SA-516, Exhibit No. 7A, Structures Group Report, page 33:

"5.1 Horizontal Stabilizer, "Some of the items found in the horizontal stabilizer are sections of seat track, a stator blade from turbine section, and glitter." On 5.1.1 Right Horizontal Stabilizer, page 34, "An engine stator blade from turbine section penetrated the upper honeycomb surface near the outboard trailing edge.

Other real evidence was discussed as stated in official government accident reports:

1. US NTSB AAR 92/02 UAL Flight 811.
2. Canadian and Indian Aviation Occurrence, Air India Flight

182.

3. UK AAIB 2/90 PA Flight 103.

4. US NTSB CD-ROM .jpg pictures of TWA 800.

I realize not everything stated in reports is exact. It is as precise as possible and when discussing thousands of pieces of wreckage of a catastrophic mystery airplane crash there is room for modification of conclusions. Cargo door explanation is constantly altering precise sequence to accommodate new evidence such as downward floor beams and hoop stresses in TWA 800 forward area.

For open minds there are seven basic questions. For closed minds there are none.

The open minds ask these questions in any order:

1. How and why does forward cargo door open in flight?
2. How does open door in flight cause nose to come off for AI 182, PA 103, and TWA 800?
3. Why did nose of UAL 811 stay on?
4. AI 182 and PA 103 not a bomb?
5. TWA 800 not center tank as initial event?
6. Explosive decompression enough to tear nose off?
7. Is there a conspiracy to keep cargo door explanation quiet?

Let me answer those basic questions briefly:

1. I don't know about AI 182, PA 103, or TWA 800, but UAL 811

door open
cause was electrical short to door motor to unlatch position
which overrode
safety locking sectors and failed switch and door unlatched and
opened. PA
103 and UAL 811 had total forward cargo door openings while
AI 182 and TWA
800 had rupture at aft midspan latch with bottom eight latches
holding
tight. Door openings were probably a result of aging aircraft, out
of rig
door, chafed aging faulty poly-x wiring, weakened Section 41
area, design
weakness of no locking sectors for midspan latches, AAR 92/02,
page 12,
(Encl 26) and only one latch per eight feet of vertical door. AI
182, PA
103, and TWA 800 had similar circumstances.

2. Cargo door opens and huge ten by thirty foot hole appears in
nose,
structural members of door and frame are missing, floor beams
are
fractured, bent, and broken, aircraft direction is askew, flight
control
surfaces affected, engines damaged, and 300 knots, more than
the fastest
hurricane or force five tornado on earth, hits damaged area and
tears nose
off within three to five seconds.

3. Nose of UAL 811 may have stayed on because pilot said he
had just come
off autopilot and did not fight plane as it gyrated, or plane was
younger

than others, or the time from door opening to tearing off was 1.5 seconds and allowed the pressurization to be relieved somewhat and six less feet of width of hole was torn off. Cargo door inadvertently opened on the ground during UAL preflight in 1991 and no damage was done. Cargo door opened in flight two inches on PA 125 in 1987 and stayed attached to fuselage and only damage was cost of fuel dumped. Cargo door opened in flight for UAL 811 in 1989 and nine died when door tore off. Cargo door explanation for AI 182, PA 103, and TWA 800 has door opening inflight, tearing off, and then nose tearing off leading to three similar accident wreckage patterns, debris fields and total destruction. Door openings have different consequences depending on altitude, speed and mode of flight.

4. Yes, not a bomb for AI 182 and PA 103 as initial event. Evidence refutes bomb explanation and is in government accident reports which careful analysis will reveal and documented on www.corazon.com. Those accident investigators did not have the benefit of hindsight, the internet, or several subsequent similar accidents to compare and draw different conclusions.

5. Center tank exploded yes, but after door ruptured/opened, hole appeared in nose, nose torn off in wind, fuselage falling with disintegrating

fuel tanks and ignited by fodded and on fire engine number 3 or 4 at 7500 feet thereby explaining the Chairman's question, "Why so few bodies burned?" The answer is they were not there to be burned. The nose came off with the passengers inside cabin and descended to ocean alone. The center tank exploded into nothingness not the passenger compartment.

6. Explosive decompression is enough to rupture pressurized hull at weak spot, one latch for eight feet of door, in a weak area, Section 41, but not enough to tear nose off. The ultimate destructive force is the 300 knots of slipstream, more powerful than any wind on earth. If cargo door popped in balloon, the large hole would appear but the nose would stay on. In a tornado, nose comes off within three to five seconds.

7. There is no conspiracy, no plot, no coverup by anyone involved with the cargo door explanation:

a. No conspiracy of Sikh terrorists named Singh to put a bomb on AI 182;

the door ruptured in flight.

b. No conspiracy of Libyan terrorists or whoever to put a bomb on PA 103;

the door ruptured in flight.

c. No conspiracy to detonate a bomb on UAL 811 as the passengers thought,

as the crew thought and told the tower who told the Coast Guard

and crash

crews on the ground as they prepared for a wounded 747 coming in after a

bomb blast; the door ruptured in flight.

d. No conspiracy to put a bomb on TWA 800, no conspiracy of terrorists to

shoot a missile, no coverup by US Navy to hide accidental shutdown, no

coverup by Boeing, NTSB, FAA, TWA who know the cargo door is the problem

and are hiding that knowledge; the door ruptured in flight.

There is no conspiracy or cover up or plot but it is

understandable for the

public and others to believe that explanation: Cargo door cause is subtle.

1. The explosive decompression of door rupture mimics a bomb with noise and blast effects.

2. The events happen years apart in different jurisdictions with different airlines.

3. Explosive decompression of door rupture leaves no direct evidence such as soot, only noise on CVR tape.

4. The cargo door manufacturer and operator are large and highly respected companies.

5. Explosive decompression causes secondary diversionary effects such as

fireball from center tank explosion and relatively mild blast in cargo

compartment of incendiary device.

6. A door opening and slipstream are considered trivial things by the public who thinks of a car trunk opening at highway speed not understanding high internal force of pressurization, large size of cargo door, and destructive force of 320 miles per hour on weakened structure.

7. Cargo door explanation assumes responsibility for rupture by manufacturer, operator, government, while bomb or missile can be blamed elsewhere.

Everybody involved is doing the best they can, including us, to find out what happened to TWA 800 based upon what we know, our experience, and the evidence.

So, gentleman, thank you for reading and thinking so far, let me end with respectful requests and an anecdote.

Please:

1. Conduct a complete examination of the forward cargo door area on the TWA 800 reconstruction and add an addendum to Exhibit 15C and then release the document to the public docket.
2. Request with good reasons that the powerplant group exhibit be released to the public docket.
3. Investigate the entire cargo door explanation for four high time Boeing 747 accidents by visiting www.corazon.com, critically analyzing

presentation and email comments to barry@corazon.

Here's a true story that just happened to me two weeks ago:

On the way to the NTSB hearing from SFO I noticed my assigned Boeing 757, not 747, come into the gate after a flight from Miami. As the baggage handler opened up the forward outward opening, non-plug cargo door, at least two pints of water rained down on him. He did not appear disturbed and then went about his business.

I deduced that the hot humid air in the cargo compartment condensed after take off from Miami into water on the cold metal fuselage skin and pooled inside until door opened and released outside on the ground in San Francisco. This much water on possibly chafed wire bundles in the forward cargo compartment would explain how wires got shorted out to turn on door motor to unlatch position for UAL 811 taking off from Honolulu. It would explain why three of the four 747s had door open in climb or shortly thereafter. We've all had the air conditioner turn on inside a hot humid car or passenger compartment and have water vapor condense into fog; or go out in the morning to have metal car covered in dew with no rain;

or start
descent in jet and have water vapor fill the cockpit. It is possible
that
enough fog and dew inside a large metal cargo door compartment
could
condense into two pints of water.

Water and chafed old faulty wiring in a known weak structure
with a known
faulty device is a dangerous combination. Let us make it safe.

Best Regards,

John Barry Smith

FAA commercial licensed pilot, instrument rated, former Part
135
certificate holder.

Light aircraft owner, Mooney M20C

2000 hours Navy aircrewman radar operator/electronics
technician, P2V-5FS.

650 hours Navy reconnaissance navigator on carrier jet, RA-5C.

Survivor by ejection in sudden, night, fiery, fatal, jet airplane
crash,

June 14th, 1967.

(US Mail envelope with 26 formal enclosures and seven informal
ones to be
mailed tomorrow, 19 Dec, 97)

Above was letter to Mr. Wildey and Mr. Streeter.

Below is paragraph written in a long email of 19 Feb 97 from me

which resulted in Secret Service interrogation. The Senator denies initiating the investigation and I believe him.

John Barry Smith> Please avoid the option to do nothing. In some cases that is wise, in this one it is not. The door hazard exists and can happen again with varying catastrophic consequences. May I be melodramatic, Senator? Why not. After the Tonkin Gulf incident in 1964, we attacked and bombed North Vietnam. After Pan Am 103 in 1988, we attacked and bombed Libya. After TWA 800 in 1996, we attacked and bombed Iraq; all for thought-to-be good reasons. Well, if Air Force One or any of the four E-4Bs (Airborne Command Posts) (all modified Boeing 747s with outward opening cargo doors) have that forward door open in flight tearing off fuselage skin allowing the 300 knot CAS slipstream to enter nose and tear it off leading to the death and destruction of all aboard including the President and other high officials, then we will attack and bomb somebody. And it would be wrong. Just fix the door again and prevent the crash is the answer. (The door has failed before.)

Below is excerpt from Newsday newspaper with Jessica Kowal writer. Although I repeated then, as I repeat now, there is no conspiracy, no coverup, and no plot about cargo door explanation, she still wrote I said there was a conspiracy. After the article was written, it is now known that the midspan latches have no locking sectors so were not fixed; and only eight of ten latches checked so not all latched; and event is so sudden there would be no time for discussion among the flight crew. Newsday did not respond to my immediate request for a retraction of the conspiracy accusation quote.

"John Barry Smith of Carmel Valley, Calif., said he's putting his theory on the Internet to save lives. After viewing pictures of a

United Airlines 747 severely damaged when a forward cargo door opened during a 1989 flight, killing nine people, Smith decided cargo doors, not bombs, were the cause of explosions aboard Pan Am Flight 103, the 1985 Air India Flight, and now TWA Flight 800.

On his Web site, Smith uses photographs and documents to compare the United Airlines plane to the Pan Am and Air India planes and to conclude that malfunctioning cargo doors opened and ripped away the skin of the fuselages and then tore the noses off the planes. In an interview, Smith said he believes a door also fell off TWA Flight 800, and that the "streak of light" some say is a missile is actually the plane's falling cargo door reflecting light.

"This door is a prime suspect. This door has killed before," Smith said. "I didn't invent the cause of these crashes. The door popped open. It's not weird. It's a no-brainer. So that's when you get to the coverup."

The coverup, he said, is that Boeing and the federal government don't want to admit there's a major defect in the 747, potentially costing the company millions of dollars to fix and severely damaging the American economy.

Smith, who said he has been "sensitive" to doors since his finger was slammed in a car door when he was 5-years old, has contacted the White House, FBI, FAA, Air Force, NTSB, and airline insurance companies to alert them to his view of the problem.

"It's a case of human nature seeing what they want to see. They see a bomb, and they ignore what's in front of them," Smith said. Several aviation officials dispute Smith's theory.

Boeing spokesman Doug Webb said the company knew of problems with 747 cargo doors a year before the United Airlines accident, and that the airlines have subsequently retrofitted them with steel-reinforced locks. NTSB spokeswoman Shelly Hazle

said the agency examined TWA Flight 800's wreckage for a broken cargo door and discounted it as a cause of the crash. If the cargo door had opened in flight, a cockpit light would have gone on and the crew would have focused all their attention on the problem, Hazle said. Yet there is no discussion of the problem on the cockpit voice-recorder tapes, so the NTSB has ruled it out, she said. And, investigators said, Pan Am 103 and the Air India planes were both downed by bombs, not cargo doors."

The below was written in the New York Times, April 12th, 1997 by Matthew Purdy. The cargo door is put just before wacky explanation of laser beam, just as Chairman Hall did in opening remarks at public TWA 800 hearing.

"And they have hardly been bashful about relating their musings to investigators at the National Transportation Safety Board. One man writes at least once a week to the board, pushing his theory that the front cargo door blew off, setting in motion a catastrophic chain of events. Other amateur investigators have postulated that laser rays emitted from Long Island might have destroyed the plane."

Please, to compare cargo door to laser rays is an insult and I demand an apology. Or not. I'm joking. Laser rays are funny now but not in the future.

Cargo doors rupturing in flight are not funny now, never have been and won't be in the future.

Respectfully Submitted,

John Barry Smith
408 659 3552
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From: John Barry Smith <barry@corazon.com>
Date: February 4, 1998 12:51:48 PM PST
To: FAAOAI
Subject: **FAA says door may have separated in flight**

Lyle Streeter
FAA AAI
Aircraft Accident Investigator
FAA National Headquarters
800 Independence Avenue, S.W
Building FOB 10A, Room 838,
Washington D.C 20591

James F. Wildey II
National Resource Specialist
National Transportation Safety Board
490 L'Enfant Plaza East, SW.
Washington, DC 20594

Dear Mr. Streeter and Mr. Wildey, 4 Feb 98

This just in...

I received a letter from a manager in the Transport Airplane Directorate, Aircraft Certification Service, dated 30 January 98. This is the same Directorate who said door all latched and all intact at water impact. They have 'rethink' it.

After my recent letter of 15 Jan 98, they now respond, "While no one scenario has been categorically proven to be the cause, it is believed, based upon available data, that the center tank (CWT) explosion preceded any separation of the forward cargo door. The paint markings and structural deformation that you cite, do indicate an outward explosion, generally accepted to be caused by the explosion of the CWT. Furthermore, you mentioned that the forward cargo door was recovered a considerable distance from the rest of the structure. This could be due to its aerodynamic characteristics and prevailing winds at the time of the accident, rather than attributing this as the primary cause of the accident."

Well, well, well. This is very important. I send this to you, Mr. Wildey, because you have relied on the Directorate for the all bottom latches latched so all latched interpretation upon which Mr. Dickinson also relied and was the basis for Exhibit 15C, now in need of revision for position of water impact damage in door area, door intact, all latched and not opening in flight. If you talk to Mr. Neil Schalekamp, please thank him for his thoughtful response and tell him I'm now preparing an extensive response with documentation to be mailed to him.

Implications of above statement from FAA:

1. Door opened and separated in flight.
2. Door opening and separation caused by CWT explosion.
3. Door flew far away.
4. Outward peeled skin and bulging at aft latch caused by outward force of CWT explosion which blew door open to separation.
5. Door area damage, structural deformation, not caused by water impact but by CWT explosion.
6. Shiny metal object was in air to reflect evening red orange sunlight.
7. CWT as initial event is 'believed,' 'based upon available data' to be correct but not certain and amenable with new data to be revised.

Main deductions of FAA letter: Door opened in flight because of CWT explosion and flew away.

It's a small step but so important. After the door has been determined to open prior to water impact then the next step is to determine what made door open and everyone gets their turn.

1. CWT guys say center tank explosion blew away bottom of cargo hold, door, and nose.
2. Bomb guys can say bomb blew up center tank which blew away bottom of cargo hold, door, and nose.
3. Missile guys can say missile blew up center tank which blew away bottom of cargo hold, door, and nose.
4. Cargo door guy says electrical short from chafed poly x wiring turned on door motor to unlatch position which resulted in aft midspan latch rupture to door open to explosive decompression to blow away bottom of cargo hold to nose off to fireball and center tank explosion ignited by on fire engine

number three or four to water impact.

Now to provide documentation, facts, evidence, and data to determine which one of the possibilities actually did happen.

Cargo door/wiring has precedent, history, and probability on its side. But that will be in another letter presenting wiring/door explanation.

Mr. Streeter, this is the FAA doing the evaluation of the red paint smears and structural deformation so I thought I'd get this email off to you fast too.

The next paragraphs of the 30 Jan 98 letter from FAA present the CWT explanation as initial event because it was ignited by internal source, not external, and it's happened ten times before in transport hulls. The engine breakup is acknowledged but said not to have caused the explosion.

FAA and NTSB and I can agree there were events of a center tank explosion, door opened in flight, one engine came apart, paint smears and bulge at aft latch from outward force, and shiny metal object in air. It comes down to a time line, a timing sequence of the individual events. And it all has to make sense.

So, TWA 800 now takes on the aspect of an active aircraft accident investigation with explanation modifications based on new evidence and discussion going on between involved parties.

Regards,

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From: John Barry Smith <barry@corazon.com>
Date: February 4, 1998 11:34:17 PM PST
To: FAAOAI
Subject: **FAA says door may have separated in flight/resent**

Lyle Streeter
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Aircraft Accident Investigator
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800 Independence Avenue, S.W
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Regards,

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From: John Barry Smith <barry@corazon.com>
Date: February 13, 1998 5:16:28 PM PST
To: FAAOAI
Subject: **Need to talk to Chief Theoretician for TWA 800**

Lyle Streeter
FAA AAI
Aircraft Accident Investigator
FAA National Headquarters

Dear Mr. Streeter,

13

Feb 98

I need to talk to the TWA 800 chief theoretician, whoever that is. The evidence is clear, door opened in flight, now discussion on what it means needs to take place. Can you arrange a meeting of minds?

An important new agreement has been implicitly agreed upon by

FAA and NTSB regarding the forward cargo door of TWA 800: It opened in flight. It was not all latched and all locked and all intact at water impact but separated in flight. The new conjectured cause of the door opening in flight has been identified as the center tank explosion as the initial event. I offer evidence that the initial event was bare chafed wire shorting to ground and turning on door unlatch motor leading to rupture at aft midspan latch leading to explosive decompression leading to nose off leading to center tank explosion in observed fireball.

FAA and NTSB position is center tank explosion and soon thereafter forward cargo door separated in flight. I contend door separated in flight and soon thereafter the center tank exploded. The difference in agreement is which came first, the tank explosion, then the door separation; or door separated, then center tank explosion. The evidence on hand reveals the correct sequence.

I have attached a letter requesting to be interviewed by aircraft accident investigator professionals regarding this door first sequence. The letter lays out the reasons for door first then tank explosion, and against tank first, then door separation. I wish to speak with the chief TWA 800 theoretician.

The conclusion of door opened in flight may appear reasonable and is. The implications of that conclusion are profound. It cracks the case for TWA 800. It explains the evidence. It matches other door opened in flight Boeing 747 accidents from which other conclusions may be drawn. It makes clear the forest of four cargo door separating in flight 747 accidents of which TWA 800 is but the latest and probably not the last.

Four fatal 747 accidents in which the aft midspan latch is

ruptured and the forward cargo door separated in flight: AI 182, PA 103, UAL 811, and TWA 800, and the cause is the same, either all bombs, or all missiles, or all center tank explosions or all meteors, or all chafed wire shorting to ground...as clearly described in NTSB AAR 92/02 for UAL 811, the tree in the forest that was not totally cut down and thus available to be examined closely for the cause that almost did it in.

Door separating first in flight explains streak, explains the non-burned bodies, explains the ignition source of the fireball, explains the abrupt stop of sooting on top of fuselage, explains intact passenger door and shattered nearby cargo door, explains location of cargo bay wreckage in red zone, explains sudden loud sound on CVR, and explains abrupt power cut to FDR.

The next step is to examine the wreckage reconstruction of TWA 800 for bare chafed wires in the forward cargo hold that match AAR 92/02 bare wires on page 54 with enlargement on page 55.

As always, I invite questions and demands for documentation to support my claims.

Very Respectfully Submitted,

John Barry Smith
551 Country Club Drive,
Carmel Valley, CA 93924
408 659 3552

James Hall

Chairman,
National Transportation Safety Board

Robert Francis II
Vice Chairman
National Transportation Safety Board

Sam Farr
Member of Congress
17th District, California
House of Representatives
Congress of the United States
Washington, DC

John McCain
Member of Congress
Chairman, Committee on Commerce, Science, and
Transportation
United States Senate
Washington, DC

Thomas E. Haueter
Chief, Major Investigations Division
National Transportation Safety Board

James F. Wildey II
National Resource Specialist
National Transportation Safety Board

Lyle Streeter
FAA AAI
Aircraft Accident Investigator
FAA National Headquarters

Thomas McSweeny
Director, Aircraft Certification Service
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Doug Kirkpatrick
Aircraft Certification Service
FAA National Headquarters

Neil Schalekamp
Manager, Propulsion/Mechanical Systems and Cabin Safety
Branch
Transport Standards Staff
Transport Airplane Directorate
Aircraft Certification Service
FAA, DOT

Ron Wojnar,
Manager
Federal Aviation Administration
Transport Airplane Directorate,

Dear Chairman Hall,

9 Feb 98

I'm making a plea to you, sir; please interview me. Please interrogate me. Please question me. Please evaluate my intelligence analysis.

I quote you, sir, "The public hearing concluded on December 12, 1997, but the investigation will remain open. The Safety Board may at its discretion again reopen the hearing in order to make any new information part of the public record."

Please do that, Chairman Hall. Reopen the hearing, I suggest in Renton Washington or Calverton, and invite all the parties to include the engine manufacturer and examine all the exhibits to include the eyewitness, powerplant group, and wreckage plot.

Be a judge this time, not a prosecutor, and demand high standards of proof from each explanation group, CWT, bomb, missile, cargo door/wiring, and meteor. Please allow each explanation two hours. Give questions to rebut from your best investigators. Photographs, sounds, text, reports and idle speculation allowed. Stipulate all of the listed causes could have happened, but did they happen?

In the meantime, an important sequence event has been agreed upon by FAA: cargo door opened in flight for TWA 800.

Mr. Neil Schalekamp. Manager, Propulsion/Mechanical Systems and Cabin Safety Branch, the same directorate that earlier said forward cargo door all latched, all locked, and all intact until

water impact has reevaluated that conclusion. Here is the new one in a 30 Jan 98 letter to me:

"While no one scenario has been categorically proven to be the cause, it is believed, based upon available data, that the center tank (CWT) explosion preceded any separation of the forward cargo door. The paint markings and structural deformation that you cite, do indicate an outward explosion, generally accepted to be caused by the explosion of the CWT. Furthermore, you mentioned that the forward cargo door was recovered a considerable distance from the rest of the structure. This could be due to its aerodynamic characteristics and prevailing winds at the time of the accident, rather than attributing this as the primary cause of the accident."

This is coupled with your statement to me of 19 Dec 97 in which you said:

"However, to repeat, the investigation of the accident involving TWA flight 800 has revealed no evidence to suggest that a failure of a cargo door precipitated the event."

An important agreement has been reached: Forward cargo door opened in flight. The implications are profound.

As I read the implications of the two official statements:

1. Door opened and separated in flight.
2. Door opening and separation caused by CWT explosion.
3. Door flew far away.
4. Outward peeled skin and bulging at aft latch caused by outward force of CWT explosion which blew door open to separation.

5. Door area damage, structural deformation, not caused by water impact but by CWT explosion.
6. Shiny metal object was in air to reflect evening red orange sunlight.
7. CWT as initial event is 'believed,' 'based upon available data' to be correct but not certain and amenable with new data to be revised.

"...no evidence to suggest that a failure of a cargo door precipitated the event."

The implications of that statement are:

1. Cargo door failed in flight.
2. Failure of cargo door did not start the initial event.

To put the two statements together for current FAA and NTSB position:

1. Evidence shows cargo door opened in flight.
2. Belief is CWT explosion caused door to open in flight which caused paint markings and structural deformation.
3. Initial event which blew cargo door open was a CWT explosion.
4. Position is subject to change upon new evidence or interpretation of existing evidence.

The acceptance that the cargo door opened in flight may appear as a reasonable consequence to a large fuel explosion nearby. Fine. Let us agree solidly that the forward cargo door opened in flight and left paint markings and outward peeled skin as evidence. Why it opened is the next explanation sought. Here are the ones offered:

1. CWT blew door open which also blew nose off.
2. Bomb blew CWT up which blew door open and blew nose off.
3. Missile blew CWT up which blew door open and blew nose off.
4. Meteor blew CWT up which blew door open and blew nose off.
5. Electrical short from chafed poly x wiring turned on door motor to unlatch position which resulted in aft midspan latch rupture to door open to explosive decompression to blown away bottom of cargo hold to nose off to fireball and center tank explosion ignited by on fire engine number three or four to water impact.

May we agree to eliminate missile, meteor and bomb from lack of evidence in this discussion? Destruction sequence came from within, not without.

So, if CWT blew door open, it must have happened very quickly after explosion which means we are less than a second apart in agreement. If open door led to CWT explosion the time is still less than a minute. Altitude of initial event is within a few seconds also. Location in air of door opening is within a few miles. Location of initial event on TWA 800 is within a few feet. We are so close to agreement on initial event, Mr. Chairman.

After it is solidly agreed upon that door opened in flight, then many avenues of investigation open up, such as have there ever been any other high time Boeing 747s that shortly after take off suffered a door opening that left a sudden loud sound on the CVR and an abrupt power cut to the FDR? Yes, of course, UAL 811. UAL 811 open door cause was chafed bare wire shorted to metal. I contend it happened again with TWA 800, known to

have poly-x wiring and a non strengthened Section 41 retrofit.

NTSB Chart 12 of Exhibit 12B groups AI 182, PA 103, UAL 811, and TWA 800, all of which had forward cargo door opening event and all have different reasons why it happened. The important thing is cargo door opened in flight for those four. In fact, they all had aft midspan latch ruptures in the door, according to the government accident reports.

Which has more credence: a CWT as initial event and door blowing open as secondary event; or door opening as initial event and CWT explosion as secondary event. I contend the latter.

Boeing 747s suffer fireball and wing tank explosions as a secondary result of hull rupture, just recently the Saudi Airlines Boeing 747 burst into a fireball when hull ruptured by midair with a cargo plane. It has more credence to say fireball/fuel tank explosion happens after a catastrophic structural failure, not as the cause. I contend the center tank did explode on TWA 800 and it happened during the observed fireball; not before it nor after, but during. To say a center tank exploded during an observed fireball has more credence. To say the CWT explosion occurred before the fireball and was unseen has less credence.

CWT explosion as secondary event has more credence than initial event. As initial event CWT explosion has never happened on a 747. As secondary event fireballs have occurred before such as Saudi Airlines and PA 103 whose center wing tank and wing fell flaming down onto Lockerbie. Both wings were on fire and both secondary events to hull rupture in flight.

Now for door opening as secondary event to CWT explosion.

When the CWT exploded it did not blow open the latched and locked passenger door nearby the shattered and opened forward cargo door of TWA 800. An all latched door to blow open at the door frame from a fluid explosion is rare. Or if the CWT explosion blew the forward cargo door open, why not the closer passenger door which is intact and in place on the wreckage reconstruction? The answer is the CWT was not the initial event.

It has more credence, based upon past accidents, that the initial event was door opening leading to structural failure leading to CWT explosion and observed fireball. It has less credence that initial event was CWT explosion leading to passenger door intact and further away cargo door all shattered and blown open. There are other reasons to believe door opened before CWT explosion:

A center tank explosion as initial event has lower credence because:

1. Above center tank is a long fuselage skin tear line one side of which has soot markings and the other side, an inch away, is pure white, untouched by flame. There was an explosion which sooted that white skin above tank but it had to happen after the nose separated. An initial event of CWT would have sooted the entire area, on both sides of tear line, not just one side.

2. A CWT explosion strong enough to blow door open and nose off would be picked up by CVR and wasn't. Sudden loud sound on CVR does not match fuel explosion but does match previous cargo door explosive decompression in a DC-10 and UAL 811; and other high time Boeing 747 fatal accidents which were not center tank explosions, AI 182, PA 103, as shown by Chart 12 of NTSB exhibit 12B which groups them all with CVR printout of the that rare event of sudden loud sound followed by abrupt

power cut to FDR. None was CWT explosion.

3. A CWT explosion pressure wave is slower than a bomb and the power cut to the FDR would not be as sudden as it was. The abrupt power cut matches abrupt power cut to UAL 811, a non CWT event.

4. A center tank explosion would give center damage, not unilateral. An explosion would give more or less equal in flight damage to both fuselage sides forward of the wing and yet the damage is unilateral with the port side very smooth, and the right side shattered. Key word is 'center' and it wasn't.

5. A CWT explosion as initial event which was strong enough to blow nose of 747 would burn those in the vicinity, that is, those passengers above and forward of the center tank. They weren't. They were not burned because they were not there to be burned.

6. CWT explosion would fodd engines more or less equally. The unconfirmed evidence shows only engine number three fodd, burnt, stator missing, and landing apart from other engines.

7. CWT explosion as initial event strong enough to blow nose off would be strong enough to blow up other fuel tanks, an event that took place 42 seconds later and thousands of feet lower at 7500 feet giving fireball observed by eyewitnesses, but not initially.

8. Leaking fuel on fire from aircraft does not present as streak, it presents as a fire close in to aircraft and white smoke, not a light steak far away from plane. Photo of midair with Boeing 727 shows leaking fuel tank fire close in to craft, white smoke, and no streak. Fire was secondary event, not initial.

9. CWT explosion can occur with midair. A structural breakup of a Boeing 747 which is disintegrating in flight can catch fire into a fireball as shown by the Saudi Arabian Airlines Boeing 747 involved in a midair over India. The initial event was not a center tank fire/explosion and yet there was a fireball.

10. Eyewitness pilot saw the fireball of TWA 800 and stated altitude of fireball was 7500 feet, yet the initial event for TWA 800 was at 13700 feet. No fireball at 13700 feet reported. A center tank explosion as initial event strong enough to blow off nose of 747 would have had to be silent, have no visible fire, weak enough to not blow up adjacent tanks, and leave strange soot marks. Very unlikely with low credence.

11. Center tank fire as secondary event has high credence. It was seen by observers, it was not heard on CVR because power had earlier been cut, the soot marks match the sooted skin above the tank but not above the earlier detached nose, the tank was torn apart by destructive wind forces as it fell, ignition sources were nearby to ignite the fuel vapor cloud as it dispersed from compromised wing, and the passengers were not burned because they were not there to be burned. They had earlier been thrown outside into the slipstream of the gaping hole where the nose had been while the forward passengers continued on with the nose to water impact, unburned.

An electrical short to door motor as initial event has higher credence because:

1. Explosive decompression produces loud sound and mimics a bomb for pressure damage on seats and baggage. The force of explosive decompression as a consequence of hull rupture at cargo door mimics the force of an internal fuel explosion on

force of floor beams and stringers and outward force on skin. It is not unusual for the explosive decompression from an open door to be overlooked at first examination; the effects are subtle, the cause is compressed air molecules which leave no trace, and it is an unpopular interpretation.

2. NTSB computer simulation traced inflight breakup of TWA 800 to above and forward of the wing on the right side, exactly where the hole is formed when the cargo door tears away with fuselage skin.

3. First objects to leave TWA 800 at event time came from the forward cargo hold, as described in Docket No. SA-516, Exhibit No. 22B, Trajectory Study Supporting Material, page 45 in faded numbers and page 30 in dark numbers. Among all the charts of pieces of the plane coming off and when, there is one chart that shows the first to go, that is page 30 chart, Forward Cargo Structure trajectories. The first item is "A489, fwd lower cargo bay struct, FS 900." That item left even before the last ASR radar beacon to Islip radar. The next item to go before anything else in the entire plane is "A470, R fwd lower cargo bay struct, FS 820." There are five other forward cargo bay structures which are plotted and leave soon thereafter. The overall debris appraisal was made by Docket Number SA-516, Exhibit No. 22A, Trajectory Study, page 3: "The wreckage distribution shows that parts were initially shed from the area just forward of the wing." Please agree, Mr. Schalekamp, cargo door is just forward of the wing and the center tank is not.

4. Cargo doors opening in flight are more common than inflight fuel tank explosions and thus have more credence because more likely to reoccur. A cargo door accident exists, UAL 811, with much evidence which matches TWA 800 and described in NTSB

AAR 92/02. Two other Boeing 747 crashes exist, AI 182 and PA 103, with much evidence which matches TWA 800 and UAL 811, none of which was caused by a center tank fire. A left fuel tank fire accident of Iranian Boeing 747 exists which does not match TWA 800 in wreckage pattern, left wing alone, or extreme weather and lightning. A new Boeing 737 tank fire on the ground does not match an old Boeing 747 in flight. A KC-135 on the ground being serviced using JP fuel does not match a flying 747 using Jet-A.

5. Poly X wiring is known to be easily chafed from vibration and in aging aircraft cause fires and shorts as stated in NTSB public hearing on aging aircraft on Thursday in Baltimore. TWA 800 has poly-x wiring and was aged.

6. Section 41 is known to be a weak structural area on 747s and is strengthened at 20000 cycles. Section 41 is near the forward cargo door and TWA 800 had not yet had the strengthening retrofit with 'only' 15000+ cycles and 93000+ flight hours.

7. Right side of TWA 800 had more severe inflight damage than left indicating problem on right side, not center.

8. Stator blade in right horizontal stabilizer indicates engines not normal and fell to water windmilling but right side of aircraft near engine was spitting out fod. Engine number three is near forward cargo door on right side near the engine.

9. CVR of a previous 747 cargo door accident and two non center tank explosion 747 crashes match TWA 800 CVR.

10. FDR power cut of TWA 800 matches a 747 cargo door accident and two non 747 center tank explosion FDRs.

11. Sooting marks and abrupt stop of soot on fuselage above center tank show nose severed first and fire/explosion later. Only a mechanical problem to cause huge explosive decompression could cause such a catastrophe as the nose of a 747 to be torn off within three to five seconds.

12. Streak could be explained by shiny metal object spinning erratically away in evening red orange sunlight reflecting light to observers on ground who perceive surprised vision as streak. The time of day, the altitude of TWA 800, the angle of sun, the position of sun, plane, and observers is perfect for streak as shiny reflecting object.

13. Entire history of pressurized airliners rupturing in flight has been full of window/hatch/door openings and rarely center tank explosions, while fuel tank explosions are common as secondary events when catastrophe occurs in flight. From the Comet to DC-10 to Boeing 747 UAL 811, hulls rupture in flight from inadvertent opening of the hull, not fuel tank explosions. Inadvertent opening has more credence as initial event than fuel tank explosion. Fuel tank explosion has high credence for secondary event.

14. Door opening in flight as result of fuel explosion is rare. If door properly secured it suffers same damage as nearby doors, not distinctly shattered. TWA 800 has shattered cargo door but nearby passenger door is intact.

15. Injuries of passengers is consistent with door open first then nose off then later fire/explosion after passengers are away from explosion.

16 Electrical fires have occurred in forward cargo hold of 747s before: Exhibit 9C, Attachments to the Systems Group Factual Report page 44, 45, 46:

A. Nov 1, 1996, burning smell in forward cargo compartment, found damaged wiring shorted to ground, charring found.

B. Oct 12, 1996, Wire bundle arcing and resultant fire at aft bulkhead of forward lower lobe cargo hold on 747-200 freighter.

Wiring/door explanation is supported by evidence in the other cargo door open accidents, AI 182, PA 103, UAL 811 in official reports. Add TWA 800 and they all had the fuselage rupture forward of the wing and door burst open. Two governments imply bomb blew door open, one said electrical short, and another has CWT exploding. And they all have a sudden loud sound on the CVR and an abrupt power cut at initial event time. They are all most likely the same cause, either all CWT explosions, all bombs, all meteors, all missiles, or all wiring short to door open motor.

A digression, Mr. Hall. I watched you sympathetically talk to the victim's families and their haughty reaction at the public hearing. When the victim's families ever complain again about the pace of the investigation, tell them that if Flight 800 had been all robot crew cargo plane that crashed in same spot, not much would have been done. But for their loved ones thousands of people have labored long and hard to find out the cause and spent millions of dollars, and anguished over it for a year and a half. For them is why we do it. It's all for them, not in spite of them. Their grief is disturbing their judgment. To assail those that wish to help is wrong. Yelling and calling out names may make them feel better but it does not solve the problem. Quiet conversation over charts, text, pictures, and drawings is best.

To summarize, recent letter by FAA branch manager from same directorate from which the initial dismissal of door came now says door opened in flight . The position that all cargo doors all latched and all locked at water impact is voided. The new position is door opened in flight and CWT explosion did it.

Let me present my case of electrical short from bad poly-x wiring to you or your expert representative, Chairman Hall. Give me my chance equal to missile and meteor guys.

Give me two hours and I can attempt to persuade you to electrical versus any other explanation such as tank explosion from mystery internal ignition source, or bomb that leaves no bomb sound or residue, or missile that has no corroborative evidence. The one that holds the evidence together is electrical short that shorted to metal and turned door unlatch motor on and aft midspan latch, with no locking sector, turns just a bit past dead center, and 38115 pounds of compressed air pressure on the aft midspan latch and it ruptured, then increasing fast moving molecules opened whole door leaving red paint smears above just before explosive decompression blew out twenty by forty feet of fuselage skin on the right side forward of the wing. Like it all happened before as described in NTSB AAR 92/02 for UAL 811.

Can I go down to Los Angeles to meet an NTSB representative who will give his full attention to the wiring/cargo door explanation?

An explanation that includes chafed wiring to cargo door to CWT explosion is an explanation that comes from NTSB gathered evidence over the years. It is only through the diligence of NTSB years ago that another similar accident can be matched,

UAL 811 to TWA 800. NTSB has only had the full investigation for less than two months. Another approach is to start with a clean sheet of paper. Shake off the FBI and their inherent distrust and secrecy. This is an airplane crash, not a bank robbery.

The position that forward cargo door opened in flight for TWA 800 is the key to cracking the case. The case of TWA 800 called the fuselage was cracked when hull ruptured when small hole appeared and allowed explosive decompression to take out huge rectangle of skin which allowed the 300 knots to tear nose off which allowed wing to fall and disintegrate and be ignited by nearby fodded and on fire jet engines. Small hole appeared when chafed wire shorted door motor to on which attempted to unlatch door but bottom eight locking sectors held so only aft midspan latch, with no locking sector, was able to come partially unlatched which allowed the 38115 pounds of internal force to burst through latch area.

To substantiate above analysis requires pointing to pictures in AARs, reading text from NTSB Exhibits, and looking at drawings from AAIB report. I can do that in person with you or your representative either here in Carmel Valley California, Los Angeles, San Francisco, or even in Renton, Washington. Have I not earned the right to that consideration based upon my analysis that door opened in flight as determined by the evidence of TWA reconstruction and now agreed upon by authority? Can you set up an appointment with me with one of your NTSB investigators?

Very Respectfully Submitted,

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From: John Barry Smith <barry@corazon.com>
Date: February 21, 1998 10:48:51 AM PST
To: FAAOAI
Subject: Fluid causes problems for 737

Dear Mr. Streeter,

This just in, the below is AAIB report on a 737 that had inflight problems.

To say similar event happened to a 747, TWA 800, as I did a few months ago, is no longer strange, there is a precedent.

Will you please engage in dialogue with me? Use my experience, research, and drive to figure 800 out.

UAL 811 is real, NTSB AAR 92/02 is real. It is the key. Stator blade is real. The engines were not normal, the powerplant report is vital.

Cargo door opened in flight, just as you showed to yourself with

the hoops stress question and now agreed to by FAA directorate in Renton.

Your maintenance cwt hatch question was also very revealing. It was not burnt and landed differently because it left early, before the center tank explosion. That two foot hole is probably how the on fire foddred engine flame exhaust got into the tank and ignited it. The source was engine and the flame way in was the hole left by the detached hatch.

Will you please refer an accident professional to have a discussion about the wiring/cargo door cause for TWA 800 if you can't do ti? Will somebody please talk to me?

Regards,

John Barry Smith

Aircraft Incident Report No: 1/98 (EW/C95/10/4)

Synopsis The incident was notified promptly to the Air Accidents Investigation Branch (AAIB) by the operator and the investigation began

that evening. The AAIB team comprised Mr D F King (Investigator-in-Charge), Mr P D Gilmartin (Operations), Mr C G Pollard

(Engineering), Mr S W Moss (Engineering), Mr A N Cable (Engineering) Ms

A Evans (Flight Recorders). The crew reported at 1330 hrs at Gatwick to

carry out a post-heavy maintenance check, test flight on the

aircraft.

The first officer (F/O) completed the external check, while the commander completed the 'Flight Deck Preparation' items of the aircraft

checklist. A Standby (STBY) Rudder system check was carried out with no

abnormalities noted and during taxi before take-off, the Yaw Damper

indicator showed normal response to turns. When the aircraft was in

straight and level flight at FL200 with an indicated airspeed of 290kt,

Autopilot and Autothrottle engaged and Yaw Damper ON, the aircraft

experienced roll/yaw oscillations. The Flight Data Recorder (FDR) showed

that the Autopilot and Autothrottle were disengaged, and the commander

reported that the Yaw Damper was switched OFF but the crew were unable

to stop the oscillations. A MAYDAY call was broadcast at 1609hrs. The

crew had the impression that the bank angle would have continued to

increase had opposite roll control inputs not been applied.

(b) Causal factors The investigation identified the following causal

factors: 1 Contamination of the connector on the Yaw Damper Coupler, in the E&E

Bay, by an unidentified fluid had occurred at some time prior to the

incident flight and compromised the function of its pin to pin

insulation.

2 Sufficiently conductive contaminant paths between certain adjacent pins had affected the phase and magnitude of the signals transmitted to the Yaw Damper Actuator, thereby stimulating a forced Dutch Roll mode of the aircraft.

3 The location of the E&E Bay, beneath the cabin floor in the area of the aircraft doors, galleys and toilets made it vulnerable to fluid ingress from a variety of sources.

4 The crew actions immediately following the onset of the Dutch Roll oscillations did not result in the disengagement of the malfunctioning Yaw Damper system.

4 Safety recommendations

4.1 It is recommended that the FAA :

- 1) Require as soon as practical a visual inspection of all Boeing 737 aircraft Electrical and Equipment (E&E) Bays to check for fluid ingress into avionics components, their connectors and associated wiring. Such inspection should involve the minimum disturbance of equipment and connectors commensurate with a thorough examination for contamination. Where such contamination is found, the component should be removed and despatched to workshops for examination.
- 2) Require as

soon as practical an inspection of the area in and around the E&E Bay

for evidence on the structure and fittings of recent fluid leakage such

as wet corrosion, staining and crystallised deposits. Such evidence

should be investigated to ensure that, where the source of the leak is

not apparent or readily rectifiable, no potential exists for it to impinge upon the avionics components, their connectors or wiring.

(Recommendation 96-3) 4.2 It is recommended that the FAA and Boeing : 3)

Conduct an urgent review of the measures incorporated into the Boeing

737 to prevent fluid ingress into the E&E Bay, its equipment, connectors

and wiring and as necessary require modifications to ensure that the

equipment, connectors and wiring are provided with protection consistent

with reliable operation. 4) Conduct a review of the Aircraft Maintenance

Manual to ensure that clear and specific instructions are contained

therein to enable evidence of fluid ingress, even if not apparently directly impinging on electrical equipment, to be identified during

routine maintenance. It should also be ascertained that any routine

testing for leaks in the toilet, galley and airstairs systems should be

done with the systems functioning fully throughout their normal

operational cycle to ensure that any leaks which only occur during, for example, draining or replenishment cycles are detected. (Recommendation 96-4) It is further recommended that: 4.3 The Boeing Airplane Company promulgate the findings of the E&E Bay Assessment Team to all operators and that the recommendations be actioned through Service Bulletins to maximise the protection from fluid ingress of bay housed electronic components in current aircraft. (Recommendation 97-60) 4.4 The CAA with the FAA review FARs and JARs with a view to requiring that the location of electronic equipment be arranged during the aircraft design so as to minimise the potential for contamination by fluid ingress, with the intention of ensuring that the equipment, connectors and wiring are provided with protection consistent with reliable operation less heavily dependant on maintenance practices. (Recommendation 97-61)D F King
Inspector of Air Accidents Air Accidents Investigation Branch
Department
of the Environment, Transport and the RegionsNovember 1997

From: John Barry Smith <barry@corazon.com>

Date: February 27, 1998 4:55:02 PM PST

To: FAAOAI
Subject: Inward or Outward

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FAA National Headquarters
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Bob Breneman,
Aerospace Engineer,
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1601 Lind Ave. S.W.
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Dear Mr. Streeter,
Dear Mr. Wildey,
Dear Mr. Schalekamp, and
Dear Mr. Breneman,

27 February 1998,

Thank you for each of your personal letters and emails to me. Your opinions are respected by me and therefore I carefully read your words, try to understand the thought, and analyze the conclusions.

The most recent letter is from Mr. Neil Schalekamp, 19 February, 1998. Since we are all involved with safety and in particular TWA 800, I thought that I would include all of us in a presentation of some very basic evidence leading to conclusions.

I consider myself the open person and willingly share my letters with you and would expect the same from you. This is a professional aviation safety matter and precision, documentation, and frank discussion are required.

The primary question to be answered from this presentation is whether the significant damage in a crucial area of TWA 800 was an outward explosion or was the shattered skin inward and caused by water impact.

Basic evidence is to be derived from:

1. NTSB picture of TWA 800 reconstruction,
2. Testimony at public hearing on TWA 800.
3. Text from NTSB Exhibits on TWA 800.
4. Charts from NTSB Exhibits on TWA 800.
5. NTSB Aircraft Accident Reports.
6. Correspondence from Mr. Wildey, Mr. Streeter, Mr. Schalekamp, and Mr. Breneman.

Evidence discovered:

1. Red paint smears on white paint above forward cargo door.
2. Metal petal shape bulge at aft midspan latch of cargo door.
3. Outward peeled skin in various places forward of the wing on the right side.
4. Unburnt center tank maintenance hatch.
5. Downward bent floor beams in cargo hold area.
6. Hoop stress forward of the wing on the right side.
7. Red paint transfer on right horizontal stabilizer.
8. Jet engine stator blade embedded in right horizontal stabilizer.
9. Red-orange streak reported by many eyewitnesses.
10. First pieces of TWA 800 to leave after initial event came from forward of the wing and from cargo hold.
11. Missing midspan latches from TWA 800 reconstruction.
12. Extensive significant matches with other 747 accidents.

Basic conclusions:

1. Fireball occurred between 5000 and 9000 feet.
2. Center tank exploded.

Basic conclusion to be determined:

Outward explosion forward of the wing on the right side in flight caused paint markings and structural deformation or nose all intact and damage caused by water impact.

Intermediate conclusions if outward explosion:

1. Door opened and slammed upwards and transferred red paint to white paint.
2. Pressurized hull rupture at aft midspan latch of cargo door.
3. Maintenance hatch separated before center tank explosion.
4. Decompression in cargo hold bent floor beams downward.
5. Door opened in flight which resulted in hoop stress.

6. Red painted pieces of door flew directly aft and struck right horizontal stabilizer.
7. Engine number three became damaged from debris ejected from cargo hold and disintegrated the forward stator section allowing a stator blade to fly directly aft and impale on the right horizontal stabilizer.
8. Maintenance hatch spin away fast from center tank and reflected evening red-orange sunlight and perceived as streak to observers far away.
9. Serious event occurred forward of the wing on the right side.
10. Midspan latches status undetermined, missing, destroyed, or not hung.

Advanced conclusions if outward explosion:

1. Door opened in flight causing large explosive decompression rectangle which allowed 300 knot slipstream to tear nose off.
2. Center tank exploded when fiery exhaust from damaged number three engine center tank through three foot empty maintenance hatch hole.
3. Door opened why door motor turned on and tried to unlatch the twelve latches but the bottom eight held while midspan turned just enough to allow the 38115 pounds of internal pressure to rupture the latched area.
4. Door motor turned on when fluid, probably water, shorted bare chafed poly-X wiring to metal fuselage.
5. Wiring became chafed from excessive vibration in high time, high cycle Boeing 747s.

Basic Actions:

1. Fireball confirmed.
2. Center tank explosion confirmed.
3. Confirm outward explosion by confirming door opened in flight by examining door hinge for overtravel impression

damage, midspan latch pins for heat damage, red paint in unusual places matched to red paint in door area, which can be matched to data in NTSB AAR 92/02.

Intermediate Action:

Confirm chafed wire by examining all wiring for chafing in forward cargo hold and adjacent main equipment bay of TWA 800.

Advanced Action:

Inspect all early model Boeing 747s for fluid and chafed wiring in electronic bays and cargo holds.

Now, to the 19 Feb 98 letter from Mr. Schalekamp.

Mr. Schalekamp, thank you for your thoughts on TWA 800. Let's go line by line:

NS>"It appears that you are determined to impose your theory about the events that led to this unfortunate accident upon the official investigators."

Well, sir, I'm flattered, would that I could.

It not me that is imposing anything; it is the evidence. The evidence is causing the sleepless nights, not me. The evidence apparently contradicts NTSB and FAA Northwest Region's opinion that center tank was initial event.

1. Red paint smears on white paint above forward cargo door.
2. Metal petal shape bulge at aft midspan latch of cargo door.
3. Outward peeled skin in various places forward of the wing on the right side.
4. Unburnt center tank maintenance hatch.

5. Downward bent floor beams in cargo hold area.
6. Hoop stress forward of the wing on the right side.
7. Red paint transfer on right horizontal stabilizer.
8. Jet engine stator blade embedded in right horizontal stabilizer.
9. Red-orange streak reported by many eyewitnesses.
10. First pieces of TWA 800 to leave after initial event came from forward of the wing and from cargo hold.
11. Missing midspan latches from TWA 800 reconstruction.
12. Extensive significant matches with other 747 accidents.

I'm not making any of the evidence up. NTSB and FAA provided the evidence and it's real. It can be touched, heard, and seen.

You state Transport Airplane Directorate has responded four times to me, and thank you very much. A few more times and you will be tied with Senator McCain for personal responses to me regarding this most important safety matter. My Congressman has written ten personal letters to me, including the one on which was attached to a 26 September 1997 letter from Mr. McSweeney to my Congressman stating that he would get back to the Congressman within thirty days with a final reply, and that was five months ago. So, in a sense, Airplane Transport Directorate of Aircraft Certification Service owes one to the cargo door explanation.

NS> "Please take note that this office will no longer be responding to your further inquires (sic) about these same concerns, including your February 6 and February 9 letters that I just received."

Well, you're the manager, so 'office' means you. To say you received letters enough to read the dates and told me about them means you have already responded to them. To refuse to read or

pass on extensive, detailed, supported by NTSB documents letters which come from a pilot and crash survivor which present an immediate safety threat to airplanes under your responsibility is an amazing attitude and contradicts your earlier statement, "Please be reassured that each of us within the FAA feels a deep responsibility to aviation safety and will take actions to correct an identified unsafe conditions." Refusing to read letters containing an identified unsafe condition (water meets chafed wires) is an action but it does not correct the unsafe condition, it runs away and tries to ignore it.

Fear is why you are annoyed and worry is why you want the messenger to go away. And it's not me that brought the fear, it's the evidence. Mentally making me go away does not make the evidence go away. There will always be those many red paint smears above the cargo door that indicate outward explosion, then door opening and slamming upward leaving paint transfers, exactly like UAL 811 as stated in NTSB AAR 92/02. I have not made a weird explanation for some flimsy evidence. I have made a solid explanation with documentation based upon solid evidence. The paint smears are real. The stator blade will outlive us. The outward peeled skin will always be there, matching photographs of UAL 811 of same area and indicating outward explosion, just like UAL 811.

Hard, solid evidence:

1. Red paint smears
2. Bulge at latch
3. Outward peeled skin
4. Unburnt center tank hatch.
5. Downward floor beams
6. Hoop stress
7. Paint transfer on stabilizer.

8. Stator blade embedded in stabilizer.
9. Red-orange streak.
10. First pieces to leave came from cargo hold.
11. Missing midspan latches

NS>"The theory of an explosive decompression, due to a sudden opening of the forward cargo door was one theory that was examined. However, it has been determined that this did not occur."

Well, Mr. Schalekamp, questions:

1. Who examined the theory? I have evidence the door was only partially examined, that is, only eight latches checked and none of the other door mechanisms to include the manual locking handle, for heaven's sakes.
2. Who determined the explosive decompression did not occur? Bernard Loeb? It did occur, it's obvious by looking at the damage forward of the wing, and anyway, the center tank explanation requires explosive decompression of fuselage forward of the wing, and structure report Exhibit suggests explosive decompression bending floor beams downward. No one has ever determined explosive decompression did not occur forward of the wing on the right side. Who determined the door did not open in flight? Bernard Loeb? Who determined there was no outward explosion forward of the wing on the right side? Bernard Loeb? I know it wasn't you because you determined there was an outward explosion there. I hope the FAA does not get like the FBI or CIA with no accountability from anonymous public officials who give opinions about noseless 747s that can climb 3000 feet in 20 seconds. The Chief Theoretician for TWA 800 is missing in action; who is it? Bernard Loeb? What is his opinion about twisted metal and red paint and stator blade and hoop stress which offer clues to inward or outward force?

NS>"Based upon the existing evidence, the NTSB...believes that the probable cause of the accident was a CWT explosion, due to an internal fuel tank ignition source."

Well fine, but the issue here is not probable cause but outward explosion or inward damage from water impact on that crucial area of TWA 800. I don't understand the reluctance to say outward explosion even though it agrees with center tank outward explosion nearby. I don't understand the reluctance to agree with me when I agree with you. You said outward explosion and I agree. It makes sense. It looks like it in the picture. The damage matches another outward explosion in a high time Boeing 747. The paint markings and structural deformation that I cite do indicate an outward explosion.

NS>"You apparently believe that the ...door precipitated the accident scenario by initially separating from the airplane."

Well, actually, I did think door started accident for eight years for high time 747 accidents that yielded a sudden loud sound on the CVR and an abrupt power cut to the FDR. Now I believe the door opening is preceded by latch rupture preceded by door motor on preceded by electrical short preceded by water onto bare chafed wire preceded by long term vibration and other stresses on the wires.

NS>"The evidence from the reconstructed 747 airplane reveals that the forward cargo door was attached to the forward section of the airplane and was latched in the closed position when this section of the airplane impacted the ocean."

Whoa! Not true! What evidence? There is no evidence showing

door all latched and locked and all intact at water impact. There is great evidence showing outward explosion causing shattered skin which occurred before water impact. The door is not in one piece but many. Yes, the bottom 10% and the top 10% stayed with the nose. 20% is not the whole door. What evidence says it exploded outward? Your evidence, Mr. Schalekamp. Your statement, "The paint markings and structural deformation that you cite, do indicate an outward explosion, generally accepted to be caused by the explosion of the CWT." What happened? Why the switch from outward explosion to inward damage from water impact? Why now say door all intact until water impact? The evidence is still there, it hasn't changed. The evidence from the reconstructed 747 airplane reveals that the forward cargo door is shattered from the outward explosion which left paint marks and structural deformation.

Mr. Schalekamp, Mr. Wildey, Mr. Streeter, and Mr. Breneman, let us look at the picture of the right side of TWA 800 reconstruction. Let us give an opinion based on the evidence. Is the shattered rectangle of about twenty feet wide and forty feet high forward of the wing an outward explosion or inward from water impact. It's a basic question. It's easy to answer with ample evidence one way and little the other. It is an important question which must be conclusively determined one way or the other. The implications are profound with far ranging consequences for safety.

NS>"You may not agree with the reasoning of the official accident investigators, but I want you to understand the evidence to date indicates that the CWT explosion preceded any fuselage breakup, including damage to the forward cargo door."

Well, sir, I want you to understand that right now I'm trying to

sort out whether the shattered, outward peeled skin, red paint transfer marks, outward bulged metal at aft midspan latch, and missing 80 percent of cargo door area was caused by an outward explosion as you stated, or inward damage from water impact as you stated.

You can help me by telling me what evidence made you change your mind. I hope it was not an opinion from a senior who does not know what an outward explosion looks like on a 747 but does know what the accepted explanation is and is not going to be swayed by new evidence or new interpretations of evidence. This is life and death, not annual performance review.

There's no going back. Outward explosion is on the record. And it's true. It is a very sad situation when truth is feared and falsehoods embraced. Outward is true, inward is false. How do I know? Because you told me, Mr. Schalekamp, that's how. Have you changed your mind? Let me see the words, "Paint markings and structural deformation do indicate inward damage from water impact," instead of, "The paint markings and structural deformation that you cite, do indicate an outward explosion, generally accepted to be caused by the explosion of the CWT"

That would be a correction to your earlier conclusion of outward explosion and would be considered a correction, the right way to do things in an investigation. Not correcting previous conclusion now said to be wrong is the wrong way.

You may think you are helping your boss by backing him up but you do a serious disservice to him and your outfit by continuing to permit him to think it was water impact inward damage which it wasn't and not outward explosion damage which it was.

Where do bosses get their conclusions from? From you, that's where. Chairman Hall thinks all the doors were all latched and intact until water impact because Bob Breneman told Al Dickinson, who told Jim Wildey, who told Bernard Loeb, who told Jim Hall. Bob Breneman made the best conclusion possible under the cramped rushed circumstances. Upon new evidence, the completed reconstruction, it is time to modify initial conclusion. To not modify conclusion because it is contrary to the boss's opinion is not right. His opinion was formed by Transport Airplane Directorate and it can be changed by Transport Airplane Directorate. If it's true. Is it true? Was it outward explosion or inward water damage? One or other; in or out. Can't have it both ways. Either inward was right early on and still right. Or inward was right early on and now outward is more right based on hindsight and new evidence.

This cargo door/wiring problem in 747s is taking a toll of innocent bystanders, let's not join the crowd:

1. UAL 811 was said to be improper latching and blame fell on ground handler.
2. New AAR for UAL 811 after new evidence recovered, the door, may have embarrassed the original authors.
3. Captain Stacey of TWA thought he was doing the best thing to exonerate his company by giving a piece of wreckage for outside confirmation of missile. He has disgraced his airline and airline participation in future accident investigations will be distrusted.
4. Mr. Kallstrom wasted a year and a half and millions on a wild goose chase for bad guys. There was none. He retired.
5. Pump manufacturers and fuel probe manufacturers are suspected of starting an explosion that killed many. They didn't.
6. CIA analyst shows to the world a headless 747 climbing 3000 feet in twenty seconds, a climb rate of 6000 feet per minute. CIA opinion about aviation is now jeered.

7. Victim's families are filled with hate at imaginary terrorists or covering up US Navy instead of getting over their grief at satisfactory explanation of mechanical cause.

8. And now an FAA official looks at evidence and reaches reasonable conclusion and states it. But it is contrary to official policy so conflict arises. Loyalties and principles are tested.

Mr. Schalekamp, you had a choice when the conflict appeared. You could have said, it was outward explosion because of evidence of paint markings and structural deformation and the outward explosion means there was an outward explosion. Period.

But instead you said FAA agrees with NTSB about initial event and "The evidence from the reconstructed 747 airplane reveals that the forward cargo door was attached to the forward section of the airplane and was latched in the closed position when this section of the airplane impacted the ocean."

You wrote a true thing from your heart and a later a false thing from your head. I explain the exasperated tone of voice in your 19 Feb letter as result of worry. You want to retract the previous statement and make things just the way they were because senior officials are displeased at your conclusion of outward because they say inward. You don't want senior officials displeased with you.

There is a fear of contradicting the boss in all of us. Then how does any boss become right once they were wrong? Or does the boss just stay wrong? He's corrected by supportive subordinates who point out to him on the photograph of reconstruction, Exhibit texts, and hearing testimony the following facts:

1. Paint smears
2. Bulge at latch
3. Outward skin peel
4. Unburnt hatch
5. Downward beams
6. Hoop stresses
7. Paint on stabilizer
8. Stator in stabilizer
9. Red-orange streak
10. Pieces from cargo hold in red zone.
11. Missing latches

The evidence is the problem with center tank as initial event, not me. The evidence is the problem with inward water caused damage explanation, not me.

If these new interpretations of evidence are not presented to senior officials, who will? Me? They give little weight to a citizen's conclusions. It has to be officials in the chain of command who have the ability to check out the new interpretations. The door hinge can be examined, the latch pins can be examined, the peeled skin can be examined. The evidence can be examined again to conclude whether it was outward or inward. It's a fork in the road of the TWA 800 investigation; which way to go? Inward goes to center tank as initial event, I know. It just ignores the huge shattered area forward on the right side. Outward goes to whatever. Outward acknowledges the area and the details inside it such as paint markings and structural deformation.

Inward or outward? It's a real conflict for Mr. Schalekamp and one which Mr. Breneman faced, Mr. Wildey faced, and Mr. Streeter is facing. Outward conclusion was given reasons and yet

inward never has any. Inward never gives evidence or reasoning, just blind recitation of the official line: "The evidence from the reconstructed 747 airplane reveals that the forward cargo door was attached to the forward section of the airplane and was latched in the closed position when this section of the airplane impacted the ocean." A line based solely on the incomplete examination when only eight of the ten latches were checked and found latched.

So, life. We are tested in ways we never expected. To say two and two is four and then find out the boss says it's five and then to quickly change answer to five from four is a wrong answer. Opinions change. Sticking with the facts that stay the same is the right answer.

Here's some right answers that were said:

Mr. Streeter, "Wiring problems are still a potential area of concern."

Mr. Wildey, "The floor beams adjacent to and inboard of the cargo door area had been fractured and buckled downward." The initial opening of the fuselage lower lobe (e.g. LF6A) would have the expected result of rapid depressurization accompanied by collapse of the main deck floor for some distance forward of STA 1000. The red area recovery of interior components as far forward as STA 600 would not be inconsistent with this floor collapse and associated structural breakup." "It is therefore possible that new scenarios (sequences) may emerge as new information is acquired whether it be from newly identified parts, or simply a new interpretation of current information."

Mr. Breneman, "A further examination of the recovered wreckage showed that the upper door hinge was still attached to

both the fuselage and the door. In addition, the door latches at the bottom of the door were still attached to the fuselage lower sill structure."

Mr. Schalekamp, "The paint markings and structural deformation that you cite, do indicate an outward explosion, generally accepted to be caused by the explosion of the CWT"

The evidence is real: paint, bulge, skin, hatch, beams, stress, stator, streak, and latches.

The people are real, Neil Schalekamp, Bob Breneman, Jim Wildey, and Lyle Streeter and John Barry Smith, 408 659 3552, 551 Country Club Drive, Carmel Valley, California, 93924, barry@corazon.com. Call me on the phone, write me a letter, send me an email, or come and visit. Anytime. I'm serious. I have the motivation to confirm the cause of a sudden night fiery fatal jet airplane crash because I narrowly survived one and I don't want it to happen again to anyone.

I'm not connected to any manufacturer, airline, government, or media. I'm a retired military officer. I have no power except to point out facts and suggest conclusions. I'm a free man with a just cause. I have no boss to answer to nor public to serve. I understand the reticence of those who do.

Mr. Schalekamp, you are the manager of a propulsion branch. Does not the discovery of a stator blade in the right horizontal stabilizer intrigue you? That discovery is very significant and justifies the exercise in wreckage reconstruction. The implications of that stator blade are profound. As FAA branch manager can you not read the NTSB Powerplant report to confirm it came from front stator stage of a P&W JTD-9, engine

number three of TWA 800? If it did, then it disintegrated in flight and confirms your previous observation of outward explosion of fuselage skin which might have shoved the FOD into number three. Would you not want P&W as a party to the TWA 800 investigation in order to provide engine information as to what those four vacuum cleaners scooped up at time of initial event? Do you want to know what happened to TWA 800? To be so firm on water impact damage after center tank explosion when the powerplant report and the wreckage plot reports have not been released to the public is not right. There are still many areas to be evaluated.

I know Northwest Region is on the record as favoring initial event as center tank explosion and has it's own pet theory for mystery ignition source. Now that you know about the stator blade, can you alter your explanation based on new evidence?

Mr. Breneman, as a structural engineer, what is your opinion about the outward or inward direction of the force that caused the shattered fuselage skin forward of the wing on the right side?

Mr. Wildey, you are a metal expert, what is your opinion of the direction of the force based on the metal evidence? Does the evidence of the red paint, bulge, outward skin, maintenance hatch, down beams, hoop stress, stator, streak, and missing latches indicate to you inward or outward?

Mr. Streeter, you are the safety expert, what is your opinion of the direction of the force which shattered, twisted, and tore that twenty foot wide and forty foot high section of fuselage skin of TWA 800?

Based upon the new faulty wiring revelations about 767s and

737s is it not reasonable for me to say it's a problem with 747s also? Especially when I point to NTSB AAR 92/02 for UAL 811 which had the exact faulty wiring problem I suggest started TWA 800.

Byron Acohido of Seattle Times told me after an interview he had with Dr. Loeb a year ago: (and nobody is lying)

"I, in fact, did grill several sources very hard about the forward cargo door evidence, including Bernie Loeb. Unless everyone involved is lying, (an assumption you'll no doubt make) there is nothing on the cargo door that indicates it came loose and was the initiating event.

All locks and latches were found in proper positions.

According to Bernie Loeb, early information that the door was found in the red zone was incorrect. It was found in the yellow zone, along with all major parts of the forward fuselage section."

Well, you see, that's not true now. All locks and all latches were not found in the proper position. I know that for sure; only eight of ten were checked according to Mr. Breneman and Mr. Wildey. Pieces of the door and local area were found in the red zone and changed in status administratively after the fact. Mr. Wildey explained why that happened.

I use our words to try to find out what is going on; they may or may not be flattering but it's the only clue I have to the official

thinking on the subject. I am open and expect my words to be discussed with others. I am quite prepared to support each statement with documentation and source. Good guys are open; bad guys are secretive; especially on a civilian airliner accident in peacetime in US waters. This bomb/missile FBI craziness has hurt the TWA 800 investigation with meddling and suppression of evidence. It's not right. It's intimidation.

UAL 811 was an (1) aged (2) high flight time (3) early model Boeing 747 (4) which took off in low light (5) running late (6) and during climb (7) experienced a sudden initial event near the leading edge of wing in fuselage which left a (8) short (9) sudden (10) loud (11) sound on the cockpit voice recorder, an (12) abrupt (13) power cut to the flight data recorder, (14) foreign object damage to starboard engine #3, (15) more severe inflight damage on starboard side, (16) at least nine never recovered bodies, (17) port fuselage side forward of the wing relatively undamaged, (18) shattered, torn, and frayed skin in forward cargo door area on starboard side, (19) unusual paint smears in forward cargo door area, (20) rupture appearance of skin at aft midspan latch of the forward cargo door, (21) outward peeled skin on upper forward fuselage, (22) vertical fuselage tear lines forward of the wing and aft of forward cargo door, (23) had hinge stay attached to detached top piece of forward cargo door, (24) cargo door opened in flight, and (25) destruction initially thought to be have been caused by a bomb but (26) later conclusively ruled out.

And so was TWA 800.

These significant evidence matches must not be ignored but integrated into the TWA 800 probable cause for it to be conclusive.

The direction of force which shattered the right side of TWA 800 must be conclusively determined. Which way was it, inward or outward?

Sincerely,

John Barry Smith
551 Country Club Drive
Carmel Valley, CA 93924
408 659 3552
barry@corazon.com
www.corazon.com

Supporting documentation and statements below:

1. Date: 08 Jan 1998 16:04:05 -0500
From: Lyle Streeter <Lyle.Streeter@faa.dot.gov>
To: barry@corazon.com (IPM Return requested) (Receipt notification requested)
Subject: Re: Wiring before door, door before center tank

Mr. Smith - latest word in on the Cairo divert is that there was no fire,
but a faulty detection system. Wiring problems are still a potential area
of concern.

I have passed your comments along to the investigators in TWA800.

Lyle Streeter

2. "The Office of Accident Investigation (AAI) is the principal organization within the FAA with respect to aircraft accident investigation and all activities related to the National Transportation Safety Board (NTSB)."

3. Docket No. SA-516, Exhibit No. 18A, Sequencing Study, page 20, "Downward separation directions were noted at STA 900, 880, 840, 820, 800, and 780..." and ""The initial opening of the fuselage lower lobe (e.g. LF6A) would have the expected result of rapid depressurization accompanied by collapse of the main deck floor for some distance forward of STA 1000. The red area recovery of interior components as far forward as STA 600 would not be inconsistent with this floor collapse and associated structural breakup." This observation matches downward buckling as was reported in AAR 92/02, page 4, "The floor beams adjacent to and inboard of the cargo door area had been fractured and buckled downward."

4. Evidence on TWA 800 of direct circumferential tension or hoop stress tension found on lower right side skin in the red zone only, as stated in Docket No. SA-516, Exhibit No. 7A, Structures Group Chairman's Factual Report of Investigation, page 11. This observation coincides with AAR 92/02 which states on page 11, "The cargo door and its associated hardware are designed to carry circumferential (hoop) load arising from pressurization of the airplane."

5. Docket No. SA-516, Exhibit No. 18A, Sequencing Report, page 30, "It is therefore possible that new scenarios (sequences) may emerge as new information is acquired whether it be from

newly identified parts, or simply a new interpretation of current information."

6. Docket No. SA-516, Exhibit No. 12-B, Sound Spectrum Study, page 21, Chart 12. The sudden loud sound on the CVR which is followed by an abrupt power cut which occurred on four high time Boeing 747s is displayed for comparison. TWA 800, Pan Am 103, Air India 182, and United Airlines 811 are plotted together in that sequence by the NTSB.

7. Testimony at TWA public hearing, Mr. Wildey, "Similarly, the forward cargo door which is just aft of station 520 on the lower side of the airplane has had some latching problems in the past. The examinations of the TWA airplane, however, conclusively show that this door was latched and locked along its bottom edge through the entire break-up sequence. The door was in this position and was part of the nose section when it impacted the water. Basically, for these two items you can see they are both part of the nose section and that there are no separations or failures prior to water impact in this 25 area."

8. Mr. Neil Schalekamp of FAA, "While no one scenario has been categorically proven to be the cause, it is believed, based upon available data, that the center tank (CWT) explosion preceded any separation of the forward cargo door. The paint markings and structural deformation that you cite, do indicate an outward explosion, generally accepted to be caused by the explosion of the CWT. Furthermore, you mentioned that the forward cargo door was recovered a considerable distance from the rest of the structure. This could be due to its aerodynamic characteristics and prevailing winds at the time of the accident, rather than attributing this as the primary cause of the accident."

9. Chairman Jim Hall of NTSB, "However, to repeat, the investigation of the accident involving TWA flight 800 has revealed no evidence to suggest that a failure of a cargo door precipitated the event."

10. >Date: Wed, 05 Feb 1997 12:34:04 -0800

From: Donald Lawson <DLawson@mntry.nps.navy.mil>

To: barry@corazon.com

Subject: 747 cargo door final report

From the head of the NTSB team working TWA 800:

1. He personally, even again this morning, looked at all the doors from the airplane. All latches were either destroyed or in closed positions.

The destroyed latches were adjacent to ones in closed positions.

2. Nobody associated with the investigation is considering further a cargo/passenger door malfunction to be part of the probable cause of this accident. Door problems have been categorically ruled out because there is simply no evidence pointing to the doors (and latches) that.

11. Docket No. SA-516, Exhibit 15C, Section 41/42, Forward Cargo Door, dated 22 April 1997, with Mr. Al Dickinson, AS-10, listed as investigator and Mr. Wildey as author, states,

"Examination of the lower lobe forward cargo door showed that all eight of the door latching cams remain attached (along with pieces of the door itself) to the pins along the lower door sill."

12. Docket No. SA-516, Exhibit No. 22B, Trajectory Study

Supporting Material, page 45 in faded numbers and page 30 in dark numbers. Among all the charts of pieces of the plane coming off and when, there is one chart that shows the first to go, that is page 30 chart, Forward cargo door trajectories. The first item is A489, fwd lower cargo bay struct, FS 900. That item left even before the last ASR radar beacon to Islip radar. The next item to go before anything else in the entire plane is A470, R fwd lower cargo bay struct, FS 820. There are five other forward cargo bay structures which are plotted and leave soon thereafter. On dark page number 29 lower frame stringer 40L-42R is shown to leave very early.

13. Docket Number SA-516, Exhibit No. 22A, Trajectory Study, page 3: "The wreckage distribution shows that parts were initially shed from the area just forward of the wing."

14. Docket No. SA-516, Exhibit No. 7A, Structures Group Report, page 33: "5.1 Horizontal Stabilizer, "Some of the items found in the horizontal stabilizer are sections of seat track, a stator blade from turbine section, and glitter." On 5.1.1 Right Horizontal Stabilizer, page 34, "An engine stator blade from turbine section penetrated the upper honeycomb surface near the outboard trailing edge.

15. Mr. Breneman, FAA, "The nose section of the airplane impacted the water on the right side, causing severe hydraulic damage with the result that the door structure did not remain completely intact. However, wreckage for the entire door was recovered at the same location as the nose section and had the same impact damage as the surrounding fuselage structure on the right side. This is additional verification that the forward cargo door had not opened in flight or separated from the airplane."

16. Chairman Hall of NTSB, "We are by no means finished. Our work will continue and we will spare no effort to determine the cause of the crash of TWA 800."

17. Chairman Hall of NTSB, "We're going to look for the needle in the haystack and go back over the 150 miles of wire that are there in the Calverton hangar, and see if that shows any evidence of arcing or other information that will lead us in the direction" of a probable cause."

18. From: Dickinson Al <DICKINA@ntsb.gov>
To: barry <barry@corazon.com>
Subject: RE: mechanical crash cause
Date: Thu, 19 Sep 1996 19:04:00 -0400
Encoding: 129 TEXT
Status:

Mr. Smith, thank you for your message concerning the TWA 800 crash investigation. We have recovered many of the door/hatch/access panel/windows from the sea floor and none of them indicate that they came off the aircraft prior to the event which lead to the crash. In addition, both the CVR and the FDR do not have any information that indicates any of the above things departed the aircraft prior to the event. A depressurization event most certainly would have been noted by the crew and recorded on the CVR. We will continue to look for any indications leading to the source of the event and definitely pay

attention to items mentioned in your letter.
Thank you for your interest in aviation safety.

19. Mr. Wildey's testimony at public hearing: "This was brought to our attention, and the reason that we examined this was that three of the four nose landing doors had a red tag and were recovered from the earliest part of the debris field and, similarly, around the nose landing gear area there were some fuselage pieces that were recovered that had a red tag on it and were supposedly recovered from the red << the red << earliest debris field.

Of course it became a very distinct question, well, what happened up there, how did these pieces, the fuselage pieces in the doors get into the red zone?

Well, our group took this as a task to look at. We made a report on it and we determined that, for example, on the doors themselves that, yes, those doors apparently did come off the airplane.

They had a lack of damage on them that was consistent with early departure. We developed some hypotheses and scenarios that could allow the doors to depart from the airplane very early in the sequence, and it is consistent with the factual observations we have made.

so, for the doors we said, yes, it appears as though we have a sequence that could account for the doors to come off early, and we also examined the fuselage pieces right around there that had red tags on them, and we looked at all the features we could find, and for the fuselage pieces around there we said we find no physical evidence to suggest that those particular pieces actually departed the airplane early

on in the sequence.

I think, if I remember our report, we said we believed that those particular pieces should be treated as yellow zone parts because we don't find any way that they could possibly have come off the airplane early in the sequence and actually have been found in the red debris field.

Just as a side note, I am aware that the tags on those particular fuselage pieces from around the nose area are the so-called 2,000 series tags, and that is not my area of expertise, but these are the << these tags had some questions about their pedigree, if you will.

But, that is really not our concern. We are saying, and our group said that we don't believe those are red zone parts and we would treat those as yellow zone parts for the purposes of analyzing the break-up sequence."

20. Testimony of Mr. Wildey at public hearing, "First of all, the conclusions reached by the Sequencing Group eliminated a large scale structural problem away from the wing center section fuel tank. Specific areas that were eliminated as factors include the section 4142 fuselage joint in the forward cargo door. A report on these subjects is contained in Exhibit 15(c) . The section 4142 fuselage joint is located in station 520 at the forward end of the reconstructed portion of the airplane, and you can see that right here (demonstrating) .

Although there have been some manufacturing alignment problems associated with this joint, the accident airplane contained absolutely no evidence of pre-existing weaknesses at this point, or that the joint separated in any manner before the nose section

impacted the water relatively intact.

Similarly, the forward cargo door which is just aft of station 520 on the lower side of the airplane has had some latching problems in the past.

The examinations of the TWA airplane, however, conclusively show that this door was latched and locked along its bottom edge through the entire break-up sequence.

The door was in this position and was part of the nose section when it impacted the water.

Basically, for these two items you can see they are both part of the nose section and that there are no separations or failures prior to water impact in this 25 area."

21. MR. STREETER: Yes, Mr. Chairman. For Mr. Wildey, a couple of items here for clarification. Specifically out of the red area, were there any fuselage skins in that area that showed any type of hoop tension failure (inaudible) .

WITNESS WILDEY: Yes, we tried to document that and it is contained within our report. One of the figures that I used did show this hoop tension type of fracture. That occurred at the initial point of the fuselage fracture at stringer forty right.

There were also other areas where you could not see any evidence of a running fracture that we classified as -- basically, from pure hoop tension, but on either side of these other areas the fracture was running into it and then out of it in the other direction.

so, the only real area that we saw was associated with stringer forty << excuse me << yes,

forty right where the fuselage cracking initiated as it came down through the front spar.

MR. STREETER: The one other area that was mentioned in your testimony regarding span-wise beam 3 failing in the forward direction, in Exhibit 18(a) you discussed where a portion of span-wise beam 2 was found in the red area.

Now, are there any inconsistencies of that, or is that related to the fuselage opening up? My concern is, would you have expected span-wise beam 2 to end up elsewhere?

WITNESS WILDEY: Well, I don't know if we had any expectations, or if you could really expect what would happen, because we just don't really know. But, there was a manufacturing access door from span-wise beam 2 just behind span-wise beam 3, and this door was found in the red zone and had no soot or fire damage on it consistent with very early departure and with its recovery position.

It clearly indicates that this door separated as part of the initial event and was blown out as part -- as was span-wise beam 3 and the front spar, and came out through the same hole in the lower fuselage that was created in the belly skin just in front of the front spar.

CHAIRMAN HALL: What is a manufacturing access door? Can you describe that for us?

WITNESS WILDEY: It is a door that is provided in span-wise beam 2 for access during the manufacturing process. It is then rivetted up and you can't really get in there after that.

There are other doors that are maintenance access doors that can be disassembled and reassembled.

This is a door that is rivetted back up during the manufacturing process and is not really there.

CHAIRMAN HALL: The approximate size of this piece?

WITNESS WILDEY: It is about two feet by three feet. It is an oval-shaped door.

CHAIRMAN HALL: Thank you.

WITNESS WILDEY: Did that answer your question, Mr. Streeter?

MR. STREETER: I think so. The main thing I am trying to get at is, again, with that piece in that position, your group didn't see any reason for that to cause any concern as far as your break-up sequence design, is that correct?

WITNESS WILDEY: Well, our sequence does take into account how this door << we list several possible ways for this door to have come off. I don't know that we reached an absolute firm conclusion as to exactly how that happened, but surely during the initial explosion or shortly thereafter this door was broken from its perimeter, and we see significant evidence that the door was pushed in the forward direction after part of it failed and, so, it came out while there was still pressure behind it to push it out, so it is part of the initial event.

We do not see any evidence of a bomb or any kind of explosion features right on the door, itself. so, it appears that part of the door perimeter was ripped apart and then the pressure behind the door pushed it in the forward direction. It hit the top of the tank and then got blown out into the earliest portion of the recovery field.

22. Summary of Docket evidence:

1. Docket No. SA-516, Exhibit No. 18A, Sequencing Study, page 20, "Downward separation directions were noted at STA 900, 880, 840, 820, 800, and 780..." and ""The initial opening of the fuselage lower lobe (e.g. LF6A) would have the expected result of rapid depressurization accompanied by collapse of the main deck floor for some distance forward of STA 1000. The red area recovery of interior components as far forward as STA 600 would not be inconsistent with this floor collapse and associated structural breakup."

2. Docket No. SA-516, Exhibit No. 7A, Structures Group Chairman's Factual Report of Investigation, page 11 which discusses direct circumferential tension or hoop stress tension found on lower right side skin in the red zone only.

3. Docket Number SA-516, Exhibit No. 15C, Report Number 97-82, Section 41/42 Joint, Forward Cargo Door, "Examination of the lower lobe forward cargo door showed that all eight of the door latching cams remain attached (along with pieces of the door itself) to the pins along the lower door sill."

4. Docket No. SA-516, Exhibit No. 18A, Sequencing Report, page 30: "It is therefore possible that new scenarios (sequences) may emerge as new information is acquired whether it be from newly identified parts, or simply a new interpretation of current information."

5. Docket No. SA-516, Exhibit No. 12-B, Sound Spectrum Study, page 21, Chart 12. The sudden loud sound on the CVR which is followed by an abrupt power cut which occurred on four high time Boeing 747s is displayed for comparison. TWA 800, Pan Am 103, Air India 182, and United Airlines 811 are plotted together in that sequence.

6. Docket No. SA-516, Exhibit No. 22B, Trajectory Study Supporting Material, page 45 in faded numbers and page 30 in

dark numbers. One chart that shows the first items to go, that is page 30 chart, Forward cargo door trajectories. The first item is A489, fwd lower cargo bay struct, FS 900. The next item to go before anything else in the entire plane is A470, R fwd lower cargo bay struct, FS 820. There are five other forward cargo bay structures which are plotted and leave soon thereafter. On dark page number 29 lower frame stringer 40L-40R is shown to leave very early.

7. Docket Number SA-516, Exhibit No. 22A, Trajectory Study, page 3: "The wreckage distribution shows that parts were initially shed from the area just forward of the wing."

8. Docket No. SA-516, Exhibit No. 7A, Structures Group Report, page 33: "5.1 Horizontal Stabilizer, "Some of the items found in the horizontal stabilizer are sections of seat track, a stator blade from turbine section, and glitter." On 5.1.1 Right Horizontal Stabilizer, page 34, "An engine stator blade from turbine section penetrated the upper honeycomb surface near the outboard trailing edge.

23. FAA web page states, "The Office of Accident Investigation (AAI) is the principal organization within the FAA with respect to aircraft accident investigation and all activities related to the National Transportation Safety Board (NTSB).

24. Specific suggestions:

1. Examine aft midspan latch pin for damage as was observed on UAL 811, NTSB AAR 92/02 page 33, "The forward midspan latch pin was relatively undamaged. The aft midspan latch pin had definite areas of damage. Both pins had wear areas where the cams would contact the pins during latching.

2. Examine the TWA 800 door hinge for damage as was observed in AAR 92/02, page 35, "Several areas on the hinge sections, such as the fuselage hinge sections, showed evidence of contact

from the door during overtravel (See figure 14.) In addition the fuselage forward hinge sections were slightly bent." Figure 14 is on page 40 and shows photograph of the hinge overtravel damage.

3. Examine two midspan latches from forward cargo door for damage. The criterion for determining if latches latched was to check to see if still locked and attached to adjacent fuselage sill or frame. The bottom eight latches of TWA 800 door were attached to sill so conclusion latched. The two midspan latches are unattached to frame so conclusion unlatched. The door frame is smooth where the aft midspan latch is supposed to be attached but isn't.

4. Examine forward and aft pull-in hooks of TWA 800 for compression and smearing damage as was observed in AAR 92/02, page 45.

5. Examine door and fuselage for paint transfer from one to the other as was observed in AAR 92/02, page 41. Red paint smears on TWA 800 on white paint between passenger windows above cargo door may have come from red paint on top of cargo door. The red paint smears are large and frequent only along the top of the cargo door area and not found on the other 460 feet of fuselage trim. This indicates door below opened outward and slammed upward into fuselage, giving overtravel over 143 degrees on the hinge and transferring red paint from door onto white paint between passenger windows. The opening door with hinge attached took red trim fuselage skin with it and that may have slammed upward also onto white painted skin. Red paint smears are not scraped away white paint revealing red underneath but red paint on top of white paint. White paint scraped away reveals green primer.

6. Examine outer skin contour of the upper door piece for inward crushing as was observed in AAR 92/02, page 41. Door blows outward and top of door smashes into fuselage above giving

inward crushing not by water impact. Photo of TWA 800 top door piece shows such damage.

7. Examine master latch lock handle housing and trigger for position. AAR 92/02, page 41, found it relatively flush with door outer skin.

8. Examine floor beams again of TWA 800 to confirm statement in Docket No. SA-516, Exhibit No. 18A, Sequencing Study, page 20, "Downward separation directions were noted at STA 900, 880, 840, 820, 800, and 780..." and ""The initial opening of the fuselage lower lobe (e.g. LF6A) would have the expected result of rapid depressurization accompanied by collapse of the main deck floor for some distance forward of STA 1000. The red area recovery of interior components as far forward as STA 600 would not be inconsistent with this floor collapse and associated structural breakup." This observation matches downward buckling as was reported in AAR 92/02, page 4, "The floor beams adjacent to and inboard of the cargo door area had been fractured and buckled downward."

9. Confirm evidence on TWA 800 of direct circumferential tension or hoop stress tension found on lower right side skin in the red zone only, as stated in Docket No. SA-516, Exhibit No. 7A, Structures Group Chairman's Factual Report of Investigation, page 11. This observation coincides with AAR 92/02 which states on page 11, "The cargo door and its associated hardware are designed to carry circumferential (hoop) load arising from pressurization of the airplane." If cargo door was fully latched and intact until water impact then there should be no hoop tension fractures. If the door was missing in flight, hoop tension fractures could be expected to be found and they were on TWA 800 leading to conclusion door was missing in flight.

10. Confirm door frame of TWA 800 which abuts aft edge of door is curved outward in petal shaped bulge indicating outward

force rupture. Aft midspan latch is unattached to aft midspan latch pin halfway up the door frame. Edge of door frame is smooth indicating door not missing by force but by unlatching of aft midspan latch.

11. Establish large round rupture hole in TWA 800 photo centered at aft midspan latch is in fact a hole or something otherwise.

12. Confirm outward peeled skin on TWA 800 upper skin as shown in photograph which indicates outward force which matches AAR 92/02, page 6 photograph of peeled upper skin in same location.

From: John Barry Smith <barry@corazon.com>

Date: March 13, 1998 4:07:19 PM PST

To: FAAOAI

Subject: **Dear Mr. Streeter,**

Sam Farr
Member of Congress
17th District, California
House of Representatives
Congress of the United States
Washington, DC

John McCain III
Member of Congress
Chairman, Committee on Commerce, Science, and
Transportation
United States Senate
Washington, DC

James Hall
Chairman,
National Transportation Safety Board

Bernard Loeb,
Director of Aviation Safety
National Transportation Safety Board

Al Dickinson,
Lead Investigator, TWA 800
National Transportation Safety Board

Ron Schleede,
Investigator, TWA 800
National Transportation Safety Board

Thomas McSweeny
Director, Aircraft Certification Service
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Bob Breneman,
Aerospace Engineer,
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Dear US Government Officials involved with TWA 800, 13
March 1998

The TWA 800 wreckage database offers more proof that forward cargo door opened in flight and allowed starboard engines to become damaged. What the wreckage plot so far shows is that the door was not intact at water impact. It shows that the nose cut off point is somewhere in the explosive decompression rectangle shown by shattered skin on reconstruction photo. The cargo door is in that fuselage station zone of twenty feet wide of explosive decompression on right side. The door is nine feet wide by eight feet high. The missing portion in the reconstruction photo is about 80%. So it appears that what cargo door was found on the ocean bottom was hung on the wreckage model, all 20% of it.

Here's the mysteries:

1. Why so much wreckage with the identical lat/long positions to

same accuracy to tenth of degree?

2. Where is the rest of the door including master latch lock handle, (a big mother about two feet long,) the rest of the latches, the viewing ports, the skin, torque tubes, pull in hooks, and the over pressure relief doors?

3. Only door material reported in Exhibit 15, trajectory study and now database is: eight latches locked to bottom sill and stayed with nose, and forward portion of door stayed with nose.

4. The hinge of cargo door was recovered, we can see it in photo, but where was it found?

5. It's as if the door is invisible. PA 103 never mentioned the forward door at all. And for 800: The trajectory study has no mention of door; the exhibit devoted to door area has one sentence covering only 80% of the latches; and the total wreckage database has only four references to it and those only refer to a forward 'portion', stringers, and a lift. The lift is about 2% of door, the portion is about 15%, and the stringer 34R and aft stringer 28R-43R are another 3%, so about 80% of the door is missing in reconstruction photo and not reported in database. The missing items are centered around the aft midspan latch area, which I contend is the locus of rupture point which is the pinprick which pops the balloon and shatters skin all around it in huge 20 foot by forty foot explosive decompression.

I'm starting to think the aft latches and aft portion of door are still out there, the very, very first to go and landed far afield where you have not looked. Where can they be?

So, conclusion is that door was in several pieces at least at water impact. Most of door is missing in database and reconstruction. Missing material is on aft part of door. Much cargo bay structure very close to door landed in red zone.

The engines are interesting too. Number 4 was in parts which again confirms the engines were not normal until water impact. Engine number four in parts would fit UAL 811 which had fodded and on fire number 4. Number 4 in parts means it may have been on fire on the way down and could have ignited the center tank and all the tanks that blew up. Engine number three falling apart and alone matches two other patterns and indicates the fodded engine vibrated and fuse pins failed before water impact and engine departed slightly earlier than other three that landed in line.

But, engines conclusively not normal which requires PW be made a party to the investigation and release of powerplant report. Cargo door not intact at water impact but shredded in flight with most of it nowhere to be found.

So, another important public docket exhibit, wreckage database, is leaked and shows important support for cargo door/wiring explanation and much debunking of center tank as initial event.

What is going on? To put a harsh light on the actions of public officials in the conduct of this investigation the following interpretations can be made.

1. Coercion of FAA official to change his conclusion from outward outward explosion to inward from water impact.

coerce \ko-"ers\ vb coerced; coercing 1 : restrain, repress 2 : compel 3 : enforce ~ coercion \-"er-zhen, -shen\ n ~ coercive \-"er-siv\ adj

Mr. Schalekamp used facts to support a conclusion, i.e, 'structural deformation and paint markings' indicate outward

explosion. He later uses opinion from NTSB but no facts to recant from outward to inward. He had discussions to 'persuade' him it was in his best interest to forget the facts and rely on opinion of seniors. Witness coerced.

2. Tampering with labels of location of wreckage pieces from red to yellow zone.

tamper \ˈtɑm-pər\ vb 1 : to carry on underhand negotiations (as by bribery) <~ with a witness> 2 : to interfere so as to weaken or change for the worse <~ with a document> 3 : to try foolish or dangerous experiments

Pieces of important metal were found in place 'r' and labeled as such. Later it was determined that the pieces in place 'r' rebutted center tank as initial event and supported cargo door opening in flight. So, the labels were altered from place 'r' for red to 'y' for yellow. Labels tampered with.

3. Obstruction of investigation into reasonable alternative mechanical explanation.

obstruct \əb-ˈstrɛkt\ vb 1 : to block by an obstacle 2 : to impede the passage, action, or operation of 3 : to cut off from sight ~ obstructive \-ˈstrɛk-tɪv\ adj ~ obstructor \-tər\ n

A huge wreckage reconstruction exists which is off limits to citizens to photograph in order to analyze and draw own conclusions. The citizen's access to public items is obstructed.

4. Suppressing public docket exhibits completed and ready for release.

sup^Ypress \se-"pres\ vb 1 : to put down by authority or force :
subdue <~ a revolt> 2 : to keep from being known; also : to stop
the publication or circulation of 3 : to hold back : repress <~
anger> <~ a cough> ~ sup^Ypress^Yible \-"pre-se-bel\ adj ~ sup
^Ypres^Ysion \-"pre-shen\ n

Eyewitness exhibit 4A, wreckage database, and powerplant report Exhibit 8 are three vitally important exhibits which are present in all major accident investigations. TWA 800 had those three suppressed. None of the reasons for suppression made sense. TWA 800 was not criminal so to withhold eyewitness report waiting for trial testimony is nonsense. Wreckage database is nuts and bolts numbers with no reason to suppress. A stator blade in right horizontal stabilizer is reason alone to include the engine manufacturer as a party to the investigation and release the current information in the powerplant report. The suppression of the engine breakdown report makes no sense either.

Except that the three reports all contain real data that rebuts center tank as initial event and offers hard support for open cargo door in flight. The eyewitnesses confirm there was something strange in the sky around TWA 800 that could have been pieces spinning away reflecting sunlight and not leaking fuel. The wreckage database confirms door in pieces and pieces found all over the place so it opened in flight. It also shows first pieces to leave did not come from center tank but lower cargo bay. The engine report may show fodded starboard engines which support door opening and allowing baggage foreign object in the vicinity of the jet intakes. The engine report may show fire damage for one or more engines which could be ignition source for center tank explosion which rebuts center tank as initial event.

Vital public docket exhibits are suppressed which rebut official

explanation and support alternate.

5. Distort report to reporter about position of door pieces and status of door at water impact.

disˈtɔrt \di-ˈstɔrt\ vb 1 : to twist out of the true meaning 2 : to twist out of a natural, normal, or original shape or condition 3 : to cause to be perceived unnaturally ~ disˈtɔrʃən \-ˈstɔr-shən\ n

When queried by a Pulitzer Prize winning aviation reporter for a large metropolitan newspaper about possible cargo door opening in flight, the official said the door was all latched and all locked and all intact at water impact. That statement was based on known error of concluding eight latches latched out of ten possible meant all latched. It was known door pieces not all found in one site near the nose so door was not all intact at water impact. The true meaning of eight latches latched is eight latches latched, not distorted into all latches latched.

Determination of cargo door status was distorted.

6. Mislead in CWT as initial event

misˈliːd \mis-ˈled\ vb -led \-ˈled\; -leadˈɪŋ : to lead in a wrong direction or into a mistaken action or belief ~ misˈliːdɪŋˈliːdly adv

The center tank explanation was made early on and much effort was made to confirm that explanation even though it was quickly shown to be a wrong direction based upon no ignition source found.

Public was misled into thinking the only mechanical possibility

was center tank explosion as initial event.

7. Sham public fact finding board of inquiry

sham \ "sham\ n 1 : an ornamental covering for a pillow 2 : counterfeit, imitation 3 : a person who shams

The Baltimore public hearing found few facts, rarely asked questions it did not know the answers already, gave scant inquiry to other reasonable lines, ignored its own researched reports, and pretended all the while to do otherwise. It was a sham; it was a show trial against the center tank.

The center tank explanation would carry more weight if had been proposed by an accident investigator first instead of an aviation trial attorney with understandable bias toward his clients, Lee Kreindler representing families of TWA 800. After meeting with Lee Kreindler, Bernard Loeb also agrees streak was leaking fuel and center tank spontaneously blew up.

So, a harsh look reveals:

1. Coercion of FAA official to change his conclusion from outward to inward.
2. Tampering with labels of location of wreckage pieces from red to yellow zone.
3. Obstruction of investigation into reasonable alternative mechanical explanation by refusing admittance to wreckage to public.
4. Suppressing public docket exhibits completed and ready for

release, eyewitness, wreckage plot, and powerplant report.

5. Distort statement with reporter about position of door pieces and status of door at water impact, said it was all latched and all locked at water impact when known evidence contradicted statement.

6. Mislead public to believe there was only one mechanical possibility by only offering one when others available.

7. Sham public inquiry held; few questions, no public input, suppressed testimony and staged presentation of predetermined conclusion.

Not only must the TWA 800 investigation by Government be thorough, it must give the appearance of thoroughness also. At this stage the appearance is sloppy, shallow, and slanted towards center tank.

Most of the above harsh criticisms can be explained as an excess of zeal to promote one cause to the exclusion of others.

So, dear Government Officials, you are honor bound to investigate any reasonable line of inquiry into the cause of the crash of TWA 800. To know of a reasonable line of inquiry and not inquire is a crime of betrayal of public trust.

Is there a reasonable line of inquiry not yet investigated?

Bomb was reasonable and done by FBI.

Missile was reasonable and done by FBI.

Center tank explosion was reasonable and done by you.

Meteor was reasonable and done by you.

Are there any others?

Is it reasonable to say that UAL 811 was an aged, high flight time, early model Boeing 747 which took off in low light running late and during climb experienced a sudden initial event of hull rupture near the leading edge of wing which left a short, sudden, loud sound on the cockpit voice recorder, an abrupt power cut to the flight data recorder, unusual damage to starboard engine #3, more severe inflight damage on starboard side, at least nine never recovered bodies, port fuselage side forward of the wing relatively undamaged, torn and frayed skin in forward cargo door area on starboard side, unusual paint smears above forward cargo door area, rupture at aft midspan latch of the forward cargo door, outward peeled skin on upper forward fuselage, vertical fuselage tear lines forward of the wing and aft of forward cargo, had hinge stay attached to detached top piece of forward cargo door, and destruction initially thought to be have been caused by a bomb but later conclusively ruled out? The confirmed cause was wiring/cargo door fault.

Is it reasonable to say that TWA 800 was an aged, high flight time, early model Boeing 747 which took off in low light running late and during climb experienced a sudden initial event of hull rupture near the leading edge of wing which left a short, sudden, loud sound on the cockpit voice recorder, an abrupt power cut to the flight data recorder, unusual damage to starboard engine #3, more severe inflight damage on starboard side, at least nine never recovered bodies, port fuselage side forward of the wing relatively undamaged, torn and frayed skin in forward cargo door area on starboard side, unusual paint smears above forward cargo door area, rupture at aft midspan latch of the forward cargo door, outward peeled skin on upper

forward fuselage, vertical fuselage tear lines forward of the wing and aft of forward cargo, had hinge stay attached to detached top piece of forward cargo door, and destruction initially thought to be have been caused by a bomb but later conclusively ruled out? The cause is officially undetermined.

Is it reasonable to say that an NTSB documented event with one high time Boeing 747 could have happened again to another high time Boeing 747 since there are so many similarities?

Is it reasonable to say the NTSB documented cause of one accident could be the actual cause of the other?

If so, then it is a reasonable line of inquiry.

To not investigate that reasonable line of inquiry with the same comprehensiveness as was done for the bomb, the missile, the meteor, or the center tank explanations is unprofessional and a betrayal of public trust. That betrayal has serious consequences.

The public trusts you to investigate all reasonable lines regardless of your title. To investigate that reasonable line of inquiry is to fulfill your professional responsibility and your special honor of being a member of the United States Government.

John McCain, you are a jet pilot who survived a jet crash caused by a missile. What is your opinion whether wiring/cargo door is a reasonable line of inquiry for TWA 800? Are you relying on Bernard Loeb for your opinion?

James Hall, you are the Chairman of a Safety Board, what is your opinion whether wiring/cargo door is a reasonable line of

inquiry for TWA 800? Are you relying on Bernard Loeb for your opinion?

Bernard Loeb, you are the NTSB Chief Theoretician for TWA 800, what is your opinion whether wiring/cargo door is a reasonable line of inquiry for TWA 800? Are you relying on Lee Kreindler for your opinion?

James Wildey, you are the metal expert who wrote the definitive report on cargo door for TWA 800, what is your opinion whether wiring/cargo door is a reasonable line of inquiry for TWA 800? Are you relying on Bernard Loeb for your opinion?

Al Dickinson and Ron Schleede, you are the TWA 800 aircraft accident investigators, what are your opinions whether wiring/cargo door is a reasonable line of inquiry for TWA 800? Are you relying on Bernard Loeb for your opinion?

Lyle Streeter, you are the FAA official who interacts with NTSB for major accidents, what is your opinion whether wiring/cargo door is a reasonable line of inquiry for TWA 800? What are you relying on?

Neil Schalekamp and Bob Breneman, you are the FAA structural experts used by NTSB for TWA 800, what are your opinions whether wiring/cargo door is a reasonable line of inquiry for TWA 800? Are you relying on Bernard Loeb for your opinion?

Well, there you have it. What to do?

To not act is wrong; to act may be wrong. What to do?

I face the same dilemma.

Respectfully,

John Barry Smith
551 Country Club Drive
Carmel Valley, CA 93924
408 659 3552
barry@corazon.com

Attached list is of evidence to establish that evidence of TWA 800 shows that wiring/cargo door cause for TWA 800 is a reasonable line of inquiry.

Below evidence is consistent with forward cargo door rupture to open to explosive decompression on right side forward of the wing leading to nose off and fireball at 7500 feet when center and other fuel tanks explode.

1. horizontal stab has red paint smear
2. stator blade in right horizontal stab behind engine number 3
3. inward movement top of cargo door matches UAL 811
4. top of door attached to hinge matches UAL 811
5. petal shape of rupture area around aft midspan latch
6. missing pieces of locking handle, latching pins, overpressure relief doors, midspan latches
7. rectangle of explosive decompression zone of outward peeled skin on right side forward of the wing on right side
8. downward movement of floor beams near cargo door
9. hoop stresses found
10. cvr sudden loud sound matches NTSB Chart 12 UAL 811
11. fdr abrupt power cut matches UAL 811

12. TWA 800 matches UAL811 in twenty five similarities
13. TWA 800 matches PA 103 in many similarities
14. TWA 800 matches AI 182 in many similarities
15. red paint smears above cargo door on white paint
16. fire on 4 in UAL 811 for ignition source for fireball/center tank explosion on TWA 800
17. starboard side more damaged than port side.
18. inflight objects hit same things such as right wing fillet in other other accidents
19. poly x is known to be susceptible to chafing and TWA 800 had poly x.
20. section 41 is known to be weak and TWA 800 did not have the retrofit
21. history of cargo door openings in past in various airliners including model and type of TWA 800.
22. EPR problems on aircraft before or during fatal flight.
23. fires in forward cargo hold in the past on Boeing 747s.
24. vertical tears in fuselage skin forward of the wing on the right side match UAL 811
25. singe marks on right side of fuselage show burnt skin, then abruptly at tear line there are no singe marks.
26. red paint rubbed off revealing white paint underneath above cargo door area
27. first pieces off came from forward cargo hold just forward of the wing
28. at least nine missing never recovered bodies, just fragments.
29. initially thought to be a bomb, just like AI 182, PA 103, and UAL 811
30. wreckage debris shows cargo door in pieces at water impact.
31. aft portion of door which includes aft midspan latch and locking handle missing from recovery effort

Evidence to check to rule in or rule out cargo door involvement.

1. hinge overtravel impression damage to match AAR 92/02
2. aft midspan latch pin for heat damage to match AAR 92/02
3. aft midspan latch for damage
4. put door back together from shattered pieces to show petal rupture
5. stator blade from which engine
6. red paint matching from cargo door area to right horizon stab
7. chafed wire bundles to bare wire in forward cargo hold to match AAR 92/02

Lee Kreindler's Theory-Center Tank as Initial Event.

The National Law Journal (p. A01)
Monday, June 30, 1997

WITH EVERY DAY that passes, it seems, Lee Kreindler looks smarter and smarter. Nearly one year after TWA Flight 800 exploded and crashed into the ocean off Long Island last July 17, killing all 230 aboard, investigators are increasingly leaning

toward mechanical failure as the cause--not a bomb or missile. It is the explanation that Mr. Kreindler, a New York aircraft

disaster litigator, has been pushing from the start.

It is also the theory that provides Mr. Kreindler and a small group of fellow plaintiffs' lawyers the clearest path to pursue TWA and

The Boeing Co. for billions of dollars in damages claimed by the victims' families.

Mr. Kreindler, of Kreindler & Kreindler, represents more than 50 of the victims' families in current and planned lawsuits against

the companies. He also chairs the plaintiffs' committee, consisting of lawyers from six firms that represent victim families in

approximately 54 wrongful-death cases. He was also the lead plaintiffs' lawyer in litigation surrounding the crash of Pan Am Flight

103, which was caused by a terrorist bomb.

Since January, nearly all of the TWA 800 lawsuits have been consolidated in a multidistrict litigation pending in federal court in

the Southern District of New York, before Judge Robert W. Sweet.

The National Transportation Safety Board and Federal Bureau of Investigation still have not conclusively determined what exactly

brought down the 25-year-old Boeing 747, although they have spent more than \$26 million trying, says NTSB spokeswoman Shelly

Hazle. But in the past few months, both agencies have sent signals that indicate they are moving toward eliminating a criminal act

as the cause of the tragedy.

Immediately after the crash, Navy divers began recovering bodies and wreckage from the crash site. By the time recovery efforts

were concluded in May, investigators had collected about 95 percent of the plane, consisting of hundreds of thousands of

pieces of

wreckage in an aircraft hangar in Calverton, Long Island. After meticulously cataloging each piece, investigators reconstructed

much of the shattered airplane, including a critical 90-foot section of the fuselage.

From the start, investigators focused their attention on the plane's center fuel tank. They believe that a volatile mix of air and fuel

vapor built up inside the tank creating conditions that led to an explosion. Still undetermined, however, is what ignited the explosion.

In May, FBI Director Louis Freeh said that investigators had found no evidence of a bomb or missile and that mechanical failure

was the most likely explanation. And on June 4, FBI assistant director James K. Kallstrom, the agent in charge of the bureau's

investigation, sent a letter to victims' families saying "we are in what could be the last phase of our criminal investigation."

Within two weeks after the crash, Mr. Kreindler's firm began piecing together its own theory of the case, based largely on news

reports and on the work of Peter Jorgenson, a former Boeing engineer the firm retained as an expert. And within a month, Mr.

Kreindler appeared on the NBC program "Dateline" to present his theory that a malfunctioning fuel pump may have ignited fuel

vapors in the airliner's center fuel tank. In October, Mr.

Kreindler presented the NTSB with a 28-page report detailing his theory.

A supplemental report, sent to the NTSB in March, identified the scavenge pump, one of three pumps located in the fuel tank, as

the most likely ignition source. While the NTSB found no evidence that either of the other pumps had malfunctioned, the scavenge pump was never found.

Mr. Kreindler's early theorizing was sharply criticized at the time by plaintiffs' and defendants' lawyers as premature and as a

transparent attempt to attract clients. Nor has the NTSB been particularly grateful for Mr. Kreindler's and Mr. Jorgenson's help.

"We have given Mr. Jorgenson more than fair consideration and have come away unimpressed," wrote NTSB General Counsel

Daniel D. Campbell in an April 29 letter to Mr. Kreindler.

Helpful or not, Mr. Kreindler's theory has the virtue of agreeing with the apparent consensus on the most important point for

purposes of the litigation: that the crash was caused by a mechanical failure.

A mechanical failure theory allows the plaintiffs to pursue a relatively straightforward products liability case against Boeing, in

which they will try to show that the aircraft was designed or manufactured improperly.

The case against TWA, however, is a little more complicated. The Warsaw Convention, an international aviation treaty, limits air

crash victims to \$75,000 in damages against an airline unless they can prove the airline acted with willful misconduct.

The major U.S. airlines, including TWA, are complying voluntarily with a proposed agreement that would abolish the \$75,000 limit

and the heightened liability requirement. The Warsaw Convention was in effect at the time of the TWA 800 crash, however, and

applies to the litigation.

Hoping they can prove willful misconduct, the plaintiffs charge the airline kept the plane in service beyond its intended lifespan

and failed to inspect and maintain it properly.

Although the plaintiffs' theory in the Pan Am 103 case relied on allegations that inadequate security was to blame for allowing the

bomb on board, a bomb or missile theory would be much easier for TWA and Boeing to defend against. Thus, company representatives are in no hurry to eliminate them as possibilities.

"Despite what some...reports have suggested, we have no indication that the investigation is over," said Randal Craft, of Haight,

Gardner, Poor & Havens in New York, counsel for TWA. "Certainly no initiating cause has been identified."

Until the FBI and NTSB investigations are concluded, plaintiffs are limited in what they can do to prepare their cases. The NTSB

says Congress gave it exclusive control over wreckage when investigating cases like TWA 800. As a result, none of the plaintiffs'

lawyers so far has been allowed inside the Calverton hangar. But in a motion before Judge Sweet, the plaintiffs' committee argued

that they should be allowed to see the wreckage because employees of TWA and Boeing have had access to the evidence from

the start, working shoulder-to-shoulder with government investigators. And the NTSB has permitted victims' families and news

photographers to view the wreckage, they argued.

Judge Sweet declined to rule on the motion June 9, but expressing concern that evidence could be lost or destroyed before trial, he

encouraged the NTSB to consider granting the plaintiffs' lawyers and their experts some limited access to the wreckage. Lawyers

representing the board agreed to get back to the plaintiffs' committee by the end of the month.

There may indeed be some cause for concern. Sen. Charles E. Grassley, R-Iowa, said his staff is investigating allegations that FBI

lab officials, already criticized in a government report for mishandling evidence in other cases, improperly handled evidence

recovered from the crash site.

In the meantime, plaintiffs have served more than 200 document requests. Once they have had a chance to review the companies'

documents, they will start taking depositions, says Mr. Kreindler.

Mr. Kreindler believes damages in the TWA 800 cases could be comparable to those in the Pan Am 103 case. Individual settlements ranged from \$575,000 to \$13 million, for a total of more than \$500 million, he says. But the plaintiffs will have to overcome some obstacles first.

In addition to heightened Warsaw Convention threshold in favor of TWA, both TWA and Boeing lawyers are expected to argue

that, because the plane crashed into the Atlantic Ocean, the Death on the High Seas Act applies. If Judge Sweet agrees with the

defendants' expected motion to apply the act, scheduled to be briefed and decided by the fall, plaintiffs' recoveries will be limited

to economic damages.€

Lee Kreindler meets NTSB officials

" NTSB spokeswoman Shelly Hazle said representatives from Kreindler's firm met with NTSB officials in Washington yesterday. "There was nothing really new," she said."

\$100M Crash Suit

First filed in TWA 800, it cites mechanical failure 23 Oct 96

By Sylvia Adcock
Staff Writer

In the first lawsuit filed in the crash of TWA Flight 800, a Manhattan attorney claimed yesterday that mechanical failure blew the plane from the sky

-- something federal investigators said they can't prove.

The \$100-million suit was filed on behalf of the two grown children of Leonard Johnson of Springfield, Va., who was one of the 230 people killed when

the Boeing 747 exploded July 17 off the South Shore.

"There's no evidence of a bomb or missile," attorney Lee Kreindler said. The theory behind the suit "is something based in logic and understanding of

the systems and examination of the path of identical airplanes and expert knowledge."

The suit, filed in Brooklyn, asks for \$50 million from Boeing and \$50 million from TWA. TWA failed to maintain and service the 25-year-old plane

properly, the suit said, and Boeing was at fault for approving TWA's decision to fly the plane beyond its service life, among other things.

"This is just the first," said Kreindler, who represents families of 25 other people. Kreindler represented the families of Pan Am Flight 103, who

recovered multi-million judgments after the 1988 bombing over Lockerbie, Scotland.

In the case of Flight 800, the cause of the crash has not

yet been determined. Investigators from the National Transportation Safety Board and the

FBI have been able to conclude only that the nearly empty center fuel tank exploded, but they aren't sure what ignited it. Investigators have recovered

more than 90 percent of the aircraft from the ocean, with no metallurgical evidence of a bomb or missile, so the mechanical theory has taken center stage.

In a statement, Kreindler said two paid experts concluded that the tank explosion would be enough to break apart the fuselage and said the tank's

scavenge pump, which has not been recovered, was "probably" the ignition source.

In an attempt to explain eyewitness accounts of a streak of light that led to the missile theory, the statement said that the explosion spread through

the fuel vent line on the right wing, creating a trail of burning vapors shooting out the wing tip.

The suit points out that TWA sold the Boeing 747 to Iran in the mid-1970s, buying it back a year later. The explosion and crash, the suit said, were

caused by TWA's "willful misconduct" in "failing to restore the subject Boeing 747 to airworthy condition after its sale to and purchase from Iran."

The suit said that the jetliner was originally designed for 60,000 hours of flying, but that as of July 17, it had flown 101,000 hours, which is allowed under federal regulations.

"This aircraft was in good shape, current in all its maintenance and airworthiness directives," said TWA spokesman Mark Abels. "The cause of this

crash has been the subject of tens of thousands of hours of intensive investigation by the NTSB and the FBI, who have not been able to support a

mechanical malfunction theory or for that matter any theory. I don't know what Mr. Kreindler knows that they don't know. If he does have valuable

information, perhaps he should contribute it."

NTSB spokeswoman Shelly Hazle said representatives from Kreindler's firm met with NTSB officials in Washington yesterday. "There was nothing really new," she said.

Boeing spokesman Doug Webb declined to comment.

Neil Schalekamp> "The paint markings and structural deformation that you cite, do indicate an outward explosion, generally accepted to be caused by the explosion of the CWT"

Byron Acohido>"I, in fact, did grill several sources very hard about the forward cargo door evidence, including Bernie Loeb. Unless everyone involved is

lying, (an assumption you'll no doubt make) there is nothing on the

cargo door that indicates it came loose and was the initiating event.

All locks and latches were found in proper positions. According to Bernie Loeb, early information that the door was found in

the red zone was incorrect. It was found in the yellow zone, along with all major parts of the forward fuselage section."

Docket No. SA-516, Exhibit 15C, Section 41/42, Forward Cargo Door, dated 22 April 1997, with Mr. Al Dickinson, AS-10, listed as investigator and Mr. Wildey as author, states, "Examination of the lower lobe forward cargo door showed that all eight of the door latching cams remain attached (along with pieces of the door itself) to the pins along the lower door sill."

Docket No. SA-516, Exhibit No. 7A, Structures Group Report, page 33: "5.1 Horizontal Stabilizer, "Some of the items found in the horizontal stabilizer are sections of seat track, a stator blade from turbine section, and glitter." On 5.1.1 Right Horizontal Stabilizer, page 34, "An engine stator blade from turbine section penetrated the upper honeycomb surface near the outboard trailing edge.

James Wildey>"...there were some fuselage pieces that were recovered that had a red tag on it and were supposedly recovered from the red << the red << earliest debris field...."

"...

we also examined the fuselage pieces right around there that had red tags on them, and we looked at all the features we could find, and for the fuselage pieces around there we said we find no physical evidence to suggest that those particular pieces actually departed the airplane early on in the sequence.

I think, if I remember our report, we said we believed that those particular pieces should be treated

as yellow zone parts because we don't find any way that they could possibly have come off the airplane early in the sequence and actually have been found in the red debris field."

"The examinations of the TWA airplane, however, conclusively show that this door was latched and locked along its bottom edge through the entire break-up sequence.

The door was in this position and was part of the nose section when it impacted the water.

Basically, for these two items you can see they are both part of the nose section and that there are no separations or failures prior to water impact in this 25 area."

From: John Barry Smith <barry@corazon.com>

Date: March 17, 1998 11:06:21 AM PST

To: FAAOAI

Subject: NTSB/cargo door meeting

Dear Mr. Streeter, there should be a meeting between NTSB and me regarding wiring/cargo door rupture explanation for TWA 800. Can you attend? Any ideas I should bring up? Any other thoughts regarding wiring/cargo door safety in 747s?

I'm sending the below snail mail to Mr. Breneman and Mr. Schalekamp of FAA, could you relay the information about NTSB/FAA meeting in Seattle about cargo door to them via email?

Sincerely,

John Barry Smith

Jim Hall
Chairman NTSB
National Transportation Safety Board
Office of the Chairman
490 L'Enfant Plaza, S.W.
Washington, DC 20594-2000

Dear Chairman Hall,

17 Mar 98

I've just received a 4 Mar 98 letter to me from Senator John McCain stating, "I have received your letter regarding the forward cargo door of TWA Flight 800, and your interest in meeting with someone at the National Transportation Safety Board (NTSB) relating your concerns.

I have contacted the NTSB on your behalf, about your concerns. I have asked for a prompt response to be sent directly to you."

Chairman Hall, I interpret that to mean that Senator McCain wishes that the NTSB and I get together in a meeting to relate my concerns about the forward cargo door of TWA 800. That seems reasonable enough. To accurately and efficiently relate my concerns to NTSB, may I present the following suggestions:

I offer to travel to Seattle, Washington, from California to meet

with NTSB officials in their offices. That's the closest office to me and previous government officials who have written to me regarding forward cargo door and TWA 800.

(From NTSB web site: NTSB Northwest Regional Office 8 a.m.-4:30 p.m.
19518 Pacific Highway South
Room 201
Seattle, Washington 98188)

The sooner the better; may I suggest Wednesday, April 1, 1998 in Room 201 of NTSB NW Regional Office at 8 a.m?

A meeting goal would be to discuss with me my concerns regarding the forward cargo door of TWA 800. My goal is to persuade NTSB that a reasonable line of inquiry, worthy of the same effort as that done for bomb, missile, and center tank, is the wiring/cargo door rupture explanation. The wiring/cargo door rupture concerns are:

1. water in forward cargo bay.
2. chafed bare wire touched by water.
3. electrical short occurs.
4. forward door motor turns on to unlatch position.
5. aft midspan latch of forward cargo door partially unlatches.
6. pressurized hull ruptures at aft midspan latch.
7. cargo door tears into pieces, some pieces stay with nose, some don't.
8. explosive decompression occurs shattering cargo door area forward of the wing on right side exposing twenty foot by forty foot hole in nose producing sudden loud sound on CVR.
9. 300 knots slipstream tears weakened nose off.
10. ejected debris is ingested by starboard engines which catch fire.

11. wing and wing fuel tanks; engines, tail, and fuselage fall and disintegrate on way down.
12. fiery starboard engine ignites fuel vapor clouds from disintegrating tanks, including center tank.
13. fireball observed on the ground.
14. water impact of wreckage, cargo bay material among first to land.

Every concern will be documented with US government and other official reports, exhibits, testimony, and charts. I will bring my laptop computer with internet access to reach NTSB TWA 800 website and other government sites for reference. All that will be required is an outside phone line, some chairs, a table, and some good lighting.

The main concern, as is the main concern of all aviation safety persons, is that can happen again unless wiring/cargo door rupture explanation is ruled in or out by a reasonable line of inquiry by NTSB which is my goal of the meeting which Senator McCain has suggested take place.

Senator McCain mentions, 'someone' at NTSB to meet with me. May I suggest several persons to be invited to the meeting?

1. NTSB Chief of Northwest Region and staff that are available.
2. Mr. Breneman of FAA who has hands on experience with the forward cargo door of TWA 800 assisting NTSB at Calverton.
3. Mr. Neil Schalekamp of FAA who offered conclusion of evidence of TWA 800 being outward explosion at cargo door area but later changed mind.

It's far away but I certainly invite you, Mr. Chairman, and would be honored should you attend, as well as Dr. Loeb, Mr. Wildey,

Mr. Drake, Mr. Dickinson, and Mr. Schleede, all of whom are very familiar with wiring/cargo door explanation and would contribute much to resolving my concerns about the forward cargo door of TWA 800. Also most helpful would be Mr. Lyle Streeter, the FAA link to NTSB. Mr. Streeter is a professional aircraft accident investigator whose opinions about aircraft accidents carry weight. If not able to attend in person, then email, phone and letters are available of course to us.

This meeting of minds is a very welcome opportunity to clear the air and resolve some differences of opinion about TWA 800 and it's cause. Harsh letters between NTSB and me have crossed paths in the last few weeks. It's distracting from the mechanical explanation of TWA 800 which relies on facts, data and evidence which is what I shall address in the proposed meeting in Seattle.

I truly believe this meeting will be very fruitful, Mr. Chairman. Goals are to establish that the cargo door of TWA 800 opened in flight or did not, it's happened before to other 747s or has not, present new evidence which has shown up in wreckage reconstruction or has not; and therefore, a reasonable line of inquiry is the wiring/cargo door rupture explanation or it is not.

I will report back to Senator McCain with the evaluation of wiring/cargo door rupture explanation by NTSB in words a former US Navy carrier jet pilot will understand, which is to say, technical and makes sense.

Chairman Hall, NTSB and FAA went right to that suspicious forward cargo door of TWA 800 from day one. It's time to go back. There's a lot more there than meets the eye at first glance. The whole story is there. It answers your question of, "Why so

few bodies burned?" The answer is basically, "They were not there to be burned. They were blown away by the first initial non-fiery explosive decompression and they were in the severed unburnt nose section. When the center tank finally did catch fire/ explode, there were no passengers in front of the fiery explosion to be burnt."

To ask your question, sir, as you did about the unburnt passengers, is to understand the center tank as initial event does not ring all the way true. There is doubt about the actual initial event in your mind.

I can resolve it.

Respectfully,

John Barry Smith
551 Country Club Drive,
Carmel Valley, CA 93924
408 659 3552
barry@corazon.com
www.corazon.com

From: Lyle Streeter <Lyle.Streeter@faa.dot.gov>
Date: March 18, 1998 7:13:15 PM PST
To: barry@corazon.com (IPM Return requested)
Subject: Re: NTSB/cargo door meeting

Mr. Smith - I have no way of knowing if I'll be able to attend or not.

That would be entirely dependent on such uncontrollable elements as

accidents and their related travel. If a meeting is set up, we will

attempt to have some representation from our aircraft certification

folks. No guarantees except that I will try.

Lyle Streeter

Reply Separator

Subject: NTSB/cargo door meeting
Author: barry@corazon.com at Internet
Date: 3/18/98 5:28 AM

Dear Mr. Streeter, there should be a meeting between NTSB and me regarding wiring/cargo door rupture explanation for TWA 800. Can you attend? Any

ideas I should bring up? Any other thoughts regarding wiring/
cargo door
safety in 747s?

I'm sending the below snail mail to Mr. Breneman and Mr.
Schalekamp of FAA,
could you relay the information about NTSB/FAA meeting in
Seattle about
cargo door to them via email?

Sincerely,

John Barry Smith

Jim Hall
Chairman NTSB
National Transportation Safety Board
Office of the Chairman
490 L'Enfant Plaza, S.W.
Washington, DC 20594-2000

Dear Chairman Hall,

17 Mar 98

I've just received a 4 Mar 98 letter to me from Senator John
McCain
stating, "I have received your letter regarding the forward cargo

door of
TWA Flight 800, and your interest in meeting with someone at
the National
Transportation Safety Board (NTSB) relating your concerns.

I have contacted the NTSB on your behalf, about your concerns.
I have asked
for a prompt response to be sent directly to you."

Chairman Hall, I interpret that to mean that Senator McCain
wishes that the
NTSB and I get together in a meeting to relate my concerns
about the
forward cargo door of TWA 800. That seems reasonable enough.
To accurately
and efficiently relate my concerns to NTSB, may I present the
following
suggestions:

I offer to travel to Seattle, Washington, from California to meet
with NTSB
officials in their offices. That's the closest office to me and
previous
government officials who have written to me regarding forward
cargo door
and TWA 800.

(From NTSB web site: NTSB Northwest Regional Office 8
a.m.-4:30 p.m.
19518 Pacific Highway South
Room 201
Seattle, Washington 98188)

The sooner the better; may I suggest Wednesday, April 1, 1998
in Room 201
of NTSB NW Regional Office at 8 a.m.?

A meeting goal would be to discuss with me my concerns
regarding the
forward cargo door of TWA 800. My goal is to persuade NTSB
that a
reasonable line of inquiry, worthy of the same effort as that done
for

bomb, missile, and center tank, is the wiring/cargo door rupture
explanation. The wiring/cargo door rupture concerns are:

1. water in forward cargo bay.
2. chafed bare wire touched by water.
3. electrical short occurs.
4. forward door motor turns on to unlatch position.
5. aft midspan latch of forward cargo door partially unlatches.
6. pressurized hull ruptures at aft midspan latch.
7. cargo door tears into pieces, some pieces stay with nose, some don't.
8. explosive decompression occurs shattering cargo door area forward of the wing on right side exposing twenty foot by forty foot hole in nose producing sudden loud sound on CVR.
9. 300 knots slipstream tears weakened nose off.
10. ejected debris is ingested by starboard engines which catch fire.
11. wing and wing fuel tanks; engines, tail, and fuselage fall and disintegrate on way down.
12. fiery starboard engine ignites fuel vapor clouds from disintegrating tanks, including center tank.

13. fireball observed on the ground.

14. water impact of wreckage, cargo bay material among first to land.

Every concern will be documented with US government and other official reports, exhibits, testimony, and charts. I will bring my laptop computer with internet access to reach NTSB TWA 800 website and other government sites for reference. All that will be required is an outside phone line, some chairs, a table, and some good lighting.

The main concern, as is the main concern of all aviation safety persons, is that can happen again unless wiring/cargo door rupture explanation is ruled in or out by a reasonable line of inquiry by NTSB which is my goal of the meeting which Senator McCain has suggested take place.

Senator McCain mentions, 'someone' at NTSB to meet with me. May I suggest several persons to be invited to the meeting?

1. NTSB Chief of Northwest Region and staff that are available.
2. Mr. Breneman of FAA who has hands on experience with the forward cargo door of TWA 800 assisting NTSB at Calverton.
3. Mr. Neil Schalekamp of FAA who offered conclusion of evidence of TWA 800 being outward explosion at cargo door area but later changed

mind.

It's far away but I certainly invite you, Mr. Chairman, and would be honored should you attend, as well as Dr. Loeb, Mr. Wildey, Mr. Drake, Mr. Dickinson, and Mr. Schleede, all of whom are very familiar with wiring/cargo door explanation and would contribute much to resolving my concerns about the forward cargo door of TWA 800. Also most helpful would be Mr. Lyle Streeter, the FAA link to NTSB. Mr. Streeter is a professional aircraft accident investigator whose opinions about aircraft accidents carry weight. If not able to attend in person, then email, phone and letters are available of course to us.

This meeting of minds is a very welcome opportunity to clear the air and resolve some differences of opinion about TWA 800 and its cause. Harsh letters between NTSB and me have crossed paths in the last few weeks. It's distracting from the mechanical explanation of TWA 800 which relies on facts, data and evidence which is what I shall address in the proposed meeting in Seattle.

I truly believe this meeting will be very fruitful, Mr. Chairman. Goals are

to establish that the cargo door of TWA 800 opened in flight or did not, it's happened before to other 747s or has not, present new evidence which has shown up in wreckage reconstruction or has not; and therefore, a reasonable line of inquiry is the wiring/cargo door rupture explanation or it is not.

I will report back to Senator McCain with the evaluation of wiring/cargo door rupture explanation by NTSB in words a former US Navy carrier jet pilot will understand, which is to say, technical and makes sense.

Chairman Hall, NTSB and FAA went right to that suspicious forward cargo door of TWA 800 from day one. It's time to go back. There's a lot more there than meets the eye at first glance. The whole story is there. It answers your question of, "Why so few bodies burned?" The answer is basically, "They were not there to be burned. They were blown away by the first initial non-fiery explosive decompression and they were in the severed unburnt nose section. When the center tank finally did catch fire/explode, there were no passengers in front of the fiery explosion to be burnt."

To ask your question, sir, as you did about the unburnt passengers, is to understand the center tank as initial event does not ring all the way true.
There is doubt about the actual initial event in your mind.

I can resolve it.

Respectfully,

John Barry Smith
551 Country Club Drive,
Carmel Valley, CA 93924
408 659 3552
barry@corazon.com
www.corazon.com

barry@corazon.com
<http://www.corazon.com/>

From: John Barry Smith <barry@corazon.com>

Date: March 20, 1998 10:21:38 PM PST

To: FAAOAI

Subject: Something to chew on...

I have no way of knowing if I'll be able to attend or not.

That would be entirely dependent on such uncontrollable elements as

accidents and their related travel. If a meeting is set up, we will

attempt to have some representation from our aircraft certification

folks. No guarantees except that I will try.

Dear Mr. Streeter, thanks, good luck.

Here is something new to chew on...

<http://www.corazon.com/Exhibit8ACover.html> has entire exhibit.

Regards,

John Barry Smith

NTSB Docket SA 516, Exhibit 8A, Powerplants Group
Chairman's Factual Report,

Page 2, paragraph 2, "After the engines were recovered, they were transported to the former Grumman facility at Calverton, New York, for disassembly. The disassembly of the engines

commenced on August 12, 1996, in the presence of the Powerplants Group. The disassembly was completed on August 16, 1996."

Analysis by John Barry Smith>1. Wrong to send to empty hangar, right to send to engine teardown facility. Wrong thing done in haste to examine engines at Calverton. 2. Five days for four engines? One day and a bit per engine is incredibly fast to disassemble one of the most complex and precise machines on the planet. It's not a bicycle. Haste is evident.

Page 2, paragraph 3, "The disassembly of the engines consisted of removing the cowling, external components, fan, and low pressure compressor (LPC) to expose the high pressure compressor (HPC), diffuser, combustor, high pressure turbine (HPT), low pressure turbine (LPT), and turbine exhaust cases. Engine No. 3 was disassembled further to remove and partially disassemble the HPC. The disassembly of the engines did not show any indications that any of the engines had sustained any uncontainments, case ruptures, fires, or penetrations."

Analysis by John Barry Smith>Why was only engine 3 disassembled further? What evidence was seen in No. 3 to warrant further investigation? Why were not the other three engines disassembled further? The four most important jet engines in an airplane crash in history were not given comprehensive teardowns. The conclusion statement of no uncontainments is contradicted by other exhibit which states 'stator blade' was found in right horizontal stabilizer. The conclusion statement of no fires in any engines is contradicted later in same report with raw data indicating sooting in engine number 3. The conclusion statement of no penetrations of any engine is contradicted by raw data in same report indicating soft

body impacts on blades. The conclusion statement of everything normal in the engines is contradicted by photograph of TWA 800 engine retrieval showing forward stator stage missing, and irregular FDR EPR readings.

Pages 16 through 22 discuss fuel samples, mainly irrelevant in discussion about engines and teardown results. 33% of engine report is not about engines.

Page 11, paragraph 3, discussing results of engine 3 disassembly, "Of the 46 fan blades in the fan rotor, 21 blades with complete or partial airfoils and 6 root sections were recovered. All of the fan blades had sooting on the convex airfoil surfaces. Most of the full length airfoils were bent rearward and the tips outboard of the outer midspan shroud were bent forward slightly. About half of the fan blades had impact damage to the leading and trailing edges. Almost all of the impact damage to the airfoils could be matched to contact with the midspan shroud on an adjacent blade. One full length blade had four soft body impacts along the leading edge and a partial airfoil had a soft body impact, which had some streaking extending rearward. "

Analysis by John Barry Smith>Less than half of complete fan blades in the fan rotor were recovered, not the 95% recovered figure given by Chairman Hall about TWA 800 recovered wreckage. Only 58% of the fan blades were recovered so it is very possible 'stator blade' found in right horizontal stabilizer was from engine number three. All had soot. Soot means fire. Only engine number three had any sooting inside engine. One full blade and one partial blade had 'soft body impacts'. There is nothing normally soft inside a jet engine. Soft body impact means foreign object damage. FOD means fire. Fire means soot. Missing blades in engine and one found directly aft in right

horizontal stabilizer means uncontainment. Uncontainment means engine not intact at water impact but inflight. Analysis above on raw data gives conclusions engine number three alone had foreign object damage in flight, had internal fire, and had partial disintegration. Engine 3 was the only engine to give such evidence. Engine number three is next to forward cargo hold, an area known to give FOD to engine 3 when cargo door inadvertently opens in flight.

From: John Barry Smith <barry@corazon.com>

Date: March 25, 1998 7:32:51 AM PST

To: FAAOAI

Subject: **Two steps forward, one step back/engine data**

Dear Mr. Streeter, there is no joy in Mudville today.

Chairman Hall nixed a meeting with me, at the urging of Senator McCain, to 'relate my concerns regarding the forward cargo door of TWA 800.' Another avenue closed.

In response, one of the suggestions I've offered to my Congressman and Senator McCain is to make me a liaison to NSTB, a job description I got from your position at FAA. What exactly does a liaison do? I interpret it to mean a mutual means of communication, as my dictionary says. In that regard, I enclose all my recent correspondence with Congressman Farr, Chairman McCain, and my response to Chairman Hall to you to keep you informed.

To not meet an informed citizen with credentials, with proper introduction by authority, with personal experience with plane crashes, about an ongoing aircraft accident investigation is very very strange. It is not going the extra mile but going one step

backwards.

I am not an enemy to be avoided but an ally to be used. The sad/funny part is that NTSB assumes me to be a crank and puts me in the category of crazy internet theorists like the missile guys therefore my wiring/cargo door rupture explanation for TWA 800 is unworthy of serious consideration while the conspiracy missile guys consider me a government 'disinformationalist' specialist sent out to confuse the missile 'truth' with nonsense about cargo doors. Therefore, no one seriously examines the wiring/cargo door explanation. It's not right.

Need help.

Regards,

John Barry Smith

Mr. Sam Farr
Member of Congress
17th District, California
House of Representatives
Congress of the United States
Washington, DC

Dear Congressman Farr,

23

Mar 98

Hello again so soon, but bad news. I had previously written the below to you last week:

"I'm putting my hopes the wiring/cargo door evidence will get a chance to be heard in a proposed upcoming meeting with NTSB officials face to face, as suggested by Senator McCain. My previous letter outlined that event."

That proposed meeting by Chairman McCain has been denied by Chairman Jim Hall of NTSB who wrote in 17 Mar 98 letter to me, ""Chairman John McCain has forwarded to the National Transportation Safety Board your correspondence dated February 13, 1998, requesting a meeting with Safety Board personnel.

As stated in our most recent letter dated March 10, 1998, the TWA flight 800 investigation team has gathered sufficient facts to rule out the possibility of an in-flight opening of a cargo door. We do not believe a meeting is necessary to further discuss this issue."

As you may imagine, Mr. Farr, this refusal of NTSB to meet a citizen to discuss matters of national safety is very, very disturbing on many levels.

The political level is an appointed lawyer to a safety board is refusing to comply with an elected official's request to meet with a citizen. What is going on? In a dictatorship, appointees rule; in a democracy elected officials rule. Yes?

After much thought on this failure to obtain a hearing with aviation experts who reject a meeting for unsubstantiated reasons about the forward cargo door of TWA 800, I believe I must now think politically and not technically. To learn politically I offer to be your intern, Mr. Farr.

May I offer myself for the position of intern to the Honorable

Congressman from 17th District, California, with specific duty to be liaison with US Senate regarding aviation safety matters, specifically the Committee on Commerce, Science, and Transportation which has the forward cargo door issue referred for review by the Chairman. This unpaid volunteer position would have limited duration and narrow duties, that is, to keep you informed of aviation matters concerning the House and Senate until the final report on TWA 800 is issued by the NTSB. Daily written reports required from intern.

As an intern learning the political ways of transportation policy and accident investigation I would of course be in close contact with the House Transportation and Infrastructure Committee and Subcommittee on Aviation, chaired by the Honorable John J. Duncan of Tennessee, with whom you have been in contact asking for his attention in the TWA 800 case.

It's an idea, Mr. Farr, and should you offer me the job, I'll gleefully accept. I'm a 54 year old retired married father who's never too old to learn. Politics seems interesting, yes?

It's apparent that NTSB will not take me seriously unless your authority is used. NTSB is a Congress mandated safety board, not an executive branch agency such as FAA. You are the boss of NTSB. This rejection by appointed Chairman Hall of the modest suggestion by elected Senator McCain is an affront to elected officials everywhere.

The civil servants, that's Mr. Hall, have taken over the mansion of democracy from the unworthy owners, citizens and their elected representatives, that's you and me, Congressman. It's a serious breach of consensual government rule of law.

Following your example of appending correspondence to keep the principals informed, I have included my strong response to Chairman Hall and Chairman McCain regarding the rebuff of Senator McCain's suggestion that NTSB and I meet to relate my concerns regarding the opening of the forward cargo door on TWA 800.

You asked one very important question of me, "What makes the doors open?" At the time, I could only answer for sure for one fatal accident, UAL 811. Now, after the public hearings, the release of data, and current analysis, I can report that the other three similar accidents had the same cause as the confirmed one; that is, chafed bare wire shorts on door motor to unlatch position and cargo door ruptures in flight causing explosive decompression which tears huge hole in side of nose. Wiring becoming frayed through time and shorting out is the larger problem than 747 cargo doors opening in flight. Cargo door opening is a symptom, not a cause.

But first, cargo door confirmed as opening in flight for TWA 800. I can do that with meetings with NTSB officials. They will not meet with a citizen or if they did under pressure, would give little weight to conclusions. They would meet with the intern liaison regarding aviation safety from Congressman's Sam Farr's office.

I can start immediately.

Best Regards,

John Barry Smith
551 Country Club Drive,
Carmel Valley, CA 93924

408 659 3552
barry@corazon.com
www.corazon.com

Attachment below:

Letter to Senator McCain which includes letter to Chairman Hall regarding refusal of NTSB to meet.

John McCain, Arizona,
Chairman, Committee on Commerce, Science, and
Transportation
United States Senate

Dear Senator McCain,
Mar 98

23

I've just received a very distressing letter from Jim Hall, Chairman of NTSB. He refuses to meet with me as suggested by you. My high hopes from your letter are dashed by his letter. His text to me in his 17 Mar letter states,

"Chairman John McCain has forwarded to the National Transportation Safety Board your correspondence dated February 13, 1998, requesting a meeting with Safety Board personnel.

As stated in our most recent letter dated March 10, 1998, the TWA flight 800 investigation team has gathered sufficient facts to rule out the possibility of an in-flight opening of a cargo door. We do not believe a meeting is necessary to further discuss this issue."

Can you believe it? What to do? I have responded to Chairman Hall's no meeting 17 Mar letter with my letter attached to this one expressing my extreme dismay in clear terms. Bridges may have been burned.

I now believe one meeting with the Northwest Region NTSB representative in his office during normal working hours to discuss an agenda suggested by you, relating my concerns regarding the forward cargo door of TWA800, is not sufficient to present my nine years of research. It will take more than one meeting to open their closed minds, especially if they were now to meet me under duress.

May I suggest several possible solutions to this political face off:

1. You choose the time and place of a meeting, maintain your previous agenda, and let me invite a few aviation experts.
2. Tell Chairman Hall to reconsider his brash refusal to comply with your modest request for a meeting between NTSB representative and an informed citizen.
3. Accept me as a volunteer intern with specific duty as liaison between the Committee on Commerce, Science and Transportation and NTSB regarding a matter that has been referred by you to the committee for review, a possible cargo door mechanical cause for TWA 800. The liaison would only concern a narrow subject, forward cargo door possible mechanical cause for TW 800 and have a definite time limit to expire upon publishing of the completed Aircraft Accident Report for TWA 800.

The two letters from NTSB which state they will refuse to meet or respond to further inquiries about TWA 800 from me nor to

accede to your request for discussion and a meeting are very, very disturbing. As a former Naval Officer, I respect the chain of command. Who is the senior Chairman? In a democracy, elected officials are always senior to appointed, yes? What is going on? Why rebuff you over such a trivial matter as setting up a meeting between citizen and public servant? It stinks. The civil servants, that's Mr. Hall, have taken over the mansion of democracy from the unworthy owners, citizens and their elected representatives, that's you and me, Senator. It's a serious breach of consensual government rule of law.

Political maneuvering is not my area; airplanes are. Let me, somehow, become involved with NTSB and the Committee regarding the narrow issue of TWA 800. I was going to report back to you after the meeting with facts, data, and evidence which led the attendees to some closely reasoned conclusions, the main one being whether inadvertent opening of the forward cargo door was a reasonable line of inquiry, or not. I was going to use descriptions and explanations that we, as former Navy aviator/flight officers, would understand. Let me do the same through stronger authority as an intern with duties as Committee Liaison to NTSB.

FAA has a NTSB liaison in Mr. Lyle Streeter of FAA HQ. His job is to inform FAA of all activities related to the National Transportation Safety Board (NTSB). My offer is more constrained and only would apply to TWA 800 for a limited time. But just as necessary.

I'm a 54 year old retired married father who volunteers to be intern to the office of the Honorable Senator from Arizona; an intern to learn US government transportation workings with specialty in aviation and specific area of interest, TWA 800. As

part of internship, a liaison assignment to NTSB and Committee on Commerce, Science, and Transportation could be made. Daily written reports from intern required. Scope and duration of unpaid internship liaison would be limited. As an intern I would be a neutral and provide mutual communication between NTSB and the committee. It's an idea, sir. I would certainly accept with much appreciation if offered the internship.

This is the second time Chairman Hall has rejected your suggestions. The first was passenger representative on the TWA 800 investigation team. That may have been prevented by law, but a meeting between official and citizen is not. NTSB has a closed mind on TWA 800 even though you have been patient, you advised me to wait, and I did, and still the investigation drags on with no satisfactory answers for manufacturer, FAA, or victim's families. And NTSB refuses to consider alternative explanations based on hindsight and new evidence. It is very distressing. A stronger solution is needed.

The evidence is the troubling part, not me. The evidence must be given a chance for fair appraisal. It has not yet been given that chance in 20 months while other explanations such as bomb, missile and mystery fuel tank explosion have, while wiring/cargo door patiently waited for its turn. It now appears that turn may never come.

Can you affect that fair appraisal of the evidence in TWA 800? I've attached some new hard evidence just gleaned from the recently released NTSB public docket exhibit 8A, powerplant report, which indicates engine number three, the one closest to cargo door, ingested 'soft bodies' and had a fire which produced 'soot'. It was the only engine to do so. The FOD and fire evidence is the type which requires fair appraisal.

It may already be too late. Cargo door problems for 747s have been traced to faulty wiring. Faulty wiring has recently been traced to uncommanded rudder movements resulting in almost uncontrollable rolls in 737s. The recent mystery Silk Air 737 crash is related to uncontrollable flight. Faulty wiring may be causing the 747 and 737 flight anomalies, one with open doors in flight for 747s and another with yaw dampers for 737s.

But one step at a time. First to confirm if cargo door opened in flight on TWA 800. I can do that if given the chance to present the evidence to aviation safety experts such as NTSB from a status that will bring serious attention, such as a liaison between the Committee and NTSB while serving as intern fulfilling assignment to review a matter in committee.

A meeting now with less status may not be productive because of their stated reluctant to hold it all.

What really bugs me is that if I were a former flight leader, squadron commander and elected over and over again to important positions of government power, then to rise to Chairman of the Senate Committee on Commerce, Science, and Transportation, and an appointed lawyer chairman of a safety board figuratively told me, "No, Mr. Chairman, bad idea to meet citizen, no can do. Request for meeting denied. Goodbye." I would be very very upset, and I am.

Here would be a more pleasing letter from a mythical Chairman NTSB,

"Dear Honorable Senator Chairman John McCain, thank you for contacting me personally regarding Mr. Smith's concerns relating to the forward cargo door of TWA flight 800. He wants a

meeting. Consider it done. I have called Citizen Smith and am flying out there to meet with him to allay his concerns. I will report back to you on that evening with a progress report and any conclusions reached. Pilot Smith shall be satisfied.

I assume Mr. Smith asked us first, before disturbing your routine. If he and I have not yet met it may be because the NTSB believes sufficient facts have been gathered to rule out this possibility of an in-flight opening of a cargo door. But we will check again! Thank you for your suggestion we do.

It is such a pleasure to hear from you since the last time we spoke. I have had time to reflect on what you said and I now can say that I agree with you more than ever.

Thank you for your interest in aviation safety.

Chairman
NTSB"

Forgive my satire of correspondence, it is my way of reducing tension created with the contradiction of my reality of political relationship between you and Jim Hall and what he thinks it is.

We know what it was like to be a few seconds from disaster in a coming apart airplane, just as the 230 TWA 800 passengers knew. We are here to tell about it and try to prevent it from ever happening again.

When receiving rude and rejecting letters like the no meeting letter from Chairman Hall, I always go back to LCDR C. T. Butler for inspiration to continue. Mr. Butler was kind enough to think of me when he found himself 200 feet off the runway at

night after a FCLP pass and the starboard engine foddred from a loose titanium bolt. We had completed our pass and were climbing to turn downwind. The engine caught on fire, lost thrust and started to descend. I knew none of this in my little cockpit behind the pilot. All I heard was a soft whooshing from the starboard engine. In that time of peril for his life, Mr. Butler thought enough of fellow crewman to tell me to eject. And I did. And he did. And I lived and he died because we high enough for my chute to open but two seconds later we were not high enough for Mr. Butler's chute to open.

So now I am thinking about others in peril. That's my motive, as best as I can describe it to myself.

Please help me. Please use my experience and knowledge. Please use your power.

Best Regards,

John Barry Smith

Attachments below:

1. Cargo door for TWA 800 to Committee for review.

19 December 1996, Senator John McCain R-AR, Chairman, Senate Commerce, Science, and Transportation Committee, writes, "Thank you again for contacting me with your concerns regarding the potential hazards involving Boeing 747s. As you know, I have passed the information you sent to Chris Paul and he has informed me of your findings. I have since forwarded the material you sent to the Commerce, Science and Transportation Committee for their review."

2. Concerns to be related to NTSB when opportunity arises for discussion.
 1. water in forward cargo bay.
 2. chafed bare wire touched by water.
 3. electrical short occurs.
 4. forward door motor turns on to unlatch position.
 5. aft midspan latch of forward cargo door partially unlatches.
 6. pressurized hull ruptures at aft midspan latch.
 7. cargo door tears into pieces, some pieces stay with nose, some don't.
 8. explosive decompression occurs shattering cargo door area forward of the wing on right side exposing twenty foot by forty foot hole in nose producing sudden loud sound on CVR.
 9. 300 knots slipstream tears weakened nose off.
 10. ejected debris is ingested by starboard engines which catch fire.
 11. wing and wing fuel tanks; engines, tail, and fuselage fall and disintegrate on way down.
 12. fiery starboard engine ignites fuel vapor clouds from disintegrating tanks, including center tank.
 13. fireball observed on the ground.
 14. water impact of wreckage, cargo bay material among first to land.

3. New evidence and analysis which supports forward cargo door opening inflight and allowing foreign objects to be ingested into number 3 engine with resultant fire.

NTSB Docket SA 516, Exhibit 8A, Powerplants Group
Chairman's Factual Report,

Page 2, paragraph 2, "After the engines were recovered, they

were transported to the former Grumman facility at Calverton, New York, for disassembly. The disassembly of the engines commenced on August 12, 1996, in the presence of the Powerplants Group. The disassembly was completed on August 16, 1996."

Analysis by JBS>

1. Wrong to send to empty hangar, right to send to engine teardown facility. Wrong thing done in haste to examine engines at Calverton.

2. Five days for four engines? One day and a bit per engine is incredibly fast to disassemble one of the most complex and precise machines on the planet. It's not a bicycle. A forensic powerplant teardown is likely to require several man hundred hours per engine with several thousand hours of metallographic back up work. Additionally many specialized tools are required to do this. There should be many thousands of feet of tape or pictures. Haste is evident in a one day teardown per engine in an empty hangar with only one engine specialist present.

Page 2, paragraph 3, "The disassembly of the engines consisted of removing the cowling, external components, fan, and low pressure compressor (LPC) to expose the high pressure compressor (HPC), diffuser, combustor, high pressure turbine (HPT), low pressure turbine (LPT), and turbine exhaust cases. Engine No. 3 was disassembled further to remove and partially disassemble the HPC. The disassembly of the engines did not show any indications that any of the engines had sustained any uncontainments, case ruptures, fires, or penetrations."

Analysis by JBS>Why was only engine 3 disassembled further? What evidence was seen in No. 3 to warrant further investigation? Why were not the other three engines

disassembled further? The four most important jet engines in an airplane crash in history were not given comprehensive teardowns. The conclusion statement of no uncontainments is contradicted by other exhibit which states 'stator blade' was found in right horizontal stabilizer. The conclusion statement of no fires in any engines is contradicted later in this same report with raw data indicating sooting in engine number 3. The conclusion statement of no penetrations of any engine is contradicted by raw data in this report indicating soft body impacts on blades. The conclusion statement of everything normal in the engines is contradicted by photograph of TWA 800 engine retrieval showing forward stator stage missing and irregular FDR EPR readings.

Pages 16 through 22 discuss fuel samples which are mainly irrelevant in a discussion about engines and teardown results. 33% of engine report is not about engines but about favored NTSB explanation of center tank fuel explosion as initial event.

Exhibit 8A, Page 11, paragraph 3, discussing results of engine 3 disassembly, "Of the 46 fan blades in the fan rotor, 21 blades with complete or partial airfoils and 6 root sections were recovered. All of the fan blades had sooting on the convex airfoil surfaces. Most of the full length airfoils were bent rearward and the tips outboard of the outer midspan shroud were bent forward slightly. About half of the fan blades had impact damage to the leading and trailing edges. Almost all of the impact damage to the airfoils could be matched to contact with the midspan shroud on an adjacent blade. One full length blade had four soft body impacts along the leading edge and a partial airfoil had a soft body impact, which had some streaking extending rearward."

Analysis by JBS>Less than half of complete fan blades in the fan

rotor were recovered, not the 95% recovered figure given by Chairman Hall about TWA 800 recovered wreckage. Only 58% of the fan blades were recovered so it is very possible 'stator blade' found in right horizontal stabilizer was from engine number three directly in front. "Almost all' of the 'impact damage,' was explained which implies some wasn't. All had soot. Soot means fire. Only engine number three had any sooting inside engine. One full blade and one partial blade had 'soft body impacts'. There is nothing normally soft inside a jet engine. Soft body impact means foreign object damage. FOD may mean fire. Fire means soot. Missing blades in engine and one found directly aft in right horizontal stabilizer means uncontainment. Uncontainment means engine not intact at water impact but in flight.

Analysis above on raw data gives conclusions engine number three alone had foreign object damage in flight, had fire, and had partial disintegration. Engine 3 was the only engine to give such evidence. Engine number three is next to forward cargo hold, an area known to give FOD to engine 3 when cargo door inadvertently opens in flight. A fodded and on fire engine number three could provide the mystery ignition source for the center tank fire/explosion/fireball.

5. Response letter to Chairman Hall after he refused meeting.

National Transportation Safety Board
Office of the Chairman
Jim Hall
490 L'Enfant Plaza, S.W.
Washington, DC 20594-200

Dear Chairman Hall,

I've just received your 17 March 98 letter in which you decline to meet with me to relate my concerns about the forward cargo door of TWA 800. As you were writing to me on 17 March saying no meeting, I was writing to you on 17 March offering to meet your representative in his NTSB office during normal working hours on an agenda determined by higher authority, Senator John McCain.

It is now apparent that one meeting with a NTSB representative will be insufficient to adequately lay out my nine years of research into the wiring/cargo door rupture explanation for four Boeing 747 fatal accidents, including TWA 800. One meeting under duress will not be productive when one party is resentful.

Something more is needed. I shall go back to my elected representatives for advice.

The affront to Chairman McCain is astonishing. It is not as serious as disobeying a lawful order from a senior officer in combat during wartime which might result in court-martial and execution, but it is serious enough so that a possible reasonable mechanical explanation for a crash cause will remain unconfirmed and unfixed, therefore allowing the faulty door to repeat its killing, as it has done before.

In the meantime, I will respond to your 17 March 98 letter in detail, giving it the close scrutiny a letter from a senior appointed official of the United States government to a citizen deserves.

You write, "Chairman John McCain has forwarded to the National Transportation Safety Board your correspondence dated

February 13, 1998, requesting a meeting with Safety Board personnel."

I note you refer to Senator McCain as 'Chairman'. Yes, sir, he is a chairman, Chairman of the Committee on Commerce, Science, and Transportation of the United States Senate. And he wanted you to meet with a person to relate concerns regarding the forward cargo door of TWA 800. Not a difficult thing to do. But failed to accomplish.

That's the second time you have rebuffed Chairman McCain's suggestions regarding this matter. You earlier declined his suggestion I assist the TWA 800 investigation team as a passenger representative. And now you refuse to follow his suggestion that an NTSB representative meet with me.

A basic civics lesson may be in order. NTSB is a Safety Board set up and guided by the legislative branch while funded by the executive branch. NTSB is overseen by Congress. Elected officials determine NTSB personnel and direction. Senator John McCain, as chairman of the committee that oversees transportation matters in the United States, is your boss. In a dictatorship, appointed officials rule; in a democracy, elected officials rule. You were appointed; John McCain was elected.

The chairman of the Senate transportation committee had earlier reviewed the forward cargo door explanation for TWA 800 and deemed it serious enough to refer to the full committee for review. Chairman McCain advised me to wait. I waited. The public hearings in Baltimore are long concluded with still no satisfactory explanation of the cause of TWA 800. Chairman McCain reviewed my appraisal of the evidence at the hearings and thought it serious enough to ask for followup. He suggested

that NTSB and I have a meeting, at my request, to relate my concerns.

You have summarily dismissed the suggestion. You not only rejected my request but Senator McCain's request.

The reason you give is in the next paragraph, "As stated in our most recent letter dated March 10, 1998, the TWA flight 800 investigation team has gathered sufficient facts to rule out the possibility of an in-flight opening of a cargo door."

Wrong. Not true. Error. Incorrect. Not 'sufficient.' Not "adequate, complete, finished, done, or work over."

The right answer is "insufficient, inadequate, incomplete, not finished, undone, work in progress."

And apparently, Chairman McCain thinks so too. That's why he asked for a meeting between me and a NTSB representative. Not a huge favor to ask. But still refused by you.

Sufficient means all ten of something checked when ten available. Insufficient means eight of ten checked when ten available. NTSB has checked eight latches of the forward cargo door when it has ten. You or Bernard Loeb may believe eight of ten is sufficient but former Naval aviator and flight officer McCain and Smith know that in high speed aircraft, ten of ten door latches checked and then checked again is barely sufficient. Eight of ten latches checked once and not rechecked is insufficient and if a student pilot conducted a preflight as sloppy as that, he would be grounded by his instructor.

You have written me that a letter previously told me sufficient

facts had been gathered. You wrote me a team had gathered sufficient facts. But you never personally tell me that, do you? Let me hear you say, Chairman Hall, "I have gathered sufficient facts to rule out the possibility of an in-flight opening of the forward cargo door of TWA 800."

You can't do it because you know about the ten latches in the door and yet only eight checked. It's as if you are leaving an out, so that when the forward cargo door is shown to have opened in flight, you can blame the 'investigation team' for the error of judgment.

I believe sufficient facts have been gathered to rule in the possibility of the in-flight opening of the forward cargo door of TWA 800. There are ten latches in the door and only eight have been checked.

The 17 Mar 98 letter concludes, "We do not believe a meeting is necessary to further discuss this issue."

It is the word, 'further,' that has finally provoked me. You have never discussed this issue with me. Your 'investigation team' has never discussed 'this issue.' You have told me nonsense which, when rebutted with facts, is never replied to. You have told me generalities and unsubstantiated conclusions. You have never asked questions about 'this issue.' Any 'further' discussion from NTSB would be the 'first' discussion.

You are an aviation safety official refusing to talk about aviation safety with an informed citizen at the urging of an elected official. You refuse to have a meeting of minds to exchange ideas about the forward cargo door of TWA 800, a known killer of nine passengers. TWA 800 was a United States civilian airliner that

crashed in peacetime in United States airspace killing 130 citizens and launching an investigation that has dragged on for twenty months now and still counting with no explanation to satisfy the manufacturer, the FAA, or the victim's families. The investigation is ongoing yet you refuse to consider a reasonable mechanical alternative with precedent. You refuse to follow suggestions from a senior elected official in your administrative area. Your mind is shut. and closed tight in the middle of an investigation. You are unclear on the concept of aircraft accident investigation. You have betrayed the public trust in aviation safety Congress has given you in appointing you Chairman of the NTSB.

I believe you are afraid of a meeting. You do not want to hear about an explanation that agrees with your appraisal of a center tank explosion but backs up in time to events prior to that explosion.

You are afraid of being wrong. Chairman Hall, yet you have already shown yourself personally to be wrong. In the '...most recent letter dated March 10, 1998...' NTSB states, "Should you continue to reiterate your position on this issue in future correspondence, you should expect no further response from the Safety Board." And yet, a week later, 17 Mar, you do give response. You did not do what you said you were going to do. Senator McCain told me in 4 Mar letter he 'contacted the NTSB' on my behalf about my concerns. He did. Senator McCain does what he says he will do.

You are afraid of looking bad, a sin for a politician but not for a crash investigator. All investigations have errors, some trivial, some serious. The reputable investigators blush at the error and fix it.

NTSB was wrong in another Boeing 747 wiring/forward cargo door fatal accident, UAL 811 as written up in NTSB final aviation accident report 90/01 in which the probable cause was given as inadvertent forward cargo door opening in flight as improper latching. Upon examination of new evidence, retrieval of actual door from ocean floor, the original probable cause was shown to be wrong and was changed to the correct cause, chafed wiring shorting on door motor to unlatch position which allowed forward cargo door to open in flight leading to explosion decompression, a huge hole in the side of the nose, and the loss of nine passenger's lives. The correct probable cause was given an entirely new NTSB AAR, 92/02. That important admitting of error and correction now shows its worth years later when another high time 747, TWA 800, suffered a hull rupture forward of the wing leaving a sudden loud sound on the CVR and an abrupt power cut to the FDR, exactly like UAL 811.

I have the outlandish, cranky, weird claim it happened again. And apparently Chairman McCain thinks enough of the possibility to warrant further investigation which starts with a meeting between me and the NTSB. Which you have declined to provide.

For senior aviation safety officials to state that they will not respond to citizens giving documented substantiation for a supplemental explanation for a plane crash is bizarre. It's past bizarre; it is a breakdown in the democratic process of elected government. The civil servants, that's you, Mr. Hall, have taken over the mansion of democracy from the unworthy owners, citizens and their elected representatives, that's me and Senator McCain. It's a serious breach of government rule of law.

Chairman Hall, you have put yourself in a precarious political

situation. You have put your career, the reputation of the NTSB, and the lives of passengers on Boeing 747s at risk by relying on opinion, probably from Bernard Loeb, that UAL 811 cause did not repeat, that all ten latches were latched, that the door did not open in flight, that the cargo door was intact at water impact, and that the open cargo door was not the initial event. And you have put everything to risk even when given hard evidence in NTSB photographs, charts, and text that the aft midspan latch ruptured, the door opened in flight, the door shattered in flight before water impact and the door rupture happened before center tank explosion. You have a closed mind impervious to facts, data, and evidence. And even impervious to suggestions by a:

1. Former jet pilot.
2. United States Senator.
3. Chairman of the transportation committee.
4. Survivor of a sudden disintegrating jet airplane crash.
5. Your elected leader.

You have made a serious error of judgment, Mr. Hall, by refusing to honor a request from Senator McCain and to discuss with me the details of the wiring/cargo door explanation for TWA 800.

The last three words in your 17 Mar letter in which you refuse to comply with a request for a meeting are "Honorable John McCain." Does the word 'honor' mean much to you, Chairman Hall? I know it means a lot to former Prisoner of War John McCain and it means a lot to decorated for valor in combat during wartime John Smith. We take the word seriously. It includes a lot of easy words to say but hard to fulfill such as fairness, loyalty, attention to detail, and best effort. You have not been fair in the evaluation of possible supplemental explanations for TWA 800, you have not been loyal to government process, you have accepted less detail than that available, and you have

not given your best effort. You have been closed minded in defense of your explanation of center tank as initial event, you have subverted the democratic rule of authority to elected officials, and you have given up in seeking a complete explanation for TWA 800 by refusing to meet and discuss NTSB generated facts, data, and evidence with a citizen with a different idea. Not good. In fact, very bad.

Who is the senior chairman? NTSB is an independent board so maybe you can tell Senator McCain and Citizen Smith to go fish, you've done all the work you're going to do, and don't bother you anymore about cargo doors on 747s.

Maybe John McCain will shrug his shoulders and say, "Heck, if NTSB doesn't want to take a meeting, then they don't. Period." Maybe Chairman McCain should write a letter to Chairman Hall apologizing for bothering the chairman with an irrelevant request about something already taken care of.

I don't know much about real world politics, only real world airplanes and their crashes. So does Senator McCain. We both have been in sudden disintegrating jet plane crashes.

I do know about the way democracy is supposed work and how cargo doors are supposed to open and close. I do know why cargo doors fail and I'm learning now how relationships between government and citizen fail.

What to do? My options are limited. NTSB has told me over the months, "No, you're wrong, you're crazy to think different, you're annoying by continued writing to us, and we intend to ignore you in the future. You have not rebutted me with facts, data, and evidence, nor have you asked any questions except one, which I

alone have answered for you, "Why so few bodies burnt?"

I understand your dislike of me. I offer an unpleasant truth, cargo doors on 747s have failed again, as they did in 1987, 1989, and 1991 with all three documented in NTSB AAR 92/02.

Unpleasant truths are painful in the short run but best in the long one in flying. Pleasant lies are the more welcome news but have bad consequences in aviation.

The evidence is what is upsetting to you Chairman Hall, not me. The hard pieces of engine blade in right stabilizer, the many red paint smears, the outward twisted metal, the petal bulge at aft latch, the incomplete examination of door latches, and the internal foreign object damage and fire evidence in engine number three, all of which contradict center tank explosion as initial event but support wiring/cargo door rupture, are the realities that drive you to rebuff a powerful man's request to meet with an informed citizen, as is your duty.

If I am rude it is because I have been snubbed and a person I respect has been insulted.

My larger focus continues on preventing death by preventing plane crashes by preventing hull ruptures in flight of 747s by door openings by preventing chafed bare wire shorting on and turning door motor on to unlatch position, as it has done before. The focus is on aft midspan latch and pin, and any chafed wire found in wreckage.

New facts gleaned from NTSB public docket exhibits are appended to this letter. It's the details, Chairman Hall. The conclusion in the powerplant report says no fire, not uncontainments, and no FOD. The details for engine three reveal

fire, uncontainment, and foreign object damage. Attention to detail.

Thank you for your interest in aviation safety.

Sincerely,

John Barry Smith
551 Country Club Drive
Carmel Valley, CA 93924
408 659 3552
barry@corazon.com
www.corazon.com

6. Immediate previous correspondence to Senator McCain:

To: JulieSwinglemccainsenategov
From: John Barry Smith <barry@corazon.com>
Subject: TWA 800 cargo door/NTSB meeting thank you
Cc:
Bcc:
X-Attachments:

John McCain, Arizona,
Chairman, Committee on Commerce, Science, and
Transportation
United States Senate

Dear Senator McCain,

17 Mar 98

I've just received your 4 Mar 98 letter to me stating that on my behalf you have contacted the NTSB regarding my concerns.

Thank you very much, sir.

You mentioned my "... interest in meeting someone at the NTSB relating your concerns." I have thought about this at length and have offered the following suggestions to Chairman Hall to satisfy your implied request for a meeting between NTSB and me to relate my concerns about the forward cargo door of TWA 800.

I offer to travel to Seattle, Washington, from California to meet with NTSB officials in their offices. I suggest Wednesday, April 1, 1998 in Room 201 of NTSB NW Regional Office, Seattle, at 8 a.m.

My goal is to persuade NTSB that a reasonable line of inquiry, worthy of the same effort as that done for bomb, missile, and center tank, is the wiring/cargo door rupture explanation. The wiring/cargo door rupture concerns are:

1. water in forward cargo bay.
2. chafed bare wire touched by water.
3. electrical short occurs.
4. forward door motor turns on to unlatch position.
5. aft midspan latch of forward cargo door partially unlatches.
6. pressurized hull ruptures at aft midspan latch.
7. cargo door tears into pieces, some pieces stay with nose, some don't.
8. explosive decompression occurs shattering cargo door area forward of the wing on right side exposing twenty foot by forty foot hole in nose producing sudden loud sound on CVR.
9. 300 knots slipstream tears weakened nose off.
10. ejected debris is ingested by starboard engines which catch

fire.

11. wing and wing fuel tanks; engines, tail, and fuselage fall and disintegrate on way down.

12. fiery starboard engine ignites fuel vapor clouds from disintegrating tanks, including center tank.

13. fireball observed on the ground.

14. water impact of wreckage, cargo bay material among first to land.

I've attached my response letter to Chairman Hall to this letter.

I will report back to you with a summary, Senator; thank you again for arranging the meeting between NTSB and me. It's the wiring/cargo door's turn to justify itself.

Very Respectfully,

John Barry Smith
551 Country Club Drive,
Carmel Valley, CA 93924
408 659 3552
barry@corazon.com
www.corazon.com

Attachment below:

Jim Hall
Chairman NTSB
National Transportation Safety Board
Office of the Chairman

490 L'Enfant Plaza, S.W.
Washington, DC 20594-2000

Dear Chairman Hall,

17 Mar 98

I've just received a 4 Mar 98 letter to me from Senator John McCain stating, "I have received your letter regarding the forward cargo door of TWA Flight 800, and your interest in meeting with someone at the National Transportation Safety Board (NTSB) relating your concerns.

I have contacted the NTSB on your behalf, about your concerns. I have asked for a prompt response to be sent directly to you."

Chairman Hall, I interpret that to mean that Senator McCain wishes that the NTSB and I get together in a meeting to relate my concerns about the forward cargo door of TWA 800. That seems reasonable enough. To accurately and efficiently relate my concerns to NTSB, may I present the following suggestions:

I offer to travel to Seattle, Washington, from California to meet with NTSB officials in their offices. That's the closest office to me and previous government officials who have written to me regarding forward cargo door and TWA 800.

(From NTSB web site: NTSB Northwest Regional Office 8
a.m.-4:30 p.m.
19518 Pacific Highway South
Room 201
Seattle, Washington 98188)

The sooner the better; may I suggest Wednesday, April 1, 1998 in Room 201 of NTSB NW Regional Office at 8 a.m?

A meeting goal would be to discuss with me my concerns regarding the forward cargo door of TWA 800. My goal is to persuade NTSB that a reasonable line of inquiry, worthy of the same effort as that done for bomb, missile, and center tank, is the wiring/cargo door rupture explanation. The wiring/cargo door rupture concerns are:

1. water in forward cargo bay.
2. chafed bare wire touched by water.
3. electrical short occurs.
4. forward door motor turns on to unlatch position.
5. aft midspan latch of forward cargo door partially unlatches.
6. pressurized hull ruptures at aft midspan latch.
7. cargo door tears into pieces, some pieces stay with nose, some don't.
8. explosive decompression occurs shattering cargo door area forward of the wing on right side exposing twenty foot by forty foot hole in nose producing sudden loud sound on CVR.
9. 300 knots slipstream tears weakened nose off.
10. ejected debris is ingested by starboard engines which catch fire.
11. wing and wing fuel tanks; engines, tail, and fuselage fall and disintegrate on way down.
12. fiery starboard engine ignites fuel vapor clouds from disintegrating tanks, including center tank.
13. fireball observed on the ground.
14. water impact of wreckage, cargo bay material among first to land.

Every concern will be documented with US government and other official reports, exhibits, testimony, and charts. I will bring

my laptop computer with internet access to reach NTSB TWA 800 website and other government sites for reference. All that will be required is an outside phone line, some chairs, a table, and some good lighting.

The main concern, as is the main concern of all aviation safety persons, is that can happen again unless wiring/cargo door rupture explanation is ruled in or out by a reasonable line of inquiry by NTSB which is my goal of the meeting which Senator McCain has suggested take place.

Senator McCain mentions, 'someone' at NTSB to meet with me. May I suggest several persons to be invited to the meeting?

1. NTSB Chief of Northwest Region and staff that are available.
2. Mr. Breneman of FAA who has hands on experience with the forward cargo door of TWA 800 assisting NTSB at Calverton.
3. Mr. Neil Schalekamp of FAA who offered conclusion of evidence of TWA 800 being outward explosion at cargo door area but later changed mind.

It's far away but I certainly invite you, Mr. Chairman, and would be honored should you attend, as well as Dr. Loeb, Mr. Wildey, Mr. Drake, Mr. Dickinson, and Mr. Schleede, all of whom are very familiar with wiring/cargo door explanation and would contribute much to resolving my concerns about the forward cargo door of TWA 800. Also most helpful would be Mr. Lyle Streeter, the FAA link to NTSB. Mr. Streeter is a professional aircraft accident investigator whose opinions about aircraft accidents carry weight. If not able to attend in person, then email, phone and letters are available of course to us.

This meeting of minds is a very welcome opportunity to clear the

air and resolve some differences of opinion about TWA 800 and its cause. Harsh letters between NTSB and me have crossed paths in the last few weeks. It's distracting from the mechanical explanation of TWA 800 which relies on facts, data and evidence which is what I shall address in the proposed meeting in Seattle.

I truly believe this meeting will be very fruitful, Mr. Chairman. Goals are to establish that the cargo door of TWA 800 opened in flight or did not, it's happened before to other 747s or has not, present new evidence which has shown up in wreckage reconstruction or has not; and therefore, a reasonable line of inquiry is the wiring/cargo door rupture explanation or it is not.

I will report back to Senator McCain with the evaluation of wiring/cargo door rupture explanation by NTSB in words a former US Navy carrier jet pilot will understand, which is to say, technical and makes sense.

Chairman Hall, NTSB and FAA went right to that suspicious forward cargo door of TWA 800 from day one. It's time to go back. There's a lot more there than meets the eye at first glance. The whole story is there. It answers your question of, "Why so few bodies burned?" The answer is basically, "They were not there to be burned. They were blown away by the first initial non-firery explosive decompression and they were in the severed unburnt nose section. When the center tank finally did catch fire/ explode, there were no passengers in front of the fiery explosion to be burnt."

To ask your question, sir, as you did about the unburnt passengers, is to understand the center tank as initial event does not ring all the way true. There is doubt about the actual initial

event in your mind.

I can resolve it.

Respectfully,

John Barry Smith
551 Country Club Drive,
Carmel Valley, CA 93924
408 659 3552
barry@corazon.com
www.corazon.com

Below was sent earlier to you, Mr. Streeter but returned so I'm
appending it here.

Date: Sat, 21 Mar 1998 02:26:48 -0800
From: Mail Delivery Subsystem <MAILER-DAEMON>
Subject: Warning: could not send message for past 4 hours
To: <barry@corazon.com>
MIME-Version: 1.0
Auto-Submitted: auto-generated (warning-timeout)

** THIS IS A WARNING MESSAGE ONLY **
** YOU DO NOT NEED TO RESEND YOUR MESSAGE **
**

The original message was received at Fri, 20 Mar 1998 22:20:10
-0800

from pm7-88.mry.redshift.com [207.204.196.88]

----- The following addresses had transient non-fatal errors -----
<Lyle.Streeter@faa.dot.gov>

----- Transcript of session follows -----
<Lyle.Streeter@faa.dot.gov>... Deferred: Connection refused by
dotms2.dot.gov.
Warning: message still undelivered after 4 hours
Will keep trying until message is 5 days old

Reporting-MTA: dns; mail.redshift.com
Arrival-Date: Fri, 20 Mar 1998 22:20:10 -0800

Final-Recipient: RFC822; Lyle.Streeter@faa.dot.gov
Action: delayed
Status: 4.4.1
Remote-MTA: dns; dotms2.dot.gov
Last-Attempt-Date: Sat, 21 Mar 1998 02:26:48 -0800
Will-Retry-Until: Wed, 25 Mar 1998 22:20:10 -0800

Return-Path: barry@corazon.com
Received: from [207.204.196.88] (pm7-88.mry.redshift.com
[207.204.196.88]) by mail.redshift.com (8.8.8/8.8.8) with
ESMTP id WAA01430 for <Lyle.Streeter@faa.dot.gov>; Fri, 20
Mar 1998 22:20:10 -0800
Message-Id: <l03020901b138fda4e7d5@[207.204.196.88]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Date: Fri, 20 Mar 1998 22:21:38 -0700
To: Lyle.Streeter@faa.dot.gov
From: John Barry Smith <barry@corazon.com>
Subject: Something to chew on...

I have no way of knowing if I'll be able to attend or not.

That would be entirely dependent on such uncontrollable elements as

accidents and their related travel. If a meeting is set up, we will

attempt to have some representation from our aircraft certification

folks. No guarantees except that I will try.

Dear Mr. Streeter, thanks, good luck.

Here is something new to chew on...

<http://www.corazon.com/Exhibit8ACover.html> has entire exhibit.

Regards,

John Barry Smith

NTSB Docket SA 516, Exhibit 8A, Powerplants Group
Chairman's Factual Report,

Page 2, paragraph 2, "After the engines were recovered, they were transported to the former Grumman facility at Calverton, New York, for disassembly. The disassembly of the engines commenced on August 12, 1996, in the presence of the Powerplants Group. The disassembly was completed on August 16, 1996."

Analysis by John Barry Smith>1. Wrong to send to empty hangar, right to send to engine teardown facility. Wrong thing done in haste to examine engines at Calverton. 2. Five days for four engines? One day and a bit per engine is incredibly fast to disassemble one of the most complex and precise machines on the planet. It's not a bicycle. Haste is evident.

Page 2, paragraph 3, "The disassembly of the engines consisted of removing the cowling, external components, fan, and low pressure compressor (LPC) to expose the high pressure compressor (HPC), diffuser, combustor, high pressure turbine (HPT), low pressure turbine (LPT), and turbine exhaust cases. Engine No. 3 was disassembled further to remove and partially disassemble the HPC. The disassembly of the engines did not show any indications that any of the engines had sustained any uncontainments, case ruptures, fires, or penetrations."

Analysis by John Barry Smith>Why was only engine 3 disassembled further? What evidence was seen in No. 3 to warrant further investigation? Why were not the other three engines disassembled further? The four most important

jet engines in an airplane crash in history were not given comprehensive teardowns. The conclusion statement of no uncontainments is contradicted by other exhibit which states 'stator blade' was found in right horizontal stabilizer. The conclusion statement of no fires in any engines is contradicted later in same report with raw data indicating sooting in engine number 3. The conclusion statement of no penetrations of any engine is contradicted by raw data in same report indicating soft body impacts on blades. The conclusion statement of everything normal in the engines is contradicted by photograph of TWA 800 engine retrieval showing forward stator stage missing, and irregular FDR EPR readings.

Pages 16 through 22 discuss fuel samples, mainly irrelevant in discussion about engines and teardown results. 33% of engine report is not about engines.

Page 11, paragraph 3, discussing results of engine 3 disassembly, "Of the 46 fan blades in the fan rotor, 21 blades with complete or partial airfoils and 6 root sections were recovered. All of the fan blades had sooting on the convex airfoil surfaces. Most of the full length airfoils were bent

rearward and the tips outboard of the outer midspan shroud were bent forward slightly. About half of the fan blades had impact damage to the leading and trailing edges. Almost all of the impact damage to the airfoils could be matched to contact with the midspan shroud on an adjacent blade. One full length blade had four soft body impacts along the leading edge and a partial airfoil had a soft body impact, which had some streaking extending rearward. "

Analysis by John Barry Smith>Less than half of complete fan blades in the fan rotor were recovered, not the 95% recovered figure given by Chairman Hall about TWA 800 recovered wreckage. Only 58% of the fan blades were recovered so it is very possible 'stator blade' found in right horizontal stabilizer was from engine number three. All had soot. Soot means fire. Only engine number three had any sooting inside engine. One full blade and one partial blade had 'soft body impacts'. There is nothing normally soft inside a jet engine. Soft body impact means foreign object damage. FOD means fire. Fire means soot. Missing blades in engine and one found directly aft in right horizontal stabilizer means uncontainment. Uncontainment means engine not intact at water impact but

inflight.

Analysis above on raw data gives conclusions engine number three alone had foreign object damage in flight, had internal fire, and had partial disintegration. Engine 3 was the only engine to give such evidence. Engine number three is next to forward cargo hold, an area known to give FOD to engine 3 when cargo door inadvertently opens in flight.

barry@corazon.com

<http://www.corazon.com/>

From: John Barry Smith <barry@corazon.com>

Date: March 28, 1998 5:23:30 PM PST

To: FAAOAI

Subject: Ox Gored/Cargo door ADs

Dear Mr. Streeter, the below came up in my research.

It says NTSB thinks that the cargo door wiring be checked because of problems. The FAA says four failures have to occur even with chafed wiring for door to open and that's safe enough so did not implement NTSB suggestion.

Hmmm. My explanation for TWA 800 and others is that door opened in flight. As to why, I've now postulated it was chafed wiring, just like UAL 811. If TWA 800 was chafed wiring turning on door motor, then FAA looks to be in error years ago when they said it couldn't happen.

AD 90-09-06 Amdnt 39-6581 Effective May 29, 1990 was after

the UAL 811 door off in 1989. FAA says that that AD is sufficient even after the aft cargo door below opened on its own in 1991 and they couldn't stop it except by pulling circuit breaker. Whole story is in NTSB AAR 92/02. On website of course, www.corazon.com

But, as you can see, everybody has committed to saying this damn door is safe. And the evidence says otherwise. Let pride be overcome and look to the reality, stator blade, red paint smears, soot, fod, and missing blades in engine number 3, and on and on.

You must do something. Something. Anything.

Cheers,
John Barry Smith

NTSB Safety Recommendation Brief

Data_Source: U.S. NTSB Safety Recommendations

Rprt_Nbr: A-91-84

Last Updated: 03-13-95

[O] On June 13, 1991, United Airlines (UAL) maintenance personnel were unable to electrically open the aft cargo door on a Boeing 747-222B,

N152UA, at John F. Kennedy Airport (JFK), Jamaica, New York. The airplane was one of two used exclusively on nonstop flights between

Narita, Japan, and JFK. This particular airplane had accumulated 19,053 hours and 1,547 cycles at the time of the occurrence.

Recommendations:

A-91-84. Evaluate the design, installation, and operation of the forward cargo door flexible conduits on Boeing 747 airplanes so equipped and

issue, if warranted, an Airworthiness Directive for inspection and repair of the flexible conduit and underlying wiring bundle, similar to the provisions recommended in A-91-83.

Responses:

FAA LTR DTD: 11/01/91

The FAA agrees with the intent of these safety recommendations and is considering the issuance of a notice of proposed rulemaking to address these issues. I will provide the Board with a copy of any document that may be issued.

NTSB LTR DTD: 11/27/91

These recommendations were issued as a result of the Board's investigation of an incident in which the rear cargo door on a Boeing 747-222B initially would not open electrically and then opened electrically without activation of the door open switches. Your letter indicates that the Federal Aviation Administration agrees with the intent of these recommendations and is considering the issuance of a notice of proposed rulemaking to address these issues. The Board urges the FAA to move expeditiously on the recommendations. Pending receipt of additional information concerning the action to be taken by the Federal Aviation Administration, the Safety Board is classifying Safety Recommendations A-91-83 and -84 as "Open--Acceptable Action."

FAA LTR DTD: 4/5/93

The Federal Aviation Administration (FAA) agrees with the intent of these recommendations. On February 18, 1992, the FAA issued a notice of proposed rulemaking (NPRM) applicable to certain Boeing Model 747 series airplanes. This NPRM proposed to require inspection of the flexible conduit, wiring, and support brackets between the fuselage and the forward and aft cargo doors. Since the issuance of this NPRM, the FAA has further reviewed the circumstances surrounding this door opening incident and has confirmed that an inadvertent in-flight opening of the cargo door cannot be caused solely by wire chafing. The FAA has determined that in addition to chafing at least four independent failures must also occur in order to drive the door latches to the open position. In light of these findings, the FAA determined that the requirements proposed by the NPRM were unnecessary. On December 21, 1992, the FAA withdrew the NPRM. I have enclosed a copy of the notice of withdrawal for the Board's information.

Airworthiness Directive (AD) 90-09-06 (Docket No. 89-NM-148-AD) mandates the installation of a door warning switch located on the lock sector, as well as a reinforcement of the lock sector to ensure that the latches remain locked against backdriving of the latches by the latch power drive unit. Failure of lock sectors that are reinforced in accordance with AD 90-09-06 has been shown to be unlikely and, even in the

event of such a failure, an indication by means of the door warning switch will warn the flightcrew of the problem. The modifications, tests, and inspections required in AD 90-09-06 provide an acceptable level of safety to preclude inadvertent actuation of the cargo door power drive unit and possible injury to maintenance or cargo handling personnel. I have enclosed a copy of the AD for the Board's information. The FAA believes that the current requirements of AD 90-09-06 address the full intent of these safety recommendations to preclude an uncommanded opening of the forward and aft cargo doors.

I consider the FAA's action to be completed, and I plan no further action on Safety Recommendations A-91-83 and -84.

NTSB LTR DTD: 11/8/93

The National Transportation Safety Board has reviewed the Federal Aviation Administration (FAA) response of April 5, 1993, to Safety Recommendations A-91-83 and -84. These recommendations asked that the FAA issue an airworthiness directive applicable to all Boeing 747 airplanes with a flexible conduit protecting the wiring bundle between-the-fuselage and aft cargo door to require an expedited inspection of:

- (1) the wiring bundle in the area normally covered by the conduit for the presence of damaged insulation (using either an electrical test method or visual examination);
- (2) the conduit support bracket and attached standoff pin-on the upper arm of the forward lift

actuator

mechanism; (3) the flexible conduit for the presence of cracking in the convoluted innercore.

The Board further recommended that wires with damaged insulation be repaired before further service. Damage to the flexible conduit, conduit support bracket, and standoff pin should result in an immediate replacement of the conduit as well as the damaged parts. The inspection should be repeated at an appropriate cyclic interval.

The Safety Board then asked, in Safety Recommendation A-91-84, that the FAA evaluate the design, installation, and operation of the forward cargo door flexible conduits on Boeing 747 airplanes so equipped and issue, if warranted, an airworthiness directive for inspection and repair of the flexible conduit and underlying wiring bundle, similar to the provisions recommended in Safety Recommendation A-91-83.

The FAA's April 5, 1993, response listed a number of findings of an FAA review of the circumstances surrounding the subject door opening.

Among the findings, the FAA confirmed that an inadvertent inflight opening of the cargo door cannot be caused solely by wire chafing.

Further, the FAA determined that at least four independent failures must occur to drive the door latches to the open position.

The FAA also

stated that failure of lock sectors that are reinforced in accordance with AD 90-09-06 has been shown to be unlikely

and, even in the event of such a failure, the door warning switch would warn the flightcrew, of the problem.

Based on these findings, the FAA has decided that the requirements of AD 90-09-06 address the full intent of these recommendations-to preclude an uncommanded opening of the forward and aft cargo doors.

FAA staff has also expressed concern that the recommended inspections could result in damage to the wire bundle insulation during the intrusive inspection. Therefore, based on the level of redundancy that now exists to prevent inadvertent door opening in flight, the Safety Board has classified Safety Recommendations A-91-83 and -84 as "Closed-Reconsidered. The Board will closely monitor incidents related to the uncommanded opening of cargo doors on 747 airplanes to further document this position.

<WEBMASTER>

NTSB Safety Recommendation Brief

Data_Source: U.S. NTSB Safety Recommendations

Rprt_Nbr: A-91-83

Last Updated: 03-13-95

[O] On June 13, 1991, United Airlines (UAL) maintenance

personnel were unable to electrically open the aft cargo door on a Boeing 747-222B, N152UA, at John F. Kennedy Airport (JFK), Jamaica, New York. The airplane was one of two used exclusively on nonstop flights between Narita, Japan, and JFK. This particular airplane had accumulated 19,053 hours and 1,547 cycles at the time of the occurrence.

Recommendations:

A-91-83. Issue an Airworthiness Directive applicable to all Boeing 747 airplanes with a flexible conduit protecting the wiring bundle between the fuselage and aft cargo door to require an expedited inspection of:

- (1) the wiring bundle in the area normally covered by the conduit for the presence of damaged insulation (using either an electrical test method or visual examination);
- (2) the conduit support bracket and attached standoff pin on the upper arm of the forward lift actuator mechanism;
- (3) the flexible conduit for the presence of cracking in the convoluted innercore.

Wires with damaged insulation should be repaired before further service. Damage to the flexible conduit, conduit support bracket and standoff pin should result in an immediate replacement of the conduit as well as the damaged parts. The inspection should be repeated at an appropriate cyclic interval.

Responses:

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NTSB LTR DTD: 11/8/93

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- (2) the conduit support bracket and attached standoff pin-on the upper arm of the forward lift actuator

mechanism; (3) the flexible conduit for the presence of cracking in the convoluted innercore.

The Board further recommended that wires with damaged insulation be repaired before further service. Damage to the flexible conduit, conduit support bracket, and standoff pin should result in an immediate replacement of the conduit as well as the damaged parts. The inspection should be repeated at an appropriate cyclic interval.

The Safety Board then asked, in Safety Recommendation A-91-84, that the FAA evaluate the design, installation, and operation of the forward cargo door flexible conduits on Boeing 747 airplanes so equipped and issue, if warranted, an airworthiness directive for inspection and repair of the flexible conduit and underlying wiring bundle, similar to the provisions recommended in Safety Recommendation A-91-83.

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Among the findings, the FAA confirmed that an inadvertent inflight opening of the cargo door cannot be caused solely by wire chafing.

Further, the FAA determined that at least four independent failures must occur to drive the door latches to the open position. The FAA also stated that failure of lock sectors that are reinforced in accordance with AD 90-09-06 has been shown to be unlikely and, even in the event of

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<WEBMASTER>

From: John Barry Smith <barry@corazon.com>

Date: April 1, 1998 2:41:33 PM PST

To: FAAOAI

Subject: FAA/NTSB link to wiring/cargo door cause for TWA 800

Dear Mr. Streeter,

Hard copy going to everyone and email to those with addresses.
No email for Mr. McSweeny, Mr. Breneman, or Mr. Schalekamp,
all of FAA, could you pass this along to them?

Regards,

Barry Smith

Sam Farr
Member of Congress
17th District, California
House of Representatives
Congress of the United States
Washington, DC

John McCain III
Member of Congress
Chairman, Committee on Commerce, Science, and
Transportation
United States Senate
Washington, DC

James Hall
Chairman,
National Transportation Safety Board

Bernard Loeb,
Director of Aviation Safety
National Transportation Safety Board

Al Dickinson,
Lead Investigator, TWA 800

National Transportation Safety Board

Ron Schleede,
Investigator, TWA 800
National Transportation Safety Board

James F. Wildey II
National Resource Specialist
National Transportation Safety Board
490 L'Enfant Plaza East, SW.
Washington, DC 20594

Thomas McSweeney
Director, Aircraft Certification Service
FAA National Headquarters

Lyle Streeter
FAA AAI
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FAA National Headquarters
800 Independence Avenue, S.W
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Neil Schalekamp
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Branch
Transport Standards Staff
Transport Airplane Directorate, ANM-100
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Renton, WA 98055-4056

Bob Breneman,

Aerospace Engineer,
Federal Aviation Administration
Transport Airplane Directorate, ANM-100
1601 Lind Ave. S.W.
Renton, WA 98055-4056

Dear Mr. Streeter,

1 April 1998

Senator McCain, you were absolutely right when you recently said about a GAO report, "I am very concerned that once again the FAA has fallen short by not fully utilizing its capabilities to help determine potential aviation safety and security problems." Well, honest agencies such as FAA and NTSB make honest mistakes, and honest agencies make honest corrections.

A motive has been discovered to explain why FAA Certification Service is so adamant that the cargo door of TWA 800 did not open in flight. It's because they earlier said it couldn't happen. There is another motive for not examining the entire door before declaring it all latched and all locked and all intact at water impact which is the Certification Service saying that the eight locking sectors for the ten latches in the door were sufficient to keep door closed in flight when it originally certified the Boeing 747. And NTSB relied on FAA examination of TWA 800 door for belief it was all latched, all locked, and all intact until water impact.

Rprt_Nbr: A-91-84 states: "Since the issuance of this NPRM, the FAA has further reviewed the circumstances surrounding this door opening incident and has confirmed that an inadvertent in-flight opening of the cargo door cannot be caused solely by wire chafing. The FAA has determined that in addition to chafing at

least four independent failures must also occur in order to drive the door latches to the open position. In light of these findings, the FAA determined that the requirements proposed by the NPRM were unnecessary."

FAA Aircraft Certification Service has thus said door was safe when designed but when it opened in flight anyway said it couldn't happen again after it was supposed to have been fixed. It was not safe when designed and it did happen again because the problems of water in hold and midspan latches not having locking sectors were not recognized at the time.

The attachment below details the sequence of NTSB asking that the wire conduits to the cargo doors of early Boeing 747s be inspected. It gives the FAA response that it couldn't happen, so the check was not necessary. It is NTSB saying cargo door could come inadvertently open electrically and FAA saying it couldn't. NTSB was well aware of the wiring problems involved with cargo doors of Boeing 747s and asked that the wiring be checked again. FAA demurred.

This NPRM attachment explains so much.

It explains why Bob Brennerman knew and went to forward cargo door as soon as wreckage was brought to Calverton within days. FAA knew there was a problem with doors and knew they could have caused problem as shown by circumstances of TWA 800: NTSB had previously said door may open in flight, FAA knew it had before, and TWA 800 looked like hull rupture at forward cargo door.

It explains why FAA was so quick to say door was not the problem when only bottom eight latches checked out of ten

available and the rest of complex door parts ignored: FAA had said door opening could not happen and did not want to be wrong.

It explains why Mr. Wildey so readily agreed with FAA cursory examination and hasty conclusion door was all latched, all locked, and all intact at water impact: NTSB had said door might open in flight and was reassured by FAA saying it couldn't and NTSB accepted it. He does not want to be wrong.

It explains why Mr. Schalekamp so quickly retracted his statement of outward explosion of hull forward of the wing on the right side in the cargo hold area: FAA had said it couldn't happen and his evaluation of paint markings and structural deformation directly contradicted that appraisal. He does not want to say FAA is wrong.

It explains why Mr. McSweeny continues to state TWA 800 had no door problem while providing no evidence to support conclusion and ignores contrary evidence it did: He said it couldn't happen and does not want to be wrong.

It explains why FAA Northwest Region is the only FAA branch to go public agreeing with center tank as initial event: FAA Northwest Region desperately wants TWA 800 to not be a door opening in flight: They said it couldn't happen and do not want to be wrong.

It explains why Mr. McSweeny will not reply directly to knowledge that the midspan latches have no locking sectors and rupture appears at aft midspan latch: FAA certification service said midspan locking sectors were not necessary when certifying cargo door as acceptable as designed. He does not want to be

wrong.

It explains why FAA and NTSB and Boeing all ignore possible cargo door involvement with TWA 800 and insist on preposterous position of forward cargo door all latched, all locked, and all intact until water impact, contrary to visual proof of wreckage reconstruction of outward peeled skin, red paint smears, petal bulge at aft latch, and rectangular shatter zone in cargo door area: All said the door was safe when designed with only eight locking sectors; when it finally broke it was supposed to have been fixed; a door opening was not supposed to ever happen again; and recommended safety actions concerning wiring and the door were rebuffed. Cargo door opening in flight for TWA 800 may make them all wrong, unless center tank explosion blew it open. FAA, NTSB and Boeing do not want to be wrong. Nobody does.

All aviation safety persons in Boeing and government are now living a nightmare. Something, the cargo door, they said was safe when designed is now shown not to be so and resulted in a failure and fatalities, Pan Am 125 and UAL 811. Something that broke was supposed to have been fixed but wasn't and resulted in another failure, UAL preflight. Something that could have been checked, wasn't, and may now have resulted in more fatalities, TWA 800. That was horror preamble, this is the current nightmare: The wiring chafed short problem causing cargo doors to open in flight is still there on all early Boeing 747s still flying.

I am saying cargo door opening in flight could happen again and did with TWA 800. The new reasons, not known by FAA at the time, are that water in the cargo hold can bypass the four safety feature switches upon which FAA relied on to prevent the inflight opening and the midspan latches do require locking sectors.

The certification should not have been granted for the door with only eight locking sectors installed instead of ten possible. There is bias against believing door opened in flight at rupture at aft midspan latch because FAA said the midspan latches were safe and did not require locking sectors. The latches required locking sectors then and still do now.

FAA said that door could not open by chafing alone relying on safety features all bypassed by water around the chafed wiring. Water and fluid are known to get into forward cargo hold by my personal viewing, by recent Bournemouth Boeing 737 AAIB incident report, the cargo hold has a bilge to hold the expected water, water condenses in the warm humid hold when subjected to cold conditioned air, two large potable water tanks are in hold, the seals are notorious for leaking, and a rain shower engulfed TWA 800 an hour before takeoff on the fatal flight.

The forward cargo door opened in flight for TWA 800, that is plain to see in the reconstruction photo of structural deformation and paint markings. What caused it to open is conjecture based on precedent and scant evidence. I agree with NTSB in A-91-83 and A-91-84 that the wiring in cargo door conduits is involved. To maintain door did not open in flight and the rectangular shatter zone forward of the wing on the right side of TWA 800 was all caused by water impact is untenable based on visual hard evidence of paint markings and structural deformation. Additional evidence for forward cargo door opening in flight is the petal bulge at aft midspan latch, the missing midspan latches, missing 80% of door material, the outward peeled skin, red paint smears, and the shape of shatter zone matches that of another cargo door opening in flight, UAL 811.

Mr. Tom McSweeney, I ask that you overcome those two biases of saying door was safe with only eight locking sectors and it could not open in flight again and conduct a thorough investigation of possible forward cargo door opening in flight for TWA 800. Institutional memory is a strong factor in investigations and it's very difficult to admit error but in areas of life and death, pride must be overcome and objectivity sought. That door opening in flight has not yet been checked out as it should be.

Mr. Neil Schalekamp, you believed at one time the forward cargo door area did open outward in flight based on structural deformation and paint markings. Will you please inform Mr. McSweeney of your findings and conclusions.

Mr. Bob Brennerman, you examined the forward cargo door of TWA 800 and saw the bottom eight latches latched. Will you please tell Mr. McSweeney that you reported on only the eight latches and not the ten available, nor did you examine the manual locking handle, the overpressure relief doors, the viewing ports or the torque tubes.

Chairman Jim Hall, please note the NTSB was right on target by zeroing in on the wire conduits as stated in A-91-83 and A-91-84: "Evaluate the design, installation, and operation of the forward cargo door flexible conduits on Boeing 747 airplanes so equipped and issue, if warranted, an Airworthiness Directive for inspection and repair of the flexible conduit and underlying wiring bundle, similar to the provisions recommended in A-91-83." That is exactly what I would recommend after all these years of research into door openings of early 747s which tracked down the culprit to chafed wiring, a problem well known to the NTSB and FAA all this while. You were right to hold hearing on aging airliners and old wiring problems. Please follow your own

recommendation and thoroughly investigate the wiring/cargo door rupture explanation for TWA 800.

Mr. Al Dickinson and Mr. Ron Schleede, would you follow NTSB recommendation in A-91-83 and examine the flexible conduit protecting the wiring bundle between the fuselage and aft cargo door; specifically:

- (1) the wiring bundle in the area normally covered by the conduit for the presence of damaged insulation (using either an electrical test method or visual examination);
- (2) the conduit support bracket and attached standoff pin on the upper arm of the forward lift actuator mechanism;
- (3) the flexible conduit for the presence of cracking in the convoluted innercore.

Mr. Jim Wildey, your exhibit report of 15C remains the final official word on the forward cargo door status of TWA 800. Knowing that you based your conclusion of door all latched and all locked and all intact at water impact on information from the service which has a very strong bias that the door not open in flight, would you reevaluate your findings and conclusions to reflect the new evidence shown in TWA 800 wreckage reconstruction such as paint markings and structural deformation? Note that the midspan latches have no locking sectors to strengthen and water does get into the forward cargo hold in flight.

Mr. Lyle Streeter, can you set up a meeting with me and government aircraft safety investigators to discuss this issue of whether forward cargo door opened in flight or not for TWA 800? Phone, or letter, or email, or in person is fine, but the details in the evidence need to be talked about in a give and take session, not just letters back and forth with general conclusions.

Although NTSB may have primary responsibility for investigating aircraft accidents, FAA Safety Office is now expected to be fully utilizing its capabilities to help determine potential aviation safety and security problems.

Gentleman, every single thing I say about the accident cause of TWA 800 and other Boeing 747s suffering hull rupture in flight forward of the wing on the right side which leaves a sudden loud sound on the CVR and an abrupt power cut to the FDR has happened before, is documented in government accident reports, and the danger known about by FAA and NTSB.

Wiring/cargo door explanation for TWA 800 is reasonable and worthy of a thorough investigation. It is not weird such as missile, bomb, or meteor, explanations which have been granted much consideration. Center tank explosion occurred but it was an effect of the wiring short, just as cargo door opening and engines being foddled, not the initial event but secondary.

Safety People, the unlikely happened, again. That damned cargo door opened in flight, as it did in 1987, 1989, and 1991 by your official count and again in 1985, 1988, and 1996 by my additional count.

It's a big problem and needs a big fix. Wiring is becoming chafed, meeting water and shorting, giving a petite mal of trivial electrical devices turning on or off and a grand mal seizure when the door motor turns on when it shouldn't.

Sincerely,

John Barry Smith
408 659 3552

barry@corazon.com
551 Country Club Drive
Carmel Valley, CA 93924

Attachment below:

NTSB Safety Recommendation Brief

Data_Source: U.S. NTSB Safety Recommendations

Rprt_Nbr: A-91-83

Last Updated: 03-13-95

[O] On June 13, 1991, United Airlines (UAL) maintenance personnel were unable to electrically open the aft cargo door on a Boeing 747-222B, N152UA, at John F. Kennedy Airport (JFK), Jamaica, New York. The airplane was one of two used exclusively on nonstop flights between Narita, Japan, and JFK. This particular airplane had accumulated 19,053 hours and 1,547 cycles at the time of the occurrence.

Recommendations:

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method or visual examination);

(2) the conduit support bracket and attached standoff pin on the upper arm of the forward lift actuator mechanism;

(3) the flexible conduit for the presence of cracking in the convoluted innercore.

Wires with damaged insulation should be repaired before further service. Damage to the flexible conduit, conduit support bracket and standoff pin should result in an immediate replacement of the conduit as well as the damaged parts. The inspection should be repeated at an appropriate cyclic interval.

Responses:

FAA LTR DTD: 11/1/91

The FAA agrees with the intent of these safety recommendations and is considering the issuance of a notice of proposed rulemaking to address these issues. I will provide the Board with a copy of any document that may be issued.

NTSB LTR DTD: 11/27/91

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The Board further recommended that wires with damaged insulation be repaired before further service. Damage to the flexible conduit, conduit support bracket, and standoff pin should result in an immediate replacement of the conduit as well as the damaged parts. The inspection should be repeated at an appropriate cyclic interval.

The Safety Board then asked, in Safety Recommendation A-91-84, that the FAA evaluate the design, installation, and operation of the forward cargo door flexible conduits on Boeing

747 airplanes so equipped and issue, if warranted, an airworthiness directive for inspection and repair of the flexible conduit and underlying wiring bundle, similar to the provisions recommended in Safety Recommendation A-91-83.

The FAA's April 5, 1993, response listed a number of findings of an FAA review of the circumstances surrounding the subject door opening. Among the findings, the FAA confirmed that an inadvertent inflight opening of the cargo door cannot be caused solely by wire chafing. Further, the FAA determined that at least four independent failures must occur to drive the door latches to the open position. The FAA also stated that failure of lock sectors that are reinforced in accordance with AD 90-09-06 has been shown to be unlikely and, even in the event of such a failure, the door warning switch would warn the flightcrew, of the problem.

Based on these findings, the FAA has decided that the requirements of AD 90-09-06 address the full intent of these recommendations-to preclude an uncommanded opening of the forward and aft cargo doors.

FAA staff has also expressed concern that the recommended inspections could result in damage to the wire bundle insulation during the intrusive inspection. Therefore, based on the level of redundancy that now exists to prevent inadvertent door opening in flight, the Safety Board has classified Safety Recommendations A-91-83 and -84 as "Closed-Reconsidered. The Board will closely monitor incidents related to the uncommanded opening of cargo doors on 747 airplanes to further document this position.

NTSB Safety Recommendation Brief

Data_Source: U.S. NTSB Safety Recommendations

Rprt_Nbr: A-91-84

Last Updated: 03-13-95

[O] On June 13, 1991, United Airlines (UAL) maintenance personnel were unable to electrically open the aft cargo door on a Boeing 747-222B, N152UA, at John F. Kennedy Airport (JFK), Jamaica, New York. The airplane was one of two used exclusively on nonstop flights between Narita, Japan, and JFK. This particular airplane had accumulated 19,053 hours and 1,547 cycles at the time of the occurrence.

Recommendations:

A-91-84. Evaluate the design, installation, and operation of the forward cargo door flexible conduits on Boeing 747 airplanes so equipped and issue, if warranted, an Airworthiness Directive for inspection and repair of the flexible conduit and underlying wiring bundle, similar to the provisions recommended in A-91-83.

Responses:

FAA LTR DTD: 11/01/91

The FAA agrees with the intent of these safety recommendations and is considering the issuance of a notice of proposed rulemaking to address these issues. I will provide the Board with a copy of any document that may be issued.

NTSB LTR DTD: 11/27/91

These recommendations were issued as a result of the Board's investigation of an incident in which the rear cargo door on a Boeing 747-222B initially would not open electrically and then opened electrically without activation of the door open switches. Your letter indicates that the Federal Aviation Administration agrees with the intent of these recommendations and is

considering the issuance of a notice of proposed rulemaking to address these issues. The Board urges the FAA to move expeditiously on the recommendations. Pending receipt of additional information concerning the action to be taken by the Federal Aviation Administration, the Safety Board is classifying Safety Recommendations A-91-83 and -84 as "Open-Acceptable Action."

FAA LTR DTD: 4/5/93

The Federal Aviation Administration (FAA) agrees with the intent of these recommendations. On February 18, 1992, the FAA issued a notice of proposed rulemaking (NPRM) applicable to certain Boeing Model 747 series airplanes. This NPRM proposed to require inspection of the flexible conduit, wiring, and support brackets between the fuselage and the forward and aft cargo doors. Since the issuance of this NPRM, the FAA has further reviewed the circumstances surrounding this door opening incident and has confirmed that an inadvertent in-flight opening of the cargo door cannot be caused solely by wire chafing. The FAA has determined that in addition to chafing at least four independent failures must also occur in order to drive the door latches to the open position. In light of these findings, the FAA determined that the requirements proposed by the NPRM were unnecessary. On December 21, 1992, the FAA withdrew the NPRM. I have enclosed a copy of the notice of withdrawal for the Board's information.

Airworthiness Directive (AD) 90-09-06 (Docket No. 89-NM-148-AD) mandates the installation of a door warning switch located on the lock sector, as well as a reinforcement of the lock sector to ensure that the latches remain locked against backdriving of the latches by the latch power drive unit. Failure

of lock sectors that are reinforced in accordance with AD 90-09-06 has been shown to be unlikely and, even in the event of such a failure, an indication by means of the door warning switch will warn the flightcrew of the problem. The modifications, tests, and inspections required in AD 90-09-06 provide an acceptable level of safety to preclude inadvertent actuation of the cargo door power drive unit and possible injury to maintenance or cargo handling personnel. I have enclosed a copy of the AD for the Board's information. The FAA believes that the current requirements of AD 90-09-06 address the full intent of these safety recommendations to preclude an uncommanded opening of the forward and aft cargo doors.

I consider the FAA's action to be completed, and I plan no further action on Safety Recommendations A-91-83 and -84.

NTSB LTR DTD: 11/8/93

The National Transportation Safety Board has reviewed the Federal Aviation Administration (FAA) response of April 5, 1993, to Safety Recommendations A-91-83 and -84. These recommendations asked that the FAA issue an airworthiness directive applicable to all Boeing 747 airplanes with a flexible conduit protecting the wiring bundle between-the-fuselage and aft cargo door to require an expedited inspection of:

- (1) the wiring bundle in the area normally covered by the conduit for the presence of damaged insulation (using either an electrical test method or visual examination);
- (2) the conduit support bracket and attached standoff pin-on the upper arm of the forward lift actuator mechanism;
- (3) the flexible conduit for the presence of cracking in the convoluted innercore.

The Board further recommended that wires with damaged insulation be repaired before further service. Damage to the flexible conduit, conduit support bracket, and standoff pin should result in an immediate replacement of the conduit as well as the damaged parts. The inspection should be repeated at an appropriate cyclic interval.

The Safety Board then asked, in Safety Recommendation A-91-84, that the FAA evaluate the design, installation, and operation of the forward cargo door flexible conduits on Boeing 747 airplanes so equipped and issue, if warranted, an airworthiness directive for inspection and repair of the flexible conduit and underlying wiring bundle, similar to the provisions recommended in Safety Recommendation A-91-83.

The FAA's April 5, 1993, response listed a number of findings of an FAA review of the circumstances surrounding the subject door opening. Among the findings, the FAA confirmed that an inadvertent inflight opening of the cargo door cannot be caused solely by wire chafing. Further, the FAA determined that at least four independent failures must occur to drive the door latches to the open position. The FAA also stated that failure of lock sectors that are reinforced in accordance with AD 90-09-06 has been shown to be unlikely and, even in the event of such a failure, the door warning switch would warn the flightcrew, of the problem.

Based on these findings, the FAA has decided that the requirements of AD 90-09-06 address the full intent of these recommendations-to preclude an uncommanded opening of the forward and aft cargo doors.

FAA staff has also expressed concern that the recommended inspections could result in damage to the wire bundle insulation

during the intrusive inspection. Therefore, based on the level of redundancy that now exists to prevent inadvertent door opening in flight, the Safety Board has classified Safety Recommendations A-91-83 and -84 as "Closed-Reconsidered. The Board will closely monitor incidents related to the uncommanded opening of cargo doors on 747 airplanes to further document this position.

From: Lyle Streeter <Lyle.Streeter@faa.dot.gov>

Date: April 2, 1998 7:06:55 AM PST

To: barry@corazon.com (IPM Return requested) (Receipt notification requested)

Subject: Re: FAA/NTSB link to wiring/cargo door cause for TWA 800

Mail forwarded as you requested.

Lyle Streeter

_____ Reply Separator

Subject: FAA/NTSB link to wiring/cargo door cause for TWA 800

Author: barry@corazon.com at Internet

Date: 4/2/98 12:11 AM

-- see attachments --

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M('=R;VYG+@T*#0I)="!E>!L86EN<R!W:'D@37(N(%-C:&
%L96MA;7 @<V\@
M<75I8VML>2!R971R86-T960@:&ES('-T871E;65N="!
O9@T*;W5T=V%R9"!E
M>!L;W-I;VX@;V8@:'5L;!"!F;W)W87)D(&]F('1H92!W:6YG
(&]N('1H92!R
M:6=H="!S:61E(&EN('1H90T*8V%R9V\@:&]L9"!A<F5A.B!
&04\$@:&%D('-A
M:60@:70@8V]U;&1N)W0@:&%P<&5N(&%N9"!H:

7,@979A;'5A=&EO;B!O9@T*
M<&%I;G0@;6%R:VEN9W,@86YD('-
T<G5C='5R86P@9&5F;W)M871I;VX@9&ER
M96-T;'D@8V]N=')A9&EC=&5D('1H870-"F%P<')A:7-
A;"X@2&4@9&]E<R!N
M;W0@=V%N="!T;R!S87D@1D%!(&ES('=R;VYG+@T*#0I)
="!E>'!L86EN<R!W
M:'D@37(N(\$UC4W=E96YY(&-O;G1I;G5E<R!T;R!S=&
&T92!45T\$@.# P(&AA
M9"!N;R!D;V]R('!R;V)L96T-"G=H:6QE('!R;W9I9&EN9R!
N;R!E=FED96YC
M92!T;R!S=7!P;W)T(&-O;F-L=7-I;VX@86YD(&EG;F]
R97,@8V]N=')A<GD-
M"F5V:61E;F-E(&ET(&1I9#H@2&4@<V%I9"!I="!
C;W5L9&XG="!H87!P96X@
M86YD(&1O97,@;F]T('=A;G0@=&\@8F4@=W)
O;F<N#0H-"DET(&5X<&QA:6YS
M('=H>2!&04\$@3F]R=&AW97-T(%)E9VEO;B!I<R!
T:&4@;VYL>2!&04\$@8G)A
M;F-H('1O(&=O('!U8FQI8PT*86=R965I;F<@=VET:"!
C96YT97(@=&%N:R!A
M<R!I;FET:6%L(&5V96YT.B!&04\$@3F]R=&AW97-T(%)
E9VEO;@T*9&5S<&5R
M871E;'D@=V%N=',@5%=(#@P,"!T;R!N;W0@8F4@82!
D;V]R(&]P96YI;F<@
M:6X@9FQI9VAT.B!4:&5Y('A:60@:70-"F-O=6QD;B=T
(&AA<'!E;B!A;F0@
M9&\@;F]T('=A;G0@=&\@8F4@=W)O;F<N#0H-"DET
(&5X<&QA:6YS('=H>2!-
M<BX@36-3=V5E;GD@=VEL;"!N;W0@<F5P;'D@9&ER96-
T;'D@=&\@:VYO=VQE
M9&=E('1H870@=&AE#0IM:61S<&%N(&QA=&-H97,@:&
&V92!N;R!L;V-K:6YG

M('E8W1O<G,@86YD()U<'1U<F4@87!P96%R<R!A="!
A9G0@;6ED<W!A;@T*
M;&%T8V@Z(\$9!02!C97)T:69I8V%T:6]N('E<G9I8V4@<V
%I9"!M:61S<&%N
M(&QO8VMI;F<@<V5C=&]R<R!W97)E(&YO= T*;F5C97-
S87)Y('=H96X@8V5R
M=&EF>6EN9R!C87)G;R!D;V]R(&%S(&%C8V5P=&
%B;&4@87,@9&5S:6=N960N
M(\$AE(&1O97,@;F]T#0IW86YT('1O(&)E('=R;VYG+@T*#0I)
="!E>!"L86EN
M<R!W:'D@1D%!(&%N9"!5%-("&%N9"!";V5I;F<@86QL
(&EG;F]R92!P;W-S
M:6)L92!C87)G;R!D;V]R#0II;G9O;'9E;65N="!W:71H(%1702
X,# @86YD
M(&EN<VES="!O;B!P<F5P;W-T97)O=7,@<&]S:
71I;VX@;V8@9F]R=V%R9 T*
M8V%R9V\@9&]O<B!A;&P@;&%T8VAE9"P@86QL
(&QO8VME9"P@86YD(&%L;"!I
M;G1A8W0@=6YT:6P@=V%T97(@:6UP86-T+ T*8V]N=')
A<GD@=&\@=FES=6%L
M('!R;V]F(&]F('=R96-K86=E(')E8V]N<W1R=6-T:6]N(&]F(&]
U='=A<F0@
M<&5E;&5D('K:6XL#0IR960@<&%I;G0@<VUE87)S+"!
P971A;"!B=6QG92!A
M="!A9G0@;&%T8V@L(&%N9"!R96-T86YG=6QA<B!S:&
%T=&5R('IO;F4@:6X-
M"F-A<F=O(&1O;W(@87)E83H@06QL('A:60@=&AE
(&1O;W(@=V%S('A9F4@
M=VAE;B!D97-I9VYE9"!W:71H(&]
N;'D@96EG:'0-"FQO8VMI;F<@<V5C=&]R
M<SL@=VAE;B!I="!F:6YA;&QY(&)R;VME(&ET('=A<R!
S=7!P;W-E9"!T;R!H
M879E(&)E96X@9FEX960[#0IA(&1O;W(@;W!E;FEN9R!

W87,@;F]T('U<!O
M<V5D('1O(&5V97(@:&%P<&5N(&%G86EN.R!
A;F0@<F5C;VUM96YD960-"G-A
M9F5T>2!A8W1I;VYS(&-O;F-E<FYI;F<@=VER:6YG(&
%N9"!T:&4@9&]O<B!W
M97)E(')E8G5F9F5D+B @0V%R9V\@9&]O<@T*;W!
E;FEN9R!;B!F;&EG:'0@
M9F]R(%1702 X,# @;6%Y(&UA:V4@=&AE;2!A;&P@=W)
O;F<L('5N;&5S<R!C
M96YT97(@=&%N:PT*97AP;&]S:6]N(&)L97<@:70@;W!
E;BX@1D%!'+'!.5%-"
M(&%N9"!";V5I;F<@9&\@;F]T('=A;G0@=&\@8F4@=W)
O;F<N#0I.;V)O9'D@
M9&]E<RX-"@T*06QL(&%V:6%T:6]N('-A9F5T>2!P97)
S;VYS(&EN(\$))O96EN
M9R!A;F0@9V]V97)N;65N="!A<F4@;F]W(&QI=FEN9R!
A#0IN:6=H=&UA<F4N
M(%-O;65T:&EN9RP@=&AE(&-A<F=O(&1O;W(L
(1H97D@<V%I9"!W87,@<V%F
M92!W:&5N(&1E<VEG;F5D(&ES#0IN;W<@<VAO=VX@;F]
T('1O(&)E('O(&%N
M9"!R97-U;'1E9"!I;B!A(&9A:6QU<F4@86YD(&9A=&%L:
71I97,L(%!A;B!!
M;2 Q,C4-"F%N9"!504P@.#\$Q+B!
3;VUE=&AI;F<@=&AA="!B<F]K92!W87,@
M<W5P<&]S960@=&\@:&%V92!B965N(&9I>&5D(&)U=
T*=V%S;B=T(&%N9"!R
M97-U;'1E9"!I;B!A;F]T:&5R(&9A:6QU<F4L(%5!3"
P<F5F;&EG:'0N(%-O
M;65T:&EN9R!T:&%T(&-O=6QD#0IH879E(&
E96X@8VAE8VME9"P@=V%S;B=T
M+'!A;F0@;6%Y(&YO=R!H879E(')E<W5L=&5D(&EN
(&UO<F4@9F%T86QI=&EE

M<RP-"E1702 X,# N(%1H870@=V%S(&AO<G)O<B!P<F5A;
6)L92P@=&AI<R!I
M<R!T:&4@8W5R<F5N="!N:6=H=&UA<F4Z
(%1H90T*=VER:6YG(&-H869E9"!S
M:&]R="!P<F]B;&5M(&-A=7-I;F<@8V%R9V\@9&]
O<G,@=&\@;W!E;B!I;B!F
M;&EG:'0@:7,@<W1I;&P-"G1H97)E(&]N(&%L;"!E87)
L>2!";V5I;F<@-S0W
M<R!S=&EL;"!F;'EI;F<N#0H-"DD@86T@<V%Y:6YG(&-
A<F=O(&1O;W(@;W!E
M;FEN9R!I;B!F;&EG:'0@8V]U;&0@:&%P<&5N(&%G86EN
(&%N9"!D:60@=VET
M: T*5%=(#@P,"X@5&AE(&YE=R!R96%S;VYS+"!
N;W0@:VYO=VX@8GD@1D%!
M(&%T('1H92!T:6UE+"!A<F4@=&AA="!W871E<B!
I;@T*=&AE(&-A<F=O(&AO
M;&0@8V%N(&)Y<&%S<R!T:&4@9F]U<B!
S869E='D@9F5A='5R92!S=VET8VAE
M<R!U<&]N('=H:6-H(\$9!00T*<F5L:65D(&]N('1O('!
R979E;G0@=&AE(&EN
M9FQI9VAT(&]P96YI;F<@86YD('1H92!M:61S<&%N
(&QA=&-H97,@9&\-"G)E
M<75I<F4@;&]C:VEN9R!S96-T;W)S
+@T*#0I4:&4@8V5R=&EF:6-A=&EO;B!S
M:&]U;&0@;F]T(&AA=F4@8F5E;B!G<F%N=&5D(&9O<B!
T:&4@9&]O<B!W:71H
M(&]N;'D@96EG:'0-"FQO8VMI;F<@<V5C=&]R<R!I;G-
T86QL960@:6YS=&5A
M9"!O9B!T96X@<&]S<VEB;&4N(%1H97)E(&ES(&)
I87,@86=A:6YS= T*8F5L
M:65V:6YG(&1O;W(@;W!E;F5D(&EN(&9L:6=H="!A="!R=7!
T=7)E(&%T(&%F
M="!M:61S<&%N(&QA=&-H(&)E8V%U<V4@1D%!

#0IS86ED('1H92!M:61S<&%N
M(&QA=&-H97,@=V5R92!S869E(&%N9"!D:60@;F]T(')
E<75I<F4@;&]C:VEN
M9R!S96-T;W)S+B!4:&4-"FQA=&-
H97,@<F5Q=6ER960@;&]C:VEN9R!S96-T
M;W)S('1H96X@86YD('-T:6QL(&1O(&YO=RX-"@T*1D%!('-
A:60@=&AA="!D
M;V]R(&-O=6QD(&YO="!O<&5N(&)Y(&-
H869I;F<@86QO;F4@<F5L>6EN9R!O
M;B!S869E='D-"F9E871U<F5S(&%L;"!B>7!A<W-E9"!B>2!
W871E<B!A<F]U
M;F0@=&AE(&-H869E9"!W:7)I;F<N(%=A=&5R(&%N9"!
F;'5I9 T*87)E(&MN
M;W=N('1O(&=E="!I;G1O(&9O<G=A<F0@8V%R9V\@:&]
L9"!B>2!M>2!P97)S
M;VYA;"!V:65W:6YG+"!B>2!R96-E;G0-"D)O=7)N96UO=71H
(\$)O96EN9R W
M,S<@04%)0B!I;F-I9&5N="!R97!O<G0L('1H92!C87)G;R!
H;VQD(&AA<R!A
M(&)I;&=E('1O#0IH;VQD('1H92!E>'!E8W1E9"!
W871E<BP@=V%T97(@8V]N
M9&5N<V5S(&EN('1H92!W87)M(&AU;6ED
(&AO;&0@=VAE;@T*<W5B:F5C=&5D
M('1O(&-O;&0@8V]N9&ET:6]N960@86ER+"!T=V\@;&
%R9V4@<&]T86)L92!W
M871E<B!T86YK<R!A<F4@:6X-"FAO;&0L('1H92!
S96%L<R!A<F4@;F]T;W)I
M;W5S(&9O<B!L96%K:6YG+"!A;F0@82!R86EN(' -
H;W=E<B!E;F=U;&9E9"!4
M5T\$-"C@P,"!A;B!H;W5R(&)E9F]R92!T86ME;V9F(&]N
('1H92!F871A;"!F
M;&EG:'0N#0H-"E1H92!F;W)W87)D(&-A<F=O(&1O;W
(@;W!E;F5D(&EN(&9L

M:6=H="!F;W(@5%=(#@P,"P@=&AA="!I<R!P;&%I;B!T;R!
S964-"FEN('1H
M92!R96-O;G-T<G5C=&EO;B!P:&]T;R!O9B!S=)U8W1U<F
%L(&1E9F]R;6%T
M:6]N(&%N9"!P86EN="!M87)K:6YG<RX-"E=H870@8V
%U<V5D(&ET('1O(&]P
M96X@:7,@8V]N:F5C='5R92!B87-E9"!O;B!
P<F5C961E;G0@86YD('-C86YT
M(&5V:61E;F-E+@T*22!A9W)E92!W:71H(\$Y44T(@:
6X@02TY,2TX,R!A;F0@
M02TY,2TX-"!T:&%T('1H92!W:7)I;F<@:6X@8V%R9V\@9&]
O<@T*8V]N9'5I
M=',@:7,@:6YV;VQV960N(%1O(&UA:6YT86EN(&1O;W
(@9&ED(&YO="!O<&5N
M(&EN(&9L:6=H="!A;F0@=&AE#0IR96-T86YG=6QA<B!
S:&%T=&5R('IO;F4@
M9F]R=V%R9"!O9B!T:&4@=VEN9R!O;B!
T:&4@<FEG:'0@<VED92!O9B!45T\$@
M.# P#0IW87,@86QL(&-A=7-E9"!B>2!W871E<B!I;7!
A8W0@:7,@=6YT96YA
M8FQE(&)A<V5D(&]N('9I<W5A;"!H87)D(&5V:61E;F-
E#0IO9B!P86EN="!M
M87)K:6YG<R!A;F0@<W1R=6-T=7)A;"!
D969O<FUA=&EO;BX@061D:71I;VYA
M;"!E=FED96YC92!F;W(-"F9O<G=A<F0@8V%R9V\@9&]
O<B!O<&5N:6YG(&EN
M(&9L:6=H="!I<R!T:&4@<&5T86P@8G5L9V4@870@869T
(&UI9'-P86X-"FQA
M=&-H+"!T:&4@;6ES<VEN9R!M:61S<&%N(&QA=&-H97,L
(&UI<W-I;F<@.# E
M(&]F(&1O;W(@;6%T97)I86PL('1H90T*;W5T=V%R9"!
P965L960@<VMI;BP@
M<F5D('!A:6YT('M96%R<RP@86YD('1H92!S:&%P92!O9B!

S:&%T=&5R('IO
M;F4-"FUA=&-H97,@=&AA="!O9B!A;F]T:&5R(&-A<F=O
(&1O;W(@;W!E;FEN
M9R!I;B!F;&EG:'0L(%5!3" X,3\$N#0H-"DUR+B!
4;VT@36-3=V5E;GDL(\$D@
M87-K('1H870@>6]U(&]V97)C;VUE('1H;W-E('1W;R!B:
6%S97,@;V8@<V%Y
M:6YG(&1O;W(-"G=A<R!S869E('=I=&@@;VYL>2!E:
6=H="!L;V-K:6YG('-E
M8W1O<G,@86YD(&ET(&-O=6QD(&YO="!O<&5N(&EN
(&9L:6=H= T*86=A:6X@
M86YD(&-O;F1U8W0@82!T:&]R;W5G:"!I;G9E<W1I9V%T:
6]N(&]F('!O<W-I
M8FQE(&9O<G=A<F0@8V%R9V\@9&]O<@T*;W!
E;FEN9R!I;B!F;&EG:'0@9F]R
M(%1702 X,# N(\$EN<W1I='5T:6]N86P@;65M;W)Y(&ES(&
\$@<W1R;VYG(&9A
M8W1O<B!I;@T*:6YV97-T:6=A=&EO;G,@86YD(&ET)
W,@=F5R>2!D:69F:6-U
M;'0@=&\@861M:70@97)R;W(@8G5T(&EN(&%R96%S(&]F
(&QI9F4-"F%N9"!D
M96%T:"P@<')I9&4@;75S="!B92!O=F5R8V]M92!A;F0@;V)
J96-T:79I='D@
M<V]U9VAT+B!4:&%T(&1O;W(@;W!E;FEN9PT*:
6X@9FQI9VAT(&AA<R!N;W0@
M>65T(&)E96X@8VAE8VME9"!O=70@87,@:
70@<VAO=6QD(&)E+@T*#0I-<BX@
M3F5I;"!38VAA;&5K86UP+"!Y;W4@8F5L:
65V960@870@;VYE('1I;64@=&AE
M(&9O<G=A<F0@8V%R9V\@9&]O<B!A<F5A#0ID:60@;W!
E;B!O=71W87)D(&EN
M(&9L:6=H="!B87-E9"!O;B!S=')U8W1U<F%L(&1E9F]R;
6%T:6]N(&%N9"!P

M86EN= T*;6%R:VEN9W,N(%=I;&P@>6JU('!L96%S92!
I;F9O<FT@37(N(\$UC
M4W=E96YY(&]F('EO=7
(@9FEN9&EN9W,@86YD#0IC;VYC;'5S:6]N<RX-"@T*
M37(N(\$)O8B!"<F5N97)M86XL('EO=2!E>&%M:6YE9"!
T:&4@9F]R=V%R9"!C
M87)G;R!D;V]R(&]F(%1702 X,# @86YD('-A=PT*=&AE(&
O='1O;2!E:6=H
M="!L871C:&5S(&QA=&-H960N(%=I;&P@>6JU('!L96%S92!
T96QL(\$UR+B!-
M8U-W965N>2!T:&%T#0IY;W4@<F5P;W)
T960@;VX@;VYL>2!T:&4@96EG:'0@
M;&%T8VAE<R!A;F0@;F]T('1H92!T96X@879A:6QA8FQE
+"!N;W(@9&ED#0IY
M;W4@97AA;6EN92!T:&4@;6%N=6%L(&QO8VMI;F<@:&
%N9&QE+"!T:&4@;W9E
M<G!R97-S=7)E(')E;&EE9B!D;V]R<RP@=&AE#0IV:65W:
6YG('!O<G1S(&]R
M('1H92!T;W)Q=64@='5B97,N#0H-"D-H86ER;6%N(\$II;2!
(86QL+"!P;&5A
M<V4@;F]T92!T:&4@3E130B!W87,@<FEG:'0@;VX@=&
%R9V5T(&)Y('IE<F]I
M;F<@:6X-"F]N('1H92!W:7)E(&-O;F1U:71S(&%S('-T871E9"!
I;B!!+3DQ
M+3@S(&%N9"!!+3DQ+3@T.B
B179A;'5A=&4@=&AE#0ID97-I9VXL(&EN<W1A
M;&QA=&EO;BP@86YD(&]P97)A=&EO;B!O9B!T:&4@9F]
R=V%R9"!C87)G;R!D
M;V]R(&9L97AI8FQE#0IC;VYD=6ET<R!O;B!";V5I;F<@-
S0W(&%I<G!L86YE
M<R!S;R!E<75I<'!E9"!A;F0@:7-S=64L(&EF('=A<G)
A;G1E9"P@86X-"D%I
M<G=O<G1H:6YE<W,@1&ER96-T:79E(&9O<B!I;G-P96-T:6]

N(&%N9"!R97!A
M:7(@;V8@=&AE(&9L97AI8FQE(&-O;F1U:70-"F%N9"!
U;F1E<FQY:6YG('=I
M<FEN9R!B=6YD;&4L('-I;6EL87(@=&\@=&AE('!
R;W9I<VEO;G,@<F5C;VUM
M96YD960@:6X-"D\$M.3\$M.#,N(B!4:&%T(&ES(&5X86-
T;'D@=VAA="!)(='O
M=6QD(')E8V]M;65N9"!A9G1E<B!
A;&P@=&AE<V4@>65A<G,@;V8-"G)E<V5A
M<F-H(&EN=&\@9&]O<B!O<&5N:6YG<R!O9B!E87)L>2
W-#=S('=H:6-H('1R
M86-K960@9&]W;B!T:&4@8W5L<')I="!T;PT*8VAA9F5D
(='I<FEN9RP@82!P
M<F]B;&5M('=E;&P@:VYO=VX@=&\@=&AE(\$Y44T
(@86YD(\$9!02!A;&P@=&AI
M<R!W:&EL92X@66]U#0IW97)E(')I9VAT('1O
(&AO;&0@:&5A<FEN9R!O;B!A
M9VEN9R!A:7)L:6YE<G,@86YD(&]L9"!W:7)I;F<@<')
O8FQE;7,N#0I0;&5A
M<V4@9F]L;&]W('EO=7(@;W=N(')E8V]M;65N9&%T:6]N(&
%N9"!T:&]R;W5G
M:&QY(&EN=F5S=&EG871E('1H90T*=VER:6YG+V-A<F=O
(&1O;W(@<G5P='5R
M92!E>'!L86YA=&EO;B!F;W(@5%=(#@P,"X-"@T*37(N(\$
%L(\$1I8VMI;G-O
M;B!A;F0@37(N(%)O;B!38VAL965D92P@=V]U;&0@>6]U
(&9O;&QO=R!.5%-"
M(')E8V]M;65N9&%T:6]N#0II;B!!+3DQ+3@S(&%N9"!E>&
%M:6YE('1H92!F
M;&5X:6)L92!C;VYD=6ET('!R;W1E8W1I;F<@=&AE
(='I<FEN9R!B=6YD;&4-
M"F)E='E96X@=&AE(&9U<V5L86=E(&%N9"!A9G0@8V
%R9V\@9&]O<CL@<W!E

M8VEF:6-A;&QY.@T**#\$I('1H92!W:7)I;F<@8G5N9&QE
(&EN('1H92!A<F5A
M(&YO<FUA;&QY(&-O=F5R960@8GD@=&AE(&-O;F1U:
70@9F]R('1H90T*<')E
M<V5N8V4@;V8@9&%M86=E9"!I;G-U;&%T:6]N
("AU<VEN9R!E:71H97(@86X@
M96QE8W1R:6-A;"!T97-T(&UE=&AO9"!O<@T*=FES=6%L
(&5X86UI;F%T:6]N
M*3L-"B@R*2!T:&4@8V]N9'5I="!S=7!P;W)T(&)R86-
K970@86YD(&%T=&%C
M:&5D('T86YD;V9F('!I;B!O;B @=&AE('5P<&5R(&%R;
0T*;V8@=&AE(&9O
M<G=A<F0@;&EF="!A8W1U871O<B!M96-H86YI<VT
[#0HH,RD@=&AE(&9L97AI
M8FQE(&-O;F1U:70@9F]R('1H92!P<F5S96YC92!O9B!C<F
%C:VEN9R!I;B!T
M:&4@8V]N=F]L=71E9 T*:6YN97)C;W)E+@T*#0I-
<BX@2FEM(%=I;&1E>2P@
M>6]U<B!E>&AI8FET(')E<&]R="!O9B Q-4,@<F5M86EN<R!
T:&4@9FEN86P@
M;V9F:6-I86P@=V]R9 T*;VX@=&AE(&9O<G=A<F0@8V
%R9V\@9&]O<B!S=&%T
M=7,@;V8@5%=(#@P,"X@2VYO=VEN9R!T:&%T('EO=2!
B87-E9"!Y;W5R#0IC
M;VYC;'5S:6]N(&]F(&1O;W(@86QL(&QA=&-H960@86YD
(&%L;"!L;V-K960@
M86YD(&%L;"!I;G1A8W0@870@=V%T97(-"FEM<&%C="!
O;B!I;F9O<FUA=&EO
M;B!F<F]M('1H92!S97)V:6-E('=H:6-H(&AA<R!A
(9E<GD@<W1R;VYG(&)I
M87,@=&AA= T*=&AE(&1O;W(@;F]T(&]P96X@:
6X@9FQI9VAT+"!W;W5L9"!Y
M;W4@<F5E=F%L=6%T92!Y;W5R(&9I;F1I;F=S(&%N9

T*8V]N8VQU<VEO;G,@
M=&\@<F5F;&5C="!T:&4@;F5W(&5V:61E;F-E('-H;W=N
(&EN(%1702 X,# @
M=W)E8VMA9V4-"G)E8V]N<W1R=6-T:6]N('-
U8V@@@87,@<&%I;G0@;6%R:VEN
M9W,@86YD('-T<G5C='5R86P@9&5F;W)M871I;VX_
(\$YO=&4@=&AA= T*=&AE
M(&UI9'-P86X@;&%T8VAE<R!H879E(&YO
(&QO8VMI;F<@<V5C=&]R<R!T;R!S
M=')E;F=T:&5N(&%N9"!W871E<B!D;V5S#0IG970@:6YT;R!
T:&4@9F]R=V%R
M9"!C87)G;R!H;VQD(&EN(&9L:6=H="X-"@T*37(N
(\$QY;&4@4W1R965T97(L
M(&-A;B!Y;W4@<V5T('5P(&\$@;65E=&EN9R!W:71H(&UE
(&%N9"!G;W9E<FYM
M96YT(&%I<F-R869T#0IS869E='D@:6YV97-T:6=A=&]R<R!
T;R!D:7-C=7-S
M('1H:7,@:7-S=64@;V8@=VAE=&AE<B!F;W)W87)D(&-
A<F=O(&1O;W(-"F]P
M96YE9"!I;B!F;&EG:'0@;W(@;F]T(&9O<B!45T\$@.# P/R!
0:&]N92P@;W(@
M;&5T=&5R+"!O<B!E;6%I;"P@;W(@:6X-"G!E<G-O;B!I<R!
F:6YE+"!B=70@
M=&AE(&1E=&%I;',@:6X@=&AE(&5V:61E;F-E
(&YE960@=&\@8F4@=&%L:V5D
M(&%B;W5T(&EN#0IA(&=I=F4@86YD
('1A:V4@<V5S<VEO;BP@;F]T(&IU<W0@
M;&5T=&5R<R!B86-K(&%N9"!F;W)T:"!W:71H
(&=E;F5R86P-"F-O;F-L=7-I
M;VYS+B!!;'1H;W5G:"!.5%-("(&UA>2!H879E('!R:
6UA<GD@<F5S<&]N<VEB
M:6QI='D@9F]R#0II;G9E<W1I9V%T:6YG(&%I<F-R869T(&
%C8VED96YT<RP@

M1D%!(%-A9F5T>2!/9F9I8V4@:7,@;F]W(&5X<&5C=&5D
('1O(&)E#0IF=6QL
M>2!U=&EL:7II;F<@:71S(&-A<&%B:6QI=&EE<R!T;R!
H96QP(&1E=&5R;6EN
M92!P;W1E;G1I86P@879I871I;VX-"G-A9F5T>2!
A;F0@<V5C=7)I='D@<')O
M8FQE;
7,N#0H-"D=E;G1L96UA;BP@979E<GD@<VEN9VQE('1H:
6YG(\$D@<V%Y
M(&%B;W5T('1H92!A8V-I9&5N="!C875S92!O9B!45T\$@.# P
(&%N9 T*;W1H
M97(@0F]E:6YG(#<T-W,@<W5F9F5R:6YG
(&AU;&P@<G5P='5R92!I;B!F;&EG
M:'0@9F]R=V%R9"!O9B!T:&4@=VEN9R!O;@T*=&AE(')
I9VAT('I9&4@=VAI
M8V@@;&5A=F5S(&\$@<W5D9&5N(&QO=60@<V]
U;F0@;VX@=&AE(\$-64B!A;F0@
M86X@86)R=7!T#0IP;W=E<B!C=70@=&\@=&AE(\$9\$4B!
H87,@:&%P<&5N960@
M8F5F;W)E+"!I<R!D;V-U;65N=&5D(&EN
(&=O=F5R;FUE;G0-"F% C8VED96YT
M(')E<&]R='L(&%N9"!T:&4@9&%N9V5R(&MN;W=N(&
%B;W5T(&)Y(\$9!02!A
M;F0@3E130BX-"@T*5VER:6YG+V-A<F=O(&1O;W
(@97AP;&%N871I;VX@9F]R
M(%1702 X,# @:7,@<F5A<V]N86)L92!A;F0@=V]R=&AY
(&]F(&\$-"G1H;W)O
M=6=H(&EN=F5S=&EG871I;VXN(\$ET(&ES(&YO="!
W96ER9"!S=6-H(&%S(&UI
M<W-I;&4L(&)O;6(L(&]R(&UE=&5O<BP-"F5X<&QA;F%T:
6]N<R!W:&EC:"!H
M879E(&)E96X@9W)A;G1E9"!M=6-H(&-O;G-
I9&5R871I;VXN(\$-E;G1E<B!T

M86YK#0IE>'!L;W-I;VX@;V-C=7)R960@8G5T(&ET('=A<R!
A;B!E9F9E8W0@
M;V8@=&AE('=I<FEN9R!S:&JR="P@:G5S="!A<R!C87)
G;PT*9&JO<B!O<&5N
M:6YG(&%N9"!E;F=I;F5S(&)E:6YG(&9O9&1E9"P@;FJT
(!H92!I;FET:6%L
M(&5V96YT(&)U="!S96-O;F1A<GDN#0H-"E-A9F5T>2!096]
P;&4L(!H92!U
M;FQI:V5L>2!H87!P96YE9"P@86=A:6XN(%1H870@9&
%M;F5D(&-A<F=O(&1O
M;W(@;W!E;F5D#0II;B!F;&EG:'0L(&%S(&ET(&1I9"!I;B Q.
3@W+" Q.3@Y
M+"!A;F0@ ,3DY,2!B>2!Y;W5R(&]F9FEC:6%L(&-O=6YT(&
%N9 T*86=A:6X@
M:6X@ ,3DX-2P@ ,3DX."P@86YD(#\$Y.38@8GD@;
7D@861D:71I;VYA;"!C;W5N
M="X-"@T*270G<R!A(&)I9R!P<F]B;&5M(&%N9"!
N965D<R!A(&)I9R!F:7@N
M(%=I<FEN9R!I<R!B96-O;6EN9R!C:&%F960L
(&UE971I;F<-"G=A=&5R(&%N
M9"!S:&JR=&EN9RP@9VEV:6YG(&\$@<&5T:71E(&UA;"!
O9B!T<FEV:6%L(&5L
M96-T<FEC86P@9&5V:6-E<PT*='5R;FEN9R!O;B!O<B!
O9F8@86YD(&\$@9W)A
M;F0@;6%L('-E:7IU<F4@=VAE;B!T:&4@9&JO<B!
M;W1O<B!T=7)N<R!O;B!W
M:&5N#0II="!S:&JU;&1N)W0N#0H-"E-I;F-
E<F5L>2P-"@T*2F]H;B!"87)R
M>2!3;6ET: T* -# X(#8U.2 S-34R#0IB87)R>4!C;W)A>F]N+F-
O;0T*-34Q
M(\$-O=6YT<GD@0VQU8B!\$<FEV90T*0V%R;65L
(%9A;&QE>2P@0T\$@.3,Y,C0-
M"@T*071T86-H;65N="!B96QO=SH-"@T*#0I.5%-"(%-

A9F5T>2!296-O;6UE
M;F1A=&EO;B!"<FEE9@T*#0I\$871A7U-O=7)
C93H@52Y3+B!.5%-"(%-A9F5T
M>2!296-O;6UE;F1A=&EO;G,-"E)P<G1?3F)R.B!!+3DQ
+3@S#0I,87-T(%5P
M9&%T960Z(# S+3\$S+3DU#0I;3UT@3VX@2G5N92
Q,RP@,3DY,2P@56YI=&5D
M(\$%I<FQI;F5S("A504PI(&UA:6YT96YA;F-E('!E<G-
O;FYE;"!W97)E#0IU
M;F%B;&4@=&\@96QE8W1R:6-A;&QY(&JP96X@=&AE(&
%F="!C87)G;R!D;V]R
M(&]N(&\$@0F]E:6YG(#<T-RTR,C)" + T*3C\$U,E5!+"!A="!
*;VAN(\$8N(\$ME
M;FYE9'D@06ER<&]R=" H2D9+*2P@2F
%M86EC82P@3F5W(%EO<FLN(%1H92!A
M:7)P;&%N90T*=V%S(&]N92!O9B!T=V\@=7-E9"!E>&-
L=7-I=F5L>2!O;B!N
M;VYS=&]P(&9L:6=H=',@8F5T=V5E;B!.87)I=&\$L(\$IA<&
%N+ T*86YD(\$I&
M2RX@5&AI<R!P87)T:6-U;&%R(&%I<G!L86YE(&AA9"!
A8V-U;75L871E9" Q
M.2PP-3,@:&]U<G,@86YD(#\$L-30W#0IC>6-
L97,@870@=&AE('!I;64@;V8@
M=&AE(&]C8W5R<F5N8V4N#0I296-O;
6UE;F1A=&EO;G,Z#0I!+3DQ+3@S+B!)
M<W-U92!A;B!!;7)W;W)T:&EN97-S(\$I<F5C=&EV92!A<'!L:
6-A8FQE('!O
M(&%L;"!";V5I;F<@-S0W#0IA:7)P;&%N97,@=VET:"!A
(&9L97AI8FQE(&-O
M;F1U:70@<')O=&5C=&EN9R!T:&4@=VER:6YG(&
U;F1L92!B971W965N('!H
M90T*9G5S96QA9V4@86YD(&%F="!C87)G;R!D;V]R('!O()
E<75I<F4@86X@

M97AP961I=&5D(&EN<W!E8W1I;VX@;V8Z#0H-"B@Q*2!
T:&4@=VER:6YG(&)U
M;F1L92!I;B!T:&4@87)E82!N;W)M86QL>2!C;W9E<F5D(&
Y('1H92!C;VYD
M=6ET(&9O<B!T:&4-"G!R97-E;F-E(&]F(&1A;6%G960@:
6YS=6QA=&EO;B H
M=7-I;F<@96ET:&5R(&%N(&5L96-T<FEC86P@=&5S= T*;
65T:&]D(&]R('9I
M<W5A;"!E>&%M:6YA=&EO;BD[#0H-"B@R*2!T:&4@8V]
N9'5I="!S=7!P;W)T
M(&)R86-K970@86YD(&%T=&%C:&5D('-T86YD;V9F('!I;B!
O;@T*=&AE('5P
M<&5R(&%R;2!O9B!T:&4@9F]R=V%R9"!L:69T(&
%C='5A=&]R(&UE8VAA;FES
M;3L-"@T**#I('1H92!F;&5X:6)L92!C;VYD=6ET(&9O<B!
T:&4@<')E<V5N
M8V4@;V8@8W)A8VMI;F<@:
6X@=&AE#0IC;VYV;VQU=&5D(&EN;F5R8V]R92X-
M"@T*5VER97,@=VET:"!D86UA9V5D
(&EN<W5L871I;VX@<VAO=6QD(&)E(')E
M<&%I<F5D(&)E9F]R92!F=7)T:&5R('-E<G9I8V4N#0I
\$86UA9V4@=&\@=&AE
M(&9L97AI8FQE(&-O;F1U:70L(&-O;F1U:70@<W5P<&]
R="!B<F%C:V5T(&%N
M9"!S=&%N9&]F9B!P:6X-"G-H;W5L9"!R97-U;'0@:
6X@86X@:6UM961I871E
M(')E<&QA8V5M96YT(&]F('1H92!C;VYD=6ET(&%S
('=E;&P@87,@=&AE#0ID
M86UA9V5D('!A<G1S+B!4:&4@:6YS<&5C=&EO;B!S:&]
U;&0@8F4@<F5P96%T
M960@870@86X@87!P<F]
P<FEA=&4@8WEC;&EC#0II;G1E<G9A;"X-"E)E<W!O
M;G-E<SH-"D9!02!,5%(@1%1\$.B Q,2\Q+SDQ#0H-"E1H92!

&04\$@86=R965S
M('=I=&@@=&AE(&EN=&5N="!O9B!T:&5S92!
S869E='D@<F5C;VUM96YD871I
M;VYS(&%N9"!I<PT*8V]N<VED97)I;F<@=&AE
(&ES<W5A;F-E(&]F(&\$@;F]T
M:6-E(&]F('!R;W!O<V5D(')U;&5M86MI;F<@=&
\@861D<F5S<PT*=&AE<V4@
M:7-S=65S+B!)('=I;&P@<')O=FED92!T:&4@0F]
A<F0@=VET:"!A(&-O<'D@
M;V8@86YY(&1O8W5M96YT('1H870@;6%Y#0IB92!I<W-
U960N#0H-"DY44T(@
M3%12(\$141#H@,3\$O,C<O.
3\$-"@T*5&AE<V4@<F5C;VUM96YD871I;VYS('=E
M<F4@:7-S=65D(&%S(&\$@<F5S=6QT(&]F('1H92!";V
%R9"=S(&EN=F5S=&EG
M871I;VX-"F]F(&%N(&EN8VED96YT(&EN('=H:6-H('1H92!
R96%R(&-A<F=O
M(&1O;W(@;VX@82!";V5I;F<@-S0W+3(R,D(@:
6YI=&EA;&QY#0IW;W5L9"!N
M;W0@;W!E;B!E;&5C=')I8V%L;'D@86YD('1H96X@;W!
E;F5D(&5L96-T<FEC
M86QL>2!W:71H;W5T(&%C=&EV871I;VX-"F]F('1H92!D;V]
R(&]P96X@<W=I
M=&-H97,N(%EO=7(@;&5T=&5R(&EN9&EC871E<R!T:&
%T('1H92!&961E<F%L
M(\$%V:6%T:6]N#0I!9&UI;FES=')A=&EO;B!A9W)
E97,@=VET:"!T:&4@:6YT
M96YT(&]F('1H97-E(')E8V]M;65N9&%T:6]N<R!A;F0@:
7,-"F-O;G-I9&5R
M:6YG('1H92!I<W-U86YC92!O9B!A(&YO=&EC92!O9B!
P<F]P;W-E9"!R=6QE
M;6%K:6YG('1O(&%D9')E<W,-"G1H97-E
(&ES<W5E<RX@5&AE(\$)O87)D('5R

M9V5S('1H92!&04\$@=&\@;6jV92!E>'!E9&ET:6jU<VQY(&]
N('1H90T*<F5C
M;VUM96YD871I;VYS+B!096YD:6YG()
E8V5I<'0@;V8@861D:71I;VYA;"!I
M;F9O<FUA=&EO;B!C;VYC97)N:6YG('1H90T*86-T:6jN('1O
(&)E('1A:V5N
M(&)Y('1H92!&961E<F%L(\$%V:6%T:6jN(\$%D;6EN:7-T<F
%T:6jN+"!T:&4@
M4V%F971Y(\$)O87)D#0II<R!C;&%S<VEF>6EN9R!
3869E='D@4F5C;VUM96YD
M871I;VYS(\$M.3\$M.#,@86YD("TX-"!A<R B3W!E;BTM06-
C97!T86)L90T*
M06-T:6jN+B(-"@T*1D%!((\$Q44B!\$5\$0Z
(#0O-2\Y,PT*#0I4:&4@1F5D97)A
M;"!!=FEA=&EO;B!!9&UI;FES=')A=&EO;B H1D%!*2!A9W)
E97,@=VET:"!T
M:&4@:6YT96YT(&]F('1H97-E#0IR96-O;
6UE;F1A=&EO;G,N(\$]N(\$9E8G)U
M87)Y(#\$X+" Q.3DR+"!T:&4@1D%!(&ES<W5E9"!A
(&YO=&EC92!O9B!P<F]P
M;W-E9 T*<G5L96UA:VEN9R H3E!232D@87!P;&EC86)L92!
T;R!C97)T86EN
M(\$)O96EN9R!-;V1E;" W-#<@<V5R:65S(&%I<G!
L86YE<RX-"E1H:7,@3E!2
M32!P<F]P;W-E9"!T;R!R97%U:7)E(&EN<W!
E8W1I;VX@;V8@=&AE(&9L97AI
M8FQE(&-O;F1U:70L('=I<FEN9RP-"F%N9"!S=7!P;W)T(&)
R86-K971S(&)E
M='=E96X@=&AE(&9U<V5L86=E(&%N9"!T:&4@9F]R=V
%R9"!A;F0@869T(&-A
M<F=O#0ID;V]R<RX@4VEN8V4@=&AE(&ES<W5A;F-E
(&]F('1H:7,@3E!232P@
M=&AE(\$9!02!H87,@9G5R=&AE<B!R979I97=E9"!T:&4-"F-

I<F-U;7-T86YC
M97,@<W5R<F]U;F1I;F<@=&AI<R!D;V]R(&]P96YI;F<@:
6YC:61E;G0@86YD
M(&AA<R!C;VYF:7)M960@=&AA= T*86X@:
6YA9'9E<G1E;G0@:6XM9FQI9VAT
M(&]P96YI;F<@;V8@=&AE(&-A<F=O(&1O;W(@8V%N;F]
T(&)E(&-A=7-E9"!S
M;VQE;'D-"F)Y('=I<F4@8VAA9FEN9RX@5&AE(\$9!02!
H87,@9&5T97)M:6YE
M9"!T:&%T(&EN(&%D9&ET:6]N('1O(&-
H869I;F<@870-"FQE87-T(&9O=7(@
M:6YD97!E;F1E;G0@9F%I;5R97,@;75S="!A;'-O(&]C8W5R
(&EN(&]R9&5R
M('1O(&1R:79E('1H92!D;V]R#0IL871C:&5S('1O('1H92!
O<&5N('!O<VET
M:6]N+B!);B!L:6=H="!O9B!T:&5S92!F:6YD:
6YG<RP@=&AE(\$9!00T*9&5T
M97)M:6YE9"!T:&%T('1H92!R97%U:7)E;65N=',@<')O<&]
S960@8GD@=&AE
M(\$Y04DT@=V5R92!U;FYE8V5S<V
%R>2X@3VX-"D1E8V5M8F5R(#(Q+" Q.3DR
M+"!T:&4@1D%!(='I=&AD<F5W('1H92!.4%)-+B!)
(&AA=F4@96YC;&]S960@
M82!C;W!Y(&]F('1H90T*;F]T:6-E(&]F('=I=&AD<F
%W86P@9F]R('1H92!"
M;V%R9"=S(&EN9F]R;6%T:6]N+@T*#0I!:7)W;W)T:&EN97-
S(\$1I<F5C=&EV
M92 H040I(#DP+3 Y+3 V("A\$;V-K970@3FN(#@Y+4Y-
+3\$T."U!1"D@;6%N
M9&%T97,-"G1H92!I;G-T86QL871I;VX@;V8@82!D;V]R
('=A<FYI;F<@<W=I
M=&-H(&QO8V%T960@;VX@=&AE(&QO8VL@<V5C=&]
R+"!A<PT*=V5L;!"!A<R!A

M(')E:6YF;W)C96UE;G0@;V8@=&AE(&QO8VL@<V5C=&]
R('1O(&5N<W5R92!T
M:&%T('1H92!L871C:&5S#0IR96UA:6X@;&]C:V5D(&
%G86EN<W0@8F%C:V1R
M:79I;F<@;V8@=&AE(&QA=&-H97,@8GD@=&AE
(&QA=&-H('!O=V5R(&1R:79E
M#0IU;FET+B!&86EL=7)E(&]F(&QO8VL@<V5C=&]R<R!
T:&%T(&%R92!R96EN
M9F]R8V5D(&EN(&%C8V]R9&%N8V4@=VET:"!!1 T*.3
M,#DM,#8@:&%S(&)E
M96X@<VAO=VX@=&\@8F4@=6YL:6ME;'D@86YD+"!
E=F5N(&EN('1H92!E=F5N
M="!O9B!S=6-H(&\$-"F9A:6QU<F4L(&%N
(&EN9&EC871I;VX@8GD@;65A;G,@
M;V8@=&AE(&1O;W(@=V%R;FEN9R!
S=VET8V@@=VEL;"!W87)N('1H90T*9FQI
M9VAT8W)E=R!O9B!T:&4@<')O8FQE;2X@5&AE
(&UO9&EF:6-A=&EO;G,L('1E
M<W1S+"!A;F0@:6YS<&5C=&EO;G,-"G)E<75I<F5D(&EN(\$
%\$(#DP+3 Y+3 V
M('!R;W9I9&4@86X@86-C97!T86)L92!L979E;"!O9B!
S869E='D@=&\@<')E
M8VQU9&4-"FEN861V97)T96YT(&%C='5A=&EO;B!O9B!
T:&4@8V%R9V\@9&]O
M<B!P;W=E<B!D<FEV92!U;FET(&%N9"!P;W-S:6)L90T*:
6YJ=7)Y('1O(&UA
M:6YT96YA;F-E(&]R(&-A<F=O(&AA;F1L:6YG('!E<G-
O;FYE;"X@22!H879E
M(&5N8VQO<V5D(&\$@8V]P>0T*;V8@=&AE(\$%\$
(&9O<B!T:&4@0F]A<F0G<R!I
M;F9O<FUA=&EO;BX@5&AE(\$9!02!B96QI979E<R!T:&%T
(('1H92!C=7)R96YT
M#0IR97%U:7)E;65N=',@;V8@040@.3

M,#DM,#8@861D<F5S<R!T:&4@9G5L
M;"!I;G1E;G0@;V8@=&AE<V4@<V%F971Y#0IR96-O;
6UE;F1A=&EO;G,@=&\@
M<')E8VQU9&4@86X@=6YC;VUM86YD960@;W!
E;FEN9R!O9B!T:&4@9FJR=V%R
M9"!A;F0@869T#0IC87)G;R!D;VJR<RX-"@T*22!C;VYS:
61E<B!T:&4@1D%!
M)W,@86-T:6JN('1O(&)E(&-O;7!L971E9"P@86YD
(\$D@<&QA;B!N;R!F=7)T
M:&5R(&%C=&EO;@T*;VX@4V%F971Y(%)E8VJM;65N9&
%T:6JN<R!!+3DQ+3@S
M(&%N9" M.#0N#0H-"DY44T(@3%12(\$141#H@,
3\$O."Y,PT*#0I4:&4@3F%T
M:6JN86P@5')A;G-P;W)T871I;VX@4V%F971Y(\$)O87)D
(&AA<R!R979I97=E
M9"!T:&4@1F5D97)A;"!!=FEA=&EO;@T*061M:
6YI<W1R871I;VX@*\$9!02D@
M<F5S<&JN<V4@;V8@07!R:6P@-2P@,3DY,RP@=&\@4V
%F971Y(%)E8VJM;65N
M9&%T:6JN<PT*02TY,2TX,R!A;F0@+3@T+B!4:&5S92!R96-
O;6UE;F1A=&EO
M;G,@87-K960@=&AA="!T:&4@1D%!(&ES<W5E(&
%N#0IA:7)W;W)T:&EN97-S
M(&1I<F5C=&EV92!A<!L:6-A8FQE('1O(&%L;"!";V5I;F<@-
S0W(&%I<G!L
M86YE<R!W:71H(&\$-"F9L97AI8FQE(&-O;F1U:70@<')
O=&5C=&EN9R!T:&4@
M=VER:6YG(&)U;F1L92!B971W965N+71H92UF=7-E;&
%G92!A;F0@869T#0IC
M87)G;R!D;VJR('1O(')E<75I<F4@86X@97AP961I=&5D
(&EN<W!E8W1I;VX@
M;V8Z#0HH,2D@=&AE('=I<FEN9R!B=6YD;&4@:
6X@=&AE(&%R96\$@;FJR;6%L

M;'D@8VJV97)E9"!B>2!T:&4@8VJN9'5I="!F;W
(@=&AE#0IP<F5S96YC92!O
M9B!D86UA9V5D(&EN<W5L871I;VX@*'5S:6YG
(&5I=&AE<B!A;B!E;&5C=')I
M8V%L('1E<W0@;65T:&]D(&]R#0IV:7-U86P@97AA;
6EN871I;VXI.R H,BD@
M=&AE(&-O;F1U:70@<W5P<&]R="!B<F%C:V5T(&%N9"!
A='1A8VAE9"!S=&%N
M9&]F9@T*<&EN+6]N('1H92!U<'!E<B!A<FT@;V8@=&AE
(&9O<G=A<F0@;&EF
M="!A8W1U871O<B!M96-H86YI<VT[(" @S*2!
T:&4-"F9L97AI8FQE(&-O;F1U
M:70@9F]R('1H92!P<F5S96YC92!O9B!C<F%C:VEN9R!I;B!
T:&4@8VJN=F]L
M=71E9"!I;FYE<F-O<F4N#0H-"E1H92!";V%R9"!F=7)T:&5R
()E8V]M;65N
M9&5D('1H870@=VER97,@=VET:"!D86UA9V5D
(&EN<W5L871I;VX@8F4-"G)E
M<&%I<F5D(&)E9F]R92!F=7)T:&5R('-E<G9I8V4N(\$1A;
6%G92!T;R!T:&4@
M9FQE>&EB;&4@8VJN9'5I="P@8VJN9'5I= T*<W5P<&]
R="!B<F%C:V5T+"!A
M;F0@<W1A;F1O9F8@<&EN('-H;W5L9"!R97-U;'0@:
6X@86X@:6UM961I871E
M()E<&QA8V5M96YT#0IO9B!T:&4@8VJN9'5I="!A<R!
W96QL(&%S+B!T:&4@
M9&%M86=E9"!P87)T<RX@5&AE(&EN<W!
E8W1I;VX@<VAO=6QD(&)E#0IR97!E
M871E9"!A="!A;B!A<'!R;W!R:6%T92!C>6-L:6,@:6YT97)
V86PN#0H-"E1H
M92!3869E='D@0F]A<F0@=&AE;B!A<VME9"P@:6X@4V
%F971Y(%)E8V]M;65N
M9&%T:6]N(\$\$M.3\$M.#0L('1H870@=&AE(\$9!

00T*979A;!5A=&4@=&AE(&1E
M<VEG;BP@:6YS=&%L;&%T:6]N+"!A;F0@;W!E<F%T:6]N
(&]F('1H92!F;W)W
M87)D(&-A<F=O(&1O;W(-"F9L97AI8FQE(&-O;F1U:71S(&]
N(\$)O96EN9R W
M-#<@86ER<&QA;F5S('-O(&5Q=6EP<&5D(&%N9"!I<W-
U92P@:68-"G=A<G)A
M;G1E9"P@86X@86ER=V]R=&AI;F5S<R!D:7)
E8W1I=F4@9F]R(&EN<W!E8W1I
M;VX@86YD(')E<&%I<B!O9B!T:&4-"F9L97AI8FQE(&-
O;F1U:70@86YD('5N
M9&5R;'EI;F<@=VER:6YG(&)U;F1L92P@<VEM:6QA<B!
T;R!T:&4@<')O=FES
M:6]N<PT*<F5C;VUM96YD960@:6X@4V%F971Y(%)E8V]
M;65N9&%T:6]N(\$M
M.3\$M.#,N#0H-"E1H92!&04\$G<R!!<')I;" U+" Q.3DS+"!R97-
P;VYS92!L
M:7-T960@82!N=6UB97
(@;V8@9FEN9&EN9W,@;V8@86X@1D%#!#0IR979I97<@
M;V8@=&AE(&-I<F-U;7-T86YC97,@<W5R<F]
U;F1I;F<@=&AE('U8FIE8W0@
M9&]O<B!O<&5N:6YG+B!!;6]N9R!T:&4-"F9I;F1I;F=S+"!
T:&4@1D%!(&-O
M;F9I<FUE9"!T:&%T(&%N(&EN861V97)T96YT
(&EN9FQI9VAT(&]P96YI;F<@
M;V8@=&AE#0IC87)G;R!D;V]R(&-A;FYO="!B92!
C875S960@<V]L96QY(&)Y
M('=I<F4@8VAA9FEN9RX@1G5R=&AE<BP@=&AE(\$9!
00T*9&5T97)M:6YE9"!T
M:&%T(&%T(&QE87-T(&9O=7(@:6YD97!E;F1E;G0@9F
%I;'5R97,@;75S="!O
M8V-U<B!T;R!D<FEV92!T:&4-"F1O;W(@;&%T8VAE<R!
T;R!T:&4@;W!E;B!P

M;W-I=&EO;BX@5&AE(\$9!02!A;'-O('-T871E9"!T:&%T
(&9A:6QU<F4@;V8@
M;&]C:PT*<V5C=&]R<R!T:&%T(&%R92!R96EN9F]R8V5D
(&EN(&%C8V]R9&%N
M8V4@=VET:"!!1" Y,"TP.2TP-B!H87,@8F5E;B!S:&]
W;@T*=&\@8F4@=6YL
M:6ME;'D@86YD+"!E=F5N(&EN('1H92!E=F5N="!O9B!S=6-
H(&\$@9F%i;'5R
M92P@=&AE(&1O;W(@=V%R;FEN9PT*<W=I=&-H
(='O=6QD('=A<FX@=&AE(&9L
M:6=H=&-R97<L(&]F('1H92!P<F]B;&5M+@T*#0I"87-E9"!
O;B!T:&5S92!F
M:6YD:6YG<RP@=&AE(\$9!02!H87,@9&5C:61E9"!T:&%T
('1H92!R97%U:7)E
M;65N=',@;V8@040-"CDP+3 Y+3 V(&%D9')E<W,@=&AE
(&9U;&P@:6YT96YT
M(&]F('1H97-E(')E8V]M;65N9&%T:6]N<RUT;R!
P<F5C;'5D92!A;@T*=6YC
M;VUM86YD960@;W!E;FEN9R!O9B!T:&4@9F]R=V%R9"!
A;F0@869T(&-A<F=O
M(&1O;W)S+@T*#0I&04\$@<W1A9F8@:&%S(&%L<V
\@97AP<F5S<V5D(&-O;F-E
M<FX@=&AA="!T:&4@<F5C;VUM96YD960@:
6YS<&5C=&EO;G,@8V]U;&0-"G)E
M<W5L="!I;B!D86UA9V4@=&\@=&AE
(='I<F4@8G5N9&QE(&EN<W5L871I;VX@
M9'5R:6YG('1H92!I;G1R=7-I=F4-"FEN<W!E8W1I;VXN
(%1H97)E9F]R92P@
M8F%S960@;VX@=&AE(&QE=F5L(&]F(')E9'5N9&
%N8WD@=&AA="!N;W<@97AI
M<W1S('1O#0IP<F5V96YT(&EN861V97)T96YT(&1O;W
(@;W!E;FEN9R!I;B!F
M;&EG:'0L('1H92!3869E='D@0F]A<F0@:&%S(&-L87-S:

69I960-"E-A9F5T
M>2!296-O;6UE;F1A=&EO;G,@02TY,2TX,R!A;F0@+3@T(&
%S("#;&]S960M
M4F5C;VYS:61E<F5D+B!4:&4@0F]
A<F0-"G=I;&P@8VQO<V5L>2!M;VYI=&]R
M(&EN8VED96YT<R!R96QA=&5D('1O('1H92!U;F-O;
6UA;F1E9"!O<&5N:6YG
M(&]F(&-A<F=O#0ID;V]R<R!O;B W-#<@86ER<&QA;F5S
('1O(&9U<G1H97(@
M9&]C=6UE;G0@=&AI<R!P;W-I=&EO;BX-"@T*3E130B!
3869E='D@4F5C;VUM
M96YD871I;VX@0G)I968-"@T*1&%T85]3;W5R8V4Z
(%4N4RX@3E130B!3869E
M='D@4F5C;VUM96YD871I;VYS#0I2<')T7TYB<CH@02TY,
2TX- T*3&%S="!5
M<&1A=&5D.B P,RTQ,RTY-0T*6T]=(\$]N(\$IU;F4@,3,L(#\$Y.
3\$L(%5N:71E
M9"!!:7)L:6YE<R H54%,*2!M86EN=&5N86YC92!P97)
S;VYN96P@=V5R90T*
M=6YA8FQE('1O(&5L96-T<FEC86QL>2!O<&5N('1H92!
A9G0@8V%R9V\@9&]O
M<B!O;B!A(\$)O96EN9R W-#<M,C(R0BP-"DXQ-3)
502P@870@2F]H;B!&+B!+
M96YN961Y(\$%I<G!O<G0@*\$I&2RDL(\$IA;6%I8V\$L
(\$YE=R!9;W)K+B!4:&4@
M86ER<&QA;F4-"G=A<R!O;F4@;V8@='=O
('5S960@97AC;'5S:79E;'D@;VX@
M;F]N<W1O<"!F;&EG:'1S(&)E='=E96X@3F%R:71A+"!*87!
A;BP-"F%N9"!*
M1DLN(%1H:7,@<&%R=&EC=6QA<B!A:7)P;&%N92!
H860@86-C=6UU;&%T960@
M,3DL,#4S(&AO=7)S(&%N9" Q+#4T-PT*8WEC;&5S(&%T
('1H92!T:6UE(&]F

M('1H92!O8V-U<G)E;F-E
+@T*4F5C;VUM96YD871I;VYS.@T*02TY,2TX-"X@
M179A;!5A=&4@=&AE(&1E<VEG;BP@:6YS=&%L;&%T:6J
N+"!A;F0@;W!E<F%T
M:6JN(&JF('1H92!F;W)W87)D#0IC87)G;R!D;VJR
(&9L97AI8FQE(&-O;F1U
M:71S(&JN(\$)O96EN9R W-#<@86ER<&QA;F5S('-O
(&5Q=6EP<&5D(&%N9"!I
M<W-U92P-"FEF('=A<G)A;G1E9"P@86X@06ER=VJ
R=&AI;F5S<R!\$:7)E8W1I
M=F4@9FJR(&EN<W!E8W1I;VX@86YD(')E<&%I<B!O9B!
T:&4-"F9L97AI8FQE
M(&-O;F1U:70@86YD('5N9&5R;'EI;F<@=VER:6YG(&
U;F1L92P@<VEM:6QA
M<B!T;R!T:&4@<')O=FES:6JN<PT*<F5C;VUM96YD960@:
6X@02TY,2TX,RX-
M"E)E<W!O;G-E<SH-"D9!02!,5%(@1%1\$.B Q,2\p,2\Y,
0T*#0I4:&4@1D%!
M(&%G<F5E<R!W:71H('1H92!
I;G1E;G0@;V8@=&AE<V4@<V%F971Y(')E8VJM
M;65N9&%T:6JN<R!A;F0@:7,-"F-O;G-I9&5R:6YG('1H92!
I<W-U86YC92!O
M9B!A(&YO=&EC92!O9B!P<FJP;W-E9"!R=6QE;6%K:6YG
('1O(&%D9')E<W,-
M"G1H97-E(&ES<W5E<RX@22!W:6QL('!R;W9I9&4@=&AE
(\$)O87)D('=I=&@@
M82!C;W!Y(&JF(&%N>2!D;V-U;65N="!T:&%T
(&UA>0T*8F4@:7-S=65D+@T*
M#0I.5%-"(\$Q44B!\$5\$0Z(#\$Q+S(W+SDQ#0H-"E1H97-E(')
E8VJM;65N9&%T
M:6JN<R!W97)E(&ES<W5E9"!A<R!A(')E<W5L="!O9B!
T:&4@0F]A<F0G<R!I
M;G9E<W1I9V%T:6JN#0IO9B!A;B!I;F-I9&5N="!I;B!

W:&EC:"!T:&4@<F5A
M<B!C87)G;R!D;V]R(&]N(&\$@0F]E:6YG(#<T-
RTR,C)"(&EN:71I86QL>0T*
M=V]U;&0@;F]T(&]P96X@96QE8W1R:6-A;&QY(&%N9"!
T:&5N(&]P96YE9"!E
M;&5C=')I8V%L;'D@=VET:&]U="!A8W1I=F%T:6]N#0IO9B!
T:&4@9&]O<B!O
M<&5N('W:71C:&5S+B!9;W5R(&QE='1E<B!I;F1I8V
%T97,@=&AA="!T:&4@
M1F5D97)A;"!!=FEA=&EO;@T*061M:
6YI<W1R871I;VX@86=R965S('=I=&@@@
M=&AE(&EN=&5N="!O9B!T:&5S92!R96-O;
6UE;F1A=&EO;G,@86YD(&ES#0IC
M;VYS:61E<FEN9R!T:&4@:7-S=6%N8V4@;V8@82!
N;W1I8V4@;V8@<')O<&]S
M960@<G5L96UA:VEN9R!T;R!A9&1R97-S#0IT:&5S92!
I<W-U97,N(%1H92!"
M;V%R9"!U<F=E<R!T:&4@1D%!(1O
(&UO=F4@97AP961I=&EO=7-L>2!O;B!T
M:&4-"G)E8V]M;65N9&%T:6]N<RX@4&5N9&EN9R!R96-E:
7!T(&]F(&%D9&ET
M:6]N86P@:6YF;W)M871I;VX@8V]N8V5R;FEN9R!T:&4-"F
%C=&EO;B!T;R!B
M92!T86ME;B!B>2!T:&4@1F5D97)A;"!!=FEA=&EO;B!!
9&UI;FES=')A=&EO
M;BP@=&AE(%-A9F5T>2!";V%R9 T*:7,@8VQA<W-
I9GEI;F<@4V%F971Y(%)E
M8V]M;65N9&%T:6]N<R!!+3DQ+3@S(&%N9" M.#0@87,@
(D]P96XM06-C97!T
M86)L90T*06-T:6]N+B(-"@T*1D%!(SQ44B!\$5\$0Z
(#00-2\Y,PT*#0I4:&4@
M1F5D97)A;"!!=FEA=&EO;B!!9&UI;FES=')A=&EO;B H1D
%!*2!A9W)E97,@

M=VET:"!T:&4@:6YT96YT(&]F('1H97-E#0IR96-O;
6UE;F1A=&EO;G,N(\$]N
M(\$9E8G)U87)Y(#\$X+" Q.3DR+"!T:&4@1D%!(&ES<W5E9"
A(&YO=&EC92!O
M9B!P<F]P;W-E9 T*<G5L96UA:VEN9R H3E!232D@87!
P;&EC86)L92!T;R!C
M97)T86EN(\$O96EN9R!-;V1E;" W-#<@<V5R:65S(&%I<G!
L86YE<RX-"E1H
M:7,@3E!232!P<F]P;W-E9"!T;R!R97%U:7)E(&EN<W!
E8W1I;VX@;V8@=&AE
M(&9L97AI8FQE(&-O;F1U:70L('=I<FEN9RP-"F%N9"!S=7!
P;W)T(&)R86-K
M971S(&)E='=E96X@=&AE(&9U<V5L86=E(&%N9"
T:&4@9F]R=V%R9"!A;F0@
M869T(&-A<F=O#0ID;V]R<RX@4VEN8V4@=&AE
(&ES<W5A;F-E(&]F('1H:7,@
M3E!232P@=&AE(\$9!02!H87,@9G5R=&AE<B!
R979I97=E9"!T:&4-"F-I<F-U
M;7-T86YC97,@<W5R<F]U;F1I;F<@=&AI<R!D;V]R(&]
P96YI;F<@:6YC:61E
M;G0@86YD(&AA<R!C;VYF:7)M960@=&AA= T*86X@:
6YA9'9E<G1E;G0@:6XM
M9FQI9VAT(&]P96YI;F<@;V8@=&AE(&-A<F=O(&1O;W
(@8V%N;F]T(&)E(&-A
M=7-E9"!S;VQE;'D-"F)Y('=I<F4@8VAA9FEN9RX@5&AE
(\$9!02!H87,@9&5T
M97)M:6YE9"!T:&%T(&EN(&%D9&ET:6]N('1O(&-
H869I;F<@870-"FQE87-T
M(&9O=7(@:6YD97!E;F1E;G0@9F%i;'5R97,@;75S="!A;'-O
(&]C8W5R(&EN
M(&]R9&5R('1O(&1R:79E('1H92!D;V]R#0IL871C:&5S('1O
('1H92!O<&5N
M('!O<VET:6]N+B!);B!L:6=H="!O9B!T:&5S92!F:6YD:

6YG<RP@=&AE(\$9!
M00T*9&5T97)M:6YE9"!T:&%T('1H92!R97%U:7)E;
65N=',@<')O<&]S960@
M8GD@=&AE(\$Y04DT@=V5R92!U;FYE8V5S<V
%R>2X@3VX-"D1E8V5M8F5R(#(Q
M+" Q.3DR+"!T:&4@1D%!(='I=&AD<F5W('1H92!.4%)-+B!)
(&AA=F4@96YC
M;&]S960@82!C;W!Y(&]F('1H90T*;F]T:6-E(&]F('I=&AD<F
%W86P@9F]R
M('1H92!";V%R9"=S(&EN9F]R;6%T:6]N+@T*#0I!:7)W;W)
T:&EN97-S(\$1I
M<F5C=&EV92 H040I(#DP+3 Y+3 V("A\$;V-K970@3F\N
(#@Y+4Y-+3\$T."U!
M1"D@;6%N9&%T97,-"G1H92!I;G-
T86QL871I;VX@;V8@82!D;V]R('=A<FYI
M;F<@<W=I=&-H(&QO8V%T960@;VX@=&AE
(&QO8VL@<V5C=&]R+"!A<PT*=V5L
M;"!A<R!A(')E:6YF;W)C96UE;G0@;V8@=&AE
(&QO8VL@<V5C=&]R('1O(&5N
M<W5R92!T:&%T('1H92!L871C:&5S#0IR96UA:6X@;&]
C:V5D(&%G86EN<W0@
M8F%C:V1R:79I;F<@;V8@=&AE(&QA=&-
H97,@8GD@=&AE(&QA=&-H('!O=V5R
M(&1R:79E#0IU;FET+B!&86EL=7)E(&]F
(&QO8VL@<V5C=&]R<R!T:&%T(&%R
M92!R96EN9F]R8V5D(&EN(&%C8V]R9&
%N8V4@=VET:"!!1 T*.3 M,#DM,#8@
M:&%S(&)E96X@<VAO=VX@=&\@8F4@=6YL:
6ME;'D@86YD+"!E=F5N(&EN('1H
M92!E=F5N="!O9B!S=6-H(&\$-"F9A:6QU<F4L(&%N
(&EN9&EC871I;VX@8GD@
M;65A;G,@;V8@=&AE(&1O;W(@=V%R;FEN9R!
S=VET8V@@=VEL;"!W87)N('1H

M90T*9FQI9VAT8W)E=R!O9B!T:&4@<')O8FQE;2X@5&AE
(&UO9&EF:6-A=&EO
M;G,L('1E<W1S+"!A;F0@:6YS<&5C=&EO;G,-"G)
E<75I<F5D(&EN(\$%\$(#DP
M+3 Y+3 V('!R;W9I9&4@86X@86-C97!T86)L92!L979E;"!
O9B!S869E='D@
M=&\@<')E8VQU9&4-"FEN861V97)T96YT(&
%C='5A=&EO;B!O9B!T:&4@8V%R
M9V\@9&]O<B!P;W=E<B!D<FEV92!U;FET(&%N9"!P;W-S:
6)L90T*:6YJ=7)Y
M('1O(&UA:6YT96YA;F-E(&]R(&-A<F=O(&AA;F1L:6YG('!
E<G-O;FYE;"X@
M22!H879E(&5N8VQO<V5D(&\$@8V]P>0T*;V8@=&AE(\$%
\$(&9O<B!T:&4@0F]A
M<F0G<R!;F9O<FUA=&EO;BX@5&AE(\$9!02!
B96QI979E<R!T:&%T('1H92!C
M=7)R96YT#0IR97%U:7)E;65N=',@;V8@040@.3
M,#DM,#8@861D<F5S<R!T
M:&4@9G5L;"!I;G1E;G0@;V8@=&AE<V4@<V
%F971Y#0IR96-O;6UE;F1A=&EO
M;G,@=&\@<')
E8VQU9&4@86X@=6YC;VUM86YD960@;W!E;FEN9R!
O9B!T:&4@
M9F]R=V%R9"!A;F0@869T#0IC87)G;R!D;V]R<RX-"@T*22!
C;VYS:61E<B!T
M:&4@1D%!)W,@86-T:6]N('1O(&)E(&-O;7!
L971E9"P@86YD(\$D@<&QA;B!N
M;R!F=7)T:&5R(&%C=&EO;@T*;VX@4V%F971Y(%)E8V]
M;65N9&%T:6]N<R!!
M+3DQ+3@S(&%N9" M.#0N#0H-"DY44T(@3%12
(\$141#H@,3\$O."Y,PT*#0I4
M:&4@3F%T:6]N86P@5')A;G-P;W)T871I;VX@4V%F971Y
(\$O87)D(&AA<R!R

M979I97=E9"!T:&4@1F5D97)A;"!=FEA=&EO;@T*061M:
6YI<W1R871I;VX@
M*\$9!02D@<F5S<&JN<V4@;V8@07!R:6P@-2P@,
3DY,RP@=&\@4V%F971Y#0I2
M96-O;6UE;F1A=&EO;G,@02TY,2TX,R!A;F0@+3@T+B!
4:&5S92!R96-O;6UE
M;F1A=&EO;G,@87-K960@=&AA="!T:&4@1D%!#0II<W-
U92!A;B!A:7)W;W)T
M:&EN97-S(&1I<F5C=&EV92!A<'!L:6-A8FQE('1O(&
%L;"!";V5I;F<@-S0W
M(&%I<G!L86YE<PT*=VET:"!A(&9L97AI8FQE(&-O;F1U:
70@<')O=&5C=&EN
M9R!T:&4@=VER:6YG(&)U;F1L92!B971W965N
+71H92UF=7-E;&%G90T*86YD
M(&%F="!C87)G;R!D;V]R('1O(')
E<75I<F4@86X@97AP961I=&5D(&EN<W!E
M8W1I;VX@;V8Z#0HH,2D@=&AE('=I<FEN9R!
B=6YD;&4@:6X@=&AE(&%R96\$@
M;F]R;6%L;'D@8V]V97)E9"!B>2!T:&4@8V]N9'5I="!F;W
(@=&AE#0IP<F5S
M96YC92!O9B!D86UA9V5D(&EN<W5L871I;VX@*'5S:6YG
(&5I=&AE<B!A;B!E
M;&5C=')I8V%L('1E<W0@;65T:&]D(&]R#0IV:7-
U86P@97AA;6EN871I;VXI
M.R H,BD@=&AE(&-O;F1U:70@<W5P<&]R="!B<F%C:V5T
(&%N9"!A='1A8VAE
M9"!S=&%N9&]F9@T*<&EN+6]N('1H92!U<'!E<B!
A<FT@;V8@=&AE(&9O<G=A
M<F0@;&EF="!A8W1U871O<B!M96-H86YI<VT[(" @S*2!
T:&4-"F9L97AI8FQE
M(&-O;F1U:70@9F]R('1H92!P<F5S96YC92!O9B!C<F
%C:VEN9R!I;B!T:&4@
M8V]N=F]L=71E9"!I;FYE<F-O<F4N#0H-"E1H92!";V%R9!"

F=7)T:&5R(')E
M8VJM;65N9&5D('1H870@=VER97,@=VET:"!D86UA9V5D
(&EN<W5L871I;VX@
M8F4-"G)E<&%I<F5D(&)E9F]R92!F=7)T:&5R('-E<G9I8V4N
(\$1A;6%G92!T
M;R!T:&4@9FQE>&EB;&4@8V]N9'5I="P@8V]N9'5I=
T*<W5P<&]R="!B<F%C
M:V5T+"!A;F0@<W1A;F1O9F8@<&EN('-H;W5L9"!R97-
U;'0@:6X@86X@:6UM
M961I871E(')E<&QA8V5M96YT#0IO9B!T:&4@8V]N9'5I="!
A<R!W96QL(&%S
M+B!T:&4@9&%M86=E9"!P87)T<RX@5&AE(&EN<W!
E8W1I;VX@<VAO=6QD(&)E
M#0IR97!E871E9"!A="!A;B!A<!R;W!R:6%T92!C>6-L:6,@:
6YT97)V86PN
M#0H-"E1H92!3869E='D@0F]A<F0@=&AE;B!
A<VME9"P@:6X@4V%F971Y(%)E
M8VJM;65N9&%T:6]N(\$\$M.3\$M.#0L('1H870@=&AE(\$9!
00T*979A;'5A=&4@
M=&AE(&1E<VEG;BP@:6YS=&%L;&%T:6]N+"!A;F0@;W!
E<F%T:6]N(&]F('1H
M92!F;W)W87)D(&-A<F=O(&1O;W(-"F9L97AI8FQE(&-
O;F1U:71S(&]N(\$)O
M96EN9R W-#<@86ER<&QA;F5S('-O(&5Q=6EP<&5D(&
%N9"!I<W-U92P@:68-
M"G=A<G)A;G1E9"P@86X@86ER=V]R=&AI;F5S<R!D:7)
E8W1I=F4@9F]R(&EN
M<W!E8W1I;VX@86YD(')E<&%I<B!O9B!
T:&4-"F9L97AI8FQE(&-O;F1U:70@
M86YD('5N9&5R;'EI;F<@=VER:6YG(&)U;F1L92P@<VEM:
6QA<B!T;R!T:&4@
M<'O=FES:6]N<PT*<F5C;VUM96YD960@:6X@4V%F971Y
(%)E8VJM;65N9&%T

M:6JN(\$\$M.3\$M.#,N#0H-"E1H92!&04\$G<R!!<')I;" U+" Q.
3DS+"!R97-P
M;VYS92!L:7-T960@82!N=6UB97
(@;V8@9FEN9&EN9W,@;V8@86X@1D%#!#0IR
M979I97<@;V8@=&AE(&-I<F-U;7-T86YC97,@<W5R<F]
U;F1I;F<@=&AE('-U
M8FIE8W0@9&]O<B!O<&5N:6YG+B!!;6]N9R!
T:&4-"F9I;F1I;F=S+"!T:&4@
M1D%!(&-O;F9I<FUE9"!T:&%T(&%N(&EN861V97)T96YT
(&EN9FQI9VAT(&]P
M96YI;F<@;V8@=&AE#0IC87)G;R!D;V]R(&-A;FYO="!B92!
C875S960@<V]L
M96QY(&)Y
(='I<F4@8VAA9FEN9RX@1G5R=&AE<BP@=&AE(\$9!
00T*9&5T97)M
M:6YE9"!T:&%T(&%T(&QE87-T(&9O=7(@:6YD97!
E;F1E;G0@9F%i;'5R97,@
M;75S="!O8V-U<B!T;R!D<FEV92!T:&4-"F1O;W(@;&
%T8VAE<R!T;R!T:&4@
M;W!E;B!P;W-I=&EO;BX@5&AE(\$9!02!A;'-O('T871E9"!
T:&%T(&9A:6QU
M<F4@;V8@;&]C:PT*<V5C=&]R<R!T:&%T(&%R92!
R96EN9F]R8V5D(&EN(&%C
M8V]R9&%N8V4@=VET:"!!1" Y,"TP.2TP-B!H87,@8F5E;B!
S:&]W;@T*=&\@
M8F4@=6YL:6ME;'D@86YD+"!E=F5N(&EN('1H92!
E=F5N="!O9B!S=6-H(&\$@
M9F%i;'5R92P@=&AE(&1O;W(@=V%R;FEN9PT*<W=I=&-
H('=O=6QD('=A<FX@
M=&AE(&9L:6=H=&-R97<L(&]F('1H92!P<F]B;&5M
+@T*#0I"87-E9"!O;B!T
M:&5S92!F:6YD:6YG<RP@=&AE(\$9!02!H87,@9&5C:61E9"!
T:&%T('1H92!R

M97%U:7)E;65N=',@;V8@040-"CDP+3 Y+3 V(&%D9')
E<W,@=&AE(&9U;&P@
M:6YT96YT(&]F('1H97-E(')E8V]M;65N9&%T:6]N<RUT;R!
P<F5C;'5D92!A
M;@T*=6YC;VUM86YD960@;W!E;FEN9R!O9B!T:&4@9F]
R=V%R9"!A;F0@869T
M(&-A<F=O(&1O;W)S+@T*#0I&04\$@<W1A9F8@:&%S(&
%L<V\@97AP<F5S<V5D
M(&-O;F-E<FX@=&AA="!T:&4@<F5C;VUM96YD960@:
6YS<&5C=&EO;G,@8V]U
M;&0-"G)E<W5L="!I;B!D86UA9V4@=&\@=&AE
(='I<F4@8G5N9&QE(&EN<W5L
M871I;VX@9'5R:6YG('1H92!I;G1R=7-I=F4-"FEN<W!
E8W1I;VXN(%1H97)E
M9F]R92P@8F%S960@;VX@=&AE(&QE=F5L(&]F(')
E9'5N9&%N8WD@=&AA="!N
M;W<@97AI<W1S('1O#0IP<F5V96YT(&EN861V97)T96YT
(&1O;W(@;W!E;FEN
M9R!I;B!F;&EG:'0L('1H92!3869E='D@0F]A<F0@:&%S(&-
L87-S:69I960-
M"E-A9F5T>2!296-O;6UE;F1A=&EO;G,@02TY,2TX,R!
A;F0@+3@T(&%S("#)
M;&]S960M4F5C;VYS:61E<F5D+B!4:&4@0F]
A<F0-"G=I;&P@8VQO<V5L>2!M
M;VYI=&]R(&EN8VED96YT<R!R96QA=&5D('1O('1H92!
U;F-O;6UA;F1E9"!O
M<&5N:6YG(&]F(&-A<F=O#0ID;V]R<R!O;B W-
#<@86ER<&QA;F5S('1O(&9U
M<G1H97(@9&]C=6UE;G0@=&AI<R!P;W-
I=&EO;BX-"@T*#0IB87)R>4!C;W)A
B>F]N+F-O;0T*:'1T<#HO+W=W=RYC;W)A>F]N+F-O;
2\-"@IB

end

From: John Barry Smith <barry@corazon.com>
Date: April 2, 1998 5:22:01 PM PST
To: FAAOAI
Subject: **Thank you**

Dear Mr. Streeter,

Mail forwarded as you requested.

Thank you.

Regards,

Barry Smith

From: John Barry Smith <barry@corazon.com>
Date: April 4, 1998 10:03:31 AM PST
To: FAAOAI
Subject: **Work/analysis in progress.**

Dear Mr. Streeter,

Following is analysis in progress. It shows a link between cargo door problems and early 747s. Most were explained as improper latching or other mechanical cause, exactly as UAL 811 was initially thought to be but later confirmed to be electrical wiring. So maybe not all mechanical.

Early 747s had polyx or related wiring.

This is raw data but important so I'd thought I'd keep you informed. You did say wiring continues to be a problem and I agree. It is the big picture.

1970 1971 was not a good year for newborn 747s and cargo doors.

I would love to know the line numbers of the 747s which had cargo bay fires as named below in NTSB exhibit.

Cheers,
Barry Smith

#15, PA103 is 44 Wire(Raychem Corp), Construction number 19646, 25 Jan 70, forward door

#16 PA 125 is 44 Wire(Raychem Corp), Construction number 19647, 121, pa, n740pa, 31 jan 70, forward door.

#72 19896 747 132 9 sep 70

#87 20108, 747-123 AA registration number 9669, 28 Oct 70 cargo door.

#89, UAL811-Poly-x(Raychem), Construction number 19875, 20 Oct 70, forward door

#101 19878 747 122 ual n4717u 7 dec 70

#115 20323 747 123 aa n9671 10 feb 71

#139, Poly-x, Construction number 19879, 122, ual, n4718u, 16
may 71, Aft door

#141 203 58 747 251b nwa n613us 22 jun 71

#153, TWA 800, is polyX Construction number 20083, 18 Aug
71,

#217 20535 747 238b 13 jul 73

#242 20826 747 245f 12 jul 74

#330, AI82 Poly-x, Construction number 21473 19 Jun 78,
forward door.

#594 23111 747 251B nwa n631us 28 feb 84

#673 55 Wire, Construction number 23736, 222b, ual,
n151ua, 1 mar 87, aft door

#680 23887 747 251f nwa 18 may 87

BMS13-42D is "Stilan"(both Raychem Corp), (Raychem Corp),
BMS13-42B is "Poly-x"

So, questions:

Why was 44 wire replaced by polyX?

BMS 13-42 seems to have two versions, poly x and stilan. What
is BMS number for 44 wire?

BMS 13-42B equals polyX for UAL 811 and UAL and TWA 800 and AI 182.

BMS 13-42D is stilan for no flights.

BMS 13-48 is 55Wire for UAL ground check.

Why is Raychem named, did different companies make the same wire?

FAA INCIDENT DATA SYSTEM REPORT[Return to Search Screen] General

Information Data Source: FAA INCIDENT DATA
SYSTEM Report Number: 811009073259C Local
Date: 10/09/1981 Local Time: 12:27
City: CHICAGO State:
IL Airport Name: CHICAGO
O'HARE INTL Airport Id: ORD
Event Type: INCIDENT - AIR CARRIER Mid Air
Collision: NOT A MIDAIR Aircraft Information Aircraft
Damage: NONE Phase of Flight: CLIMB TO
CRUISE Aircraft Make/Model: BOEING B-747-123
Airframe Hours: 0 Operator Code:
AALA Operator: AMERICAN
AIRLINES INC - AALA Owner Name:
AMERICAN AIRLINES INC Narrative
AIRCRAFT RETURNED TO AIRPORT SHORTLY AFTER
TAKEOFF DUE CARGO DOOR WARNING LIGHT FOUND
NO FAULT. Detail Primary Flight Type:
SCHEDULED AIR CARRIER Secondary Flight Type:
PASSENGERS Type of Operation: AIR
CARRIER/COMMERCIAL Registration Number: 9669

Total Aboard: 0 Fatalities: 0 Injuries:
 0 Landing Gear: Aircraft Weight
 Class: OVER 12500 LBS Engine Make:
 Engine Model: Engine
 Group: Number of Engines: 4 Engine
 Type: Environmental/Operations
 Information Primary Flight Conditions: VISUAL FLIGHT
 RULES Secondary Flight Conditions: WEATHER NOT A
 FACTOR Wind Direction (deg): 11 Wind Speed (mph):
 06 Visibility (mi): GREATER THAN 10
 MILES Visibility Restrictions: Light Condition:
 DAY Flight Plan Filed: INSTRUMENT
 FLIGHT RULES Approach Type: Pilot-in-Command
 Pilot Certificates: AIRLINE TRANSPORT Pilot
 Rating: AIRPLANE MULTI-ENGINE LAND Pilot
 Qualification: QUALIFIED Flight Time (Hours) Total
 Hours: 0 Total in Make/Model: 0 Total Last
 90 Days: 0 Total Last 90 Days Make/Model: 0<<>>
 [Return to Search Screen]

1. Exhibit 9C, Attachments to the Systems Group Factual Report page 44 45 46:

A. 1996, burning smell in forward cargo compartment, found damaged wiring

shorted to ground, charring found.

B. Oct 12, 1996, Wire bundle arcing and resultant fire at aft bulkhead of

forward lower lobe cargo hold on 747-200 freighter.

C. Nov 1, 1997 Identical problem reported as A above. The fire from shorted

wires in chafed wiring bundle in forward cargo compartment

either happened twice, once in 1996 and once in 1997, as the report states, or it's the same event reported twice with a wrong date. Probably wrong date and right dates are both 1996.

Difficulty Date : 10/31/97 0:00:00
Operator Type : Air Carrier
ATA Code : 5230
Part Name : LATCH
Aircraft Manufacturer : BOEING
Aircraft Group : 747
Aircraft Model : 747251B
Part/Defect Location : CARGO DOOR
Part Condition : OUT OF ADJUST
Submitter Code : Carrier
Operator Desig. : NWAA
Precautionary Procedure : UNSCHED LANDING
: DUMP FUEL
Nature : WARNING INDICATION
Stage of Flight : CLIMB
District Office Region : Great Lakes office #01
A/C N Number : 613US
Part Total Time : 0
Part Time since Overhaul: 0
Aircraft Serial No. : 20358

Discrepancy/Corrective Action:

DURING CLIMB, THE AFT CARGO DOOR ILLUMINATED AND AIRCRAFT FAILED TO PRESSURIZE. FLIGHT RETURNED TO BKK AFTER DUMPING 5000 LBS OF FUEL AND LANDED WITHOUT

FURTHER INCIDENT. MAINTENANCE FOUND THE AFT CARGO DOOR HANDLE OUT OF POSITION. ADJUSTED LATCH AND LOCK. OPERATIONAL CHECK OK. Difficulty Date

ATA Code : 5230
Aircraft Manufacturer : BOEING
Aircraft Model : 747123
Aircraft Serial No. : 20323
Difficulty Date : 23 April 1993
Operator Desig. : IPXA
A/C N Number : 671UP
Precautionary Procedure : Unsched. Landing
Nature : Other
Stage of Flight : Climb

Discrepancy/Corrective Action:

THE SIDE CARGO LIGHT ILLUMINATED SHORTLY AFTER DEPARTURE FROM ONT. THE AIRCRAFT COULD NOT BE PRESSURIZED. THE CREW DUMPED FUEL DOWN TO MAX LANDING WEIGHT AND RETURNED TO ONT. MAINTENANCE FOUND THE MAIN CARGO DOOR SHEAR PIN SHEARED AND REPLACED PIN. OPS CHECK WAS NORMAL.

Part Name : SHEAR PIN
Manufacture Part Number : 69B156232
Part Condition : BROKEN
Part/Defect Loc. : MAIN CARGO DR
Overhaul : X
Submitter Code : Carrier

District Office : Southern US office #01
Aircraft Type : 12501 lbs. and over weight class
Monoplane Low Wing
Powered with 4 Engines

ATA Code : 5230
Aircraft Manufacturer : BOEING
Aircraft Model : 747451
Aircraft Serial No. : 24223
Difficulty Date : 16 September 1993
Operator Desig. : NWAA
A/C N Number : 668US
Precautionary Procedure : None
Nature : Other
Stage of Flight : Insp/Maint

Discrepancy/Corrective Action:

DURING PERIODIC INSPECTION, CORROSION WAS
FOUND ON THE FORWARD CARGO DOOR FORWARD
MIDSPAN LATCH
TORQUE TUBE. REPLACED TORQUE TUBE AND LATCH
ASSEMBLY.

Part Name : TUBE
Manufacture Part Number : 65B073396
Part Condition : CORROSION
Part/Defect Loc. : FWD CARGO DOOR
Overhaul : X
Submitter Code : Carrier
District Office : Great Lakes office #01
Aircraft Type : 12501 lbs. and over weight class

Monoplane Low Wing
Powered with 4 Engines

ATA Code : 5230
Aircraft Manufacturer : BOEING
Aircraft Model : 747238B
Aircraft Serial No. : 20535
Difficulty Date : 10 November 1993
Operator Desig. : CALA
A/C N Number : 17025
Precautionary Procedure : Unsched. Landing
Nature : Other
Stage of Flight : Climb

Discrepancy/Corrective Action:

EWR - FLT 0028 - AIRCRAFT CABIN PRESSURE COULD NOT BE MAINTAINED ABOVE 17,000 FEET. ALL PACKS AND DUCT PRESSURE WERE NORMAL AND THERE WERE NO SYSTEM FAIL LIGHTS OR DOOR WARNING LIGHTS. THE AIRCRAFT WAS RETURNED TO EWR. MAINTENANCE FOUND THE AFT CARGO DOOR FORWARD PRESSURE RELIEF DOOR SHROUD CRACKED AND THE DOOR SEAL WAS MISSING. THE DOOR SHROUD AND SEAL WERE REPLACED. THE AIRCRAFT WAS PRESSURIZED AND NO LEAKS WERE NOTED. (W)

Part Name : SHROUD

Part Condition : CRACKED
Part/Defect Loc. : AFT CARGO DOOR
Overhaul : X
Submitter Code : Carrier
District Office : Southwestern US office #09
Aircraft Type : 12501 lbs. and over weight class
Monoplane Low Wing
Powered with 4 Engines

ATA Code : 5230
Aircraft Manufacturer : BOEING
Aircraft Model : 747132
Aircraft Serial No. : 19896
Difficulty Date : 06 September 1994
Operator Desig. : EIAA
Operator Type : Air Carrier
A/C N Number : 481EV
Precautionary Procedure : Unsched. Landing
: Dump Fuel
Nature : Warning Indication
Stage of Flight : Climb

Discrepancy/Corrective Action:

JFK - ON TAKEOFF AFT CARGO DOOR LT ILLUMINATED.
UNABLE TO PRESSURIZE, DUMPED 50,000 POUNDS,
LANDED JFK. UPON
ARRIVING AT JFK , FOUND AFT CARGO VENT DOORS
OPENED AND DOOR HANDLE UNLOCKED. CHECKED
OPERATION OF DOOR
AND HANDLE PER MM 52-34-12 AND MM 52-34-00. OPS
CHECKED OK. ADJUST LATCH PIN PER MM 52-34-12

PAGE 234 AND
PRESSURIZED OK. PER MM 21-31-00. OPS CHECKED OK
AND INDICATION OK. (W)

Part Name : DOOR
Part Condition : NOT LATCHED
Part/Defect Loc. : CARGO COMPT
Name : EVERGREEN INTERNATIONAL
AIRLINES IN
Submitter Code : Carrier
District Office : Northwest Mountain office #09

ATA Code : 5230
Aircraft Manufacturer : BOEING
Aircraft Model : 747251F
Aircraft Serial No. : 23887
A/C Total Time : 29362
A/C Total Cycles : 6796
Difficulty Date : 20 October 1994
Operator Desig. : NWAA
Operator Type : Air Carrier
A/C N Number : 639US
Precautionary Procedure : Unsched. Landing
: Dump Fuel
Nature : Warning Indication
Stage of Flight : Take Off
Station : VHHH
Flight # : 0904

Discrepancy/Corrective Action:

AFTER TAKEOFF, AFT CARGO DOOR LIGHT ILLUMINATED. CREW FOLLOWED COCKPIT OPERATING PROCEDURE, DUMPED 75,000 LBS OF FUEL, AND RETURNED TO HKG. FOUND HOOK ACTUATOR DEACTIVATED. REPLACED HOOK ACTUATOR PER MM 52-71-00 AND DOOR WARNING SWITCH (S3) PER MM 52-71-00. PERFORMED CHECK AND UNITS TESTED NORMAL. AIRCRAFT RETURNED TO SERVICE.

Part Name : SWITCH
Manufacture Part Number : C210251
Part Condition : FAILED
Part/Defect Loc. : AFT CARGO
Name : NORTHWEST AIRLINES INC
Submitter Code : Carrier
District Office : Great Lakes office #01

ATA Code : 5230
Aircraft Manufacturer : BOEING
Aircraft Model : 747245F
Aircraft Serial No. : 20826
Difficulty Date : 27 November 1994
Operator Desig. : FDEA
Operator Type : Air Carrier
A/C N Number : 640FE
Precautionary Procedure : Unsched. Landing
Nature : Warning Indication
Stage of Flight : Take Off
Station : ORD
Flight # : 77

Discrepancy/Corrective Action:

ON ROTATION, AFT CARGO DOOR OPENED. REPLACED
SPRING ON LOCK PIN AND ADJ PER MM 52-34-12.

Part Name : SPRING
Manufacture Part Number : MS245851290
Part Condition : FAILED
Part/Defect Loc. : AFT CARGO DOOR
Name : FEDERAL EXPRESS CORP
Submitter Code : Carrier
District Office : Southern US office #04

ATA Code : 5230
Aircraft Manufacturer : BOEING
Aircraft Model : 747122
Aircraft Serial No. : 19878
A/C Total Time : 80672
A/C Total Cycles : 18869
Powerplant Manufacturer : PWA
Powerplant Model : JT9D7A
Difficulty Date : 24 October 1994
Operator Desig. : UALA
Operator Type : Air Carrier
A/C N Number : 4717U
Precautionary Procedure : Emer. Descent
Nature : Warning Indication
Stage of Flight : Cruise
Station : NRT
Flight # : 0825

Discrepancy/Corrective Action:

AT 37000 FEET UNABLE TO MAINTAIN CABIN
PRESSURE. MADE EMERGENCY DESCENT. REPLACED
MISSING SEAL ON AFT CARGO
DOOR.

Part Name : SEAL
Manufacture Part Number : 60B1000010
Part Condition : MISSING
Part/Defect Loc. : CARGO DOOR
Name : UNITED AIRLINES INC.
Submitter Code : Carrier
District Office : Western/Pacific US office #29

ATA Code : 5230
Aircraft Manufacturer : BOEING
Aircraft Model : 747132
Aircraft Serial No. : 19896
Difficulty Date : 14 May 1995
Operator Desig. : EIAA
Operator Type : Air Carrier
A/C N Number : 481EV
Precautionary Procedure : Unsched. Landing
Nature : Warning Indication
Stage of Flight : Climb

Discrepancy/Corrective Action:

JFK - LOG PAGE A3752 - AFT CARGO LIGHT
ILLUMINATED ON TAKEOFF ROLL ALONG WITH CARGO
DOOR ANNUNCIATOR LIGHT
ON PILOTS CLEAR SHIELDS. ABNORMAL CHECKLIST
COMPLETED AND LANDING WAS UNEVENTUAL.

FOUND LOWER AFT CARGO
DOOR VENT DOOR RELEASE HANDLE OPEN.
RESECURED HANDLE AND OPERATED HANDLE
NUMEROUS TIMES. LIGHT OPERATED
NORMALLY IAW MM 52-34-0. OPERATION OF AFT
CARGO DOOR VENT DOOR HANDLE AND TRIGGER
ASSY AND INDICATION
SYSTEM ALL CHECKED OK. (X)

Part Name : VENT DOOR HANDLE
Part Condition : NOT SECURED
Part/Defect Loc. : CARGO DOOR
Name : EVERGREEN INTERNATIONAL
AIRLINES IN
Submitter Code : Carrier
District Office : Northwest Mountain office #09

ATA Code : 5230
Aircraft Manufacturer : BOEING
Aircraft Model : 747251B
Aircraft Serial No. : 23111
A/C Total Time : 45787
A/C Total Cycles : 7155
Difficulty Date : 03 March 1996
Operator Desig. : NWAA
Operator Type : Air Carrier
A/C N Number : 631US
Precautionary Procedure : Unsched. Landing
: Emer. Descent
Nature : Warning Indication
Stage of Flight : Cruise
Station : RPMM
Flight # : 0007

Discrepancy/Corrective Action:

DURING CRUISE, PRESSURIZATION AUTO FAIL LIGHT ILLUMINATED ACCOMPANIED BY A LOSS OF PRESSURIZATION. AIRCRAFT DIVERTED TO MNL AND LANDED WITHOUT INCIDENT. REPLACED AIR/GROUND RELAY R229, RIGHT OUTFLOW VALVE ACTUATOR AND AUTO PRESSURE CONTROLLER. REPAIRED DENT IN FORWARD CARGO DOOR DEPRESSOR SEAL AND OPERATIONAL CHECK GOOD.

Part Name : SEAL
Part Condition : DAMAGED
Part/Defect Loc. : CARGO DOOR
Name : NORTHWEST AIRLINES INC
Submitter Code : Carrier
District Office : Great Lakes office #01

From: John Barry Smith <barry@corazon.com>

Date: April 5, 1998 8:43:06 AM PDT

To: FAAOAI

Subject: **FAAOAI role**

Dear Mr. Streeter,

The attached article just came out.

It is apparent that not only I am dissatisfied with the way NTSB handles aircraft accidents. It's the heavy hitters, not just the journeymen like me.

NTSB withholds data from the crash below and withholds data from NTSB. They are all politicians over at the Board and not aircraft investigators.

Just like cargo door is symptom of larger problem, wiring; withheld exhibits from TWA are a symptom of a larger problem, withheld data from all accidents.

NTSB is fixated on center tank as initial event disregarding clear visual evidence of outward explosion in cargo door area.

Boeing is trying to show any cause such as missile and avoiding cargo door manufacturer design defect.

TWA wants anything but door that can be blamed on them for improper latching.

Wacky public loves missiles and bombs and bored by door popping open.

Media reports what government says.

Family members want comfort, not more pain of trivial cause of wiring short.

Where is FAA Office of Aviation Safety?

It's time for you to step forward. Maybe you are already working behind the scenes, if so, fine. Good luck.

FAA is encouraged to get involved with safety by Senator McCain. FAA is dissatisfied with NTSB AARs. It's time for FAA to get involved with TWA 800. What better way with facts, data, and evidence that door opened in flight and it may have been wiring that shorted door motor on.

The down side is certification service takes a hit for saying door was safe and could not open in flight just by chafed wiring.

What is more important, checking out a worthy line of investigation, wiring bad to door open, or keeping already tarnished reputation of certification service intact?

My data is real, the evidence is there to see, my facts come from official reports, my conclusions are conservative, and my wiring/door cause can be confirmed and replicated.

To be a neutral liaison was proper role for the last year and a half regarding TWA 800. But now, with Senator McCain expressing displeasure at FAA safety for not doing more and with FAA upset at NTSB conclusions, it's time for FAA OAI to fill the vacuum.

Do you believe the wiring/cargo door cause is a worthy line of investigation for TWA 800? Then please do it, someone has to.

Best Regards,

John Barry Smith

HoustonChronicle.com Section: National
HoustonChronicle.com's National
News forum 8:45 PM 4/3/1998 FAA considers challenging
safety board finding on '94
crashBy DON PHILLIPS Washington Post WASHINGTON -- In
the 30 years since
the National Transportation Safety Board was created, no
government
agency has formally petitioned the board to reconsider one of its
reports on any air, rail, water, highway or pipeline disaster. That

may
be changing. For more than a year, the Federal Aviation
Administration
has debated internally whether to challenge the board's
conclusion that
American Eagle Flight 4184 crashed because the FAA, the
French
government and the French manufacturer of the plane failed to
take
actions that could have prevented the deaths of 68 people in a
soggy
bean field near Roselawn, Ind., on Oct. 31, 1994. FAA
Administrator Jane
Garvey, who took over the agency in July 1997, is considering
her
staff's strong recommendation that the FAA push a
reconsideration
petition, following months of meetings with the safety board
staff that
failed to reach a compromise. This petition is more than a
bureaucratic
stink bomb. Officials on both sides fear a public airing could
poison
already strained relations between the FAA and the NTSB. Part
of the
strain is institutional: The FAA has regulatory responsibility for
aviation safety, while the safety board investigates accidents and
recommends safety-related actions to the FAA. The FAA is not
required to
accept the recommendations. But in recent years, new strains
have
appeared. Some are based on personality conflicts, and some are
deeper.

For instance, the safety board has increasingly added "cultural" issues to its technical findings of the "probable cause" of accidents. Quite often it has listed the FAA's action, or inaction, as a probable cause. The reconsideration petition in effect questions the board's technical competence. The FAA is reluctant to take on the safety board in such a drastic way, partly because the board is popular with Congress. And with Vice President Al Gore adopting aviation safety as one of his pet causes, the Clinton administration cringes whenever its FAA disagrees with the board, according to industry insiders. Unlike other interagency spats, the White House can't forcibly mediate -- the safety board is an independent agency, and usually acts the part. The simmering dispute also could affect U.S.-French relations in the aviation field, something all sides have worked hard to prevent. The Direction Generale de l'Aviation Civile, the French equivalent of the FAA, presented its petition for reconsideration to the safety board in November 1996. The French have never publicized the petition and decline to comment. In a court deposition, FAA official John Dow said, without identifying them or their nationality, that two companies told him the board's report had

convinced them "the openness and candor which normally must be a part of a proper investigation was simply abused by the board, twisted by the board, and ultimately resulted in a situation that was not going to be conducive to openness in accident investigations." Bernard Loeb, the safety board's director of aviation safety, said any French concerns are unfounded. "They do feel we treat a French-built airplane differently than a U.S.-built airplane," he said. "That is incorrect." The plane involved was the ATR-72, manufactured by the French company Avions de Transport Regional. The FAA agrees with the safety board that the buildup of an ice ridge on the ATR-72 twin-turboprop's wings caused a sudden movement of the ailerons, the flat surface that controls an aircraft's rolls to the left or right. That caused a sudden roll that automatically cut off the autopilot, surprising the crew and sending the plane into a dive. After that basic conclusion, the two agencies agree on very little. NTSB's lengthy report said the FAA, the DGAC and the aircraft manufacturer could have prevented the crash by a more careful analysis of five previous incidents involving ATR aircraft. The report said the manufacturer withheld information from the DGAC, the DGAC

withheld information from the FAA, and the FAA essentially failed in its oversight responsibilities. The objections of the FAA and the DGAC are similar, ranging from the question of bureaucratic responsibilities within international treaties to the explosive issue of whether the dead ATR flight crew should carry some responsibility. Several documents, including a Nov. 17, 1997, letter from FAA Associate Administrator Guy Gardner to NTSB's Loeb, detail the FAA's objections: á The FAA contends Roselawn was the first icing accident of its type and could not have been predicted from other incidents that were "entirely different aerodynamically." á The report demonstrated "a lack of understanding" of the FAA's aircraft certification process and the role of formal agreements with other countries on aircraft airworthiness. á The safety board failed to take into account "human factors," including the role of the crew. Loeb, in a Feb. 13 letter, acknowledged the report misstates the requirements of the U.S.-French airworthiness agreement and "will correct this error." But the letter disagrees with the remaining FAA points. Even though some of the incidents were not exactly the same aerodynamically, Loeb wrote, if the data had been examined by experienced aeronautical engineers, "action could have been

taken that
may have prevented the crash at Roselawn." Beyond the
technical points
lies the most sensitive question -- the role of the crew. The safety
board said the crew had no major role in the crash. The board
withheld a
major portion of the cockpit voice recorder as "nonpertinent."
Sources
have said the deleted conversations could be extremely
embarrassing to
the family of at least one of the dead pilots. The DGAC said the
deleted
conversations could help demonstrate the crew's mind was not on
flying,
and that was part of the pilots' failure to notice an ice buildup as
the
flight circled, waiting for clearance to land at Chicago's O'Hare
Airport. The DGAC petition points out that the captain left the
cockpit
for more than five minutes during the holding pattern and chatted
with
flight attendants. It is unclear when the FAA will decide on the
petition. A negative decision could offend Garvey's senior staff.
A
positive one could offend the safety board, and possibly shave
support
she needs in Congress and the White House.

From: John Barry Smith <barry@corazon.com>

Date: April 8, 1998 9:50:03 AM PDT

To: FAAOAI

Subject: FAA inspected wrong cargo door of TWA 800

John McCain, Arizona,
Chairman, Committee on Commerce, Science, and
Transportation
United States Senate

Dear Senator McCain, 8 Apr 98

Please may I have a meeting with aviation safety officials to present my findings? Please may I have discussion with you or your representative to display evidence. Please may I not be ignored and refused meetings with NTSB? Please may the facts, data, and evidence from my years of research have a change to be seen and heard by aviation safety officials?

The TWA 800 wreckage database reveals aft cargo door bottom sill, latches and locks were checked but not forward door! Bob Breneman, the FAA structural engineer who made the examination and concluded forward door all latched and locked, could not have examined the forward door latches and locks because they were not recovered. They are not in the database and they are not in the wreckage reconstruction in the hangar. The forward door is only 20% recovered and sill and latches are missing.

But in the terminal field (that includes the wings and rest of headless 747 fuselage and aft door) was found on page 14 of 71 of wreckage database, "C122, RF45A 40 39 47.00 latitude, 72 37 27. 90 longitude, aft cargo door- lower sill latches & locks."

So in the hangar jumbled with wreckage days after crash, as wreckage was brought in, Bob Breneman of FAA looked at bottom latches of a cargo door and saw them locked and hastily

said forward door all latched and locked. He got the two identical doors mixed up. He never corrected his error.

The forward door reconstruction shows all the pieces of those items found in database. Most of the forward door is missing in wreckage reconstruction and most of forward door is missing in database. The sill and latches and locks are missing in database and reconstruction. 80% of forward door is still out there someplace.

Aft door was not reconstructed in hangar as too far away from center tank. The aft door bottom sill, latches and locks were recovered. The two doors are identical in shape, function, and size. It was an honest error.

Senator McCain, not only has FAA and NTSB not examined the two midspan latches of the forward cargo door, they have not examined any of the ten latches and locks. There are not sufficient facts to rule out the inflight opening of the forward cargo door in flight. The evidence shows it did by petal bulge, red paint smears, and outward peeled skin in door area.

The history shows it was bare chafed wiring shorting the cargo door motor on to the unlatch position, just like UAL 811. Wiring is the big problem with early 747s but not for starting spontaneous center tank explosions. Wiring is a problem for shorting and turning cargo door motor on.

I ask again, sir, please may I have a meeting with aviation safety officials to present my findings? Please may I have discussion with you or your representative to display evidence. Please may I not be ignored and refused meetings with NTSB? Please may the facts, data, and evidence from my years of research have a

change to be seen and heard by aviation safety officials?

Very Respectfully,

John Barry Smith
551 Country Club Drive,
Carmel Valley, CA 93924
408 659 3552
barry@corazon.com
www.corazon.com

From: John Barry Smith <barry@corazon.com>
Date: April 8, 1998 9:50:24 AM PDT
To: FAAOAI
Subject: **Wrong door examined in TWA 800**

Dear Mr. Streeter, 8 Apr 98

Please may I have a meeting with aviation safety officials to present my findings? Please may I have discussion with you or your representative to display evidence. Please may I not be ignored and refused meetings with NTSB? Please may the facts, data, and evidence from my years of research have a change to be seen and heard by aviation safety officials?

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and they are not in the wreckage reconstruction in the hangar. The forward door is only 20% recovered and sill and latches are missing.

But in the terminal field (that includes the wings and rest of headless 747 fuselage and aft door) was found on page 14 of 71 of wreckage database, "C122, RF45A 40 39 47.00 latitude, 72 37 27. 90 longitude, aft cargo door- lower sill latches & locks."

So in the hangar jumbled with wreckage days after crash, as wreckage was brought in, Bob Brennerman of FAA looked at bottom latches of a cargo door and saw them locked and hastily said forward door all latched and locked. He got the two identical doors mixed up. He never corrected his error.

The forward door reconstruction shows all the pieces of those items found in database. Most of the forward door is missing in wreckage reconstruction and most of forward door is missing in database. The sill and latches and locks are missing in database and reconstruction. 80% of forward door is still out there someplace.

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Very Respectfully,

John Barry Smith
551 Country Club Drive,
Carmel Valley, CA 93924
408 659 3552
barry@corazon.com
www.corazon.com

From: John Barry Smith <barry@corazon.com>
Date: April 9, 1998 10:14:21 AM PDT
To: FAAOAI
Subject: Wrong door/what to do?

Mr. Streeter, 9 Apr 98

The wrong door error is serious. It opens up the whole reexamination of the forward cargo door. I don't know how best

to proceed. The enclosed correspondence from NTSB to reporter shows how petulantly they treat me.

I trust you as an aircraft accident investigator who puts solving plane crashes first and all else second. So I'm enclosing recent correspondence. Bob Breneman and Neil Schalekamp of FAA are deeply involved and must be informed. They told me to buzz off, they won't tell you that.

The only two officials who actually examined the sill and latches and locks were Bob Breneman of FAA and Ron Schleede of NTSB. Everyone else relied on their error of aft door checked, not forward. The whole time I'm saying check the latches of the forward door and was reassured they were all latched and locked, nobody checked.

Where to proceed from here? I don't know, but I'm here to answer any questions. So far, I have been told a lot and when I refute, I am never replied to. I am never asked questions. That is not a good sign for an investigation.

Regards,
Barry Smith

Emails below:

Dear Jonathan,

First of all, Senator McCain did not request that the NTSB meet with Mr. Smith.

Attached is letter from Senator McCain to me which I interpret as the senator asking NTSB to meet with me to relate my

concerns about the forward cargo door. That conclusion is bland, conservative, and entirely reasonable based on the wording.

The Senator asked that the Board respond to Mr. Smith's concerns, which we have done numerous times and in great detail.

Absolutely not true and close to a lie. They have never ever responded to my concerns. They have told me generalities a few times. When rebutted with facts, they never reply.

Examination of the lower lobe forward cargo door showed that all eight of the door latching cams remain attached (along with pieces of the door itself) to the pins along the lower door sill.

Now we know they looked at the wrong door. They have never examined the forward door latches because they have not been recovered to examine.

You are free to request copies of the correspondence between Mr. Smith and the Safety Board, a prudent step, I believe, before publishing such an article.

Please do so. That is a good idea. That will refute the statement above of detailed and numerous responses to me. The public record is very important.

Your story was all facts, Jonathan. Why are they so upset? Why

are they annoyed?

Although Mr. Smith does display some knowledge of the Boeing 747, he has a basic misunderstanding of the facts. For example, Mr. Smith claims that there are 10 latches on the cargo door and that the Board only discusses eight in the above mentioned report. While a superficial description of the door might imply that there are 10 latches, Mr. Smith is, in fact, incorrect in implying that they all hold the door onto the fuselage. The eight at the bottom of the door, which were discussed in the report actually hold the door closed - the other two, one on each side of the door are merely "alignment latches" and do not hold the door closed.

Ah, some meat. Let's use basic physics here, Jonathan, ten latches and a hinge hold the door in. One long hinge on top, and eight latches below. Each eight foot side has one latch. Now, do the molecules of internal air pressure at 3.5 PSI know the difference between top, bottom, or sides when they try to decompress? It's 38115 pounds of pressure on the inside of that door and it's equal on all inches, not just the bottom.

There is nothing superficial about my discussion and research into forward cargo doors on high time 747s.

And of course, there is that petal shaped rupture bulge at the aft midspan latch of forward door of TWA 800 and the aft midspan latch rupture of the forward door of UAL 811, as shown in NTSB AAR 92/02 to support circumstantial evidence.

If you have further questions or concerns, please feel free to contact us

Please do, Jonathan. I suggest pointing out to them that Exhibit 15C, which she quotes, is impossible because the forward sill and latches were not recovered but the aft cargo door sill and latches were recovered. The aft sill was found with other aft cargo door skin in the terminal debris field which is where the wings and rest of fuselage were found, far away from the red zone and nose debris field where the forward cargo door hinge and a few pieces of top forward door skin were found, but no latches and locks and sill.

Bob Breneman of FAA looked at the wrong door.

They can't run away from that one.

By the way, they admitted for the first time the cargo door has ten latches. Very important.

I'm getting emotional here when they say I have a basic misunderstanding of the facts and they got the wrong door.

You are on to something here, Jonathan, and it all leads back to PA 103.

When you contact them again, as they encourage you to do, I

suggest the following:

Ask for the correspondence between NTSB and me, as they suggest, in order to buttress your next story.

Point out the wrong door error as shown in NTSB wreckage database, on corazon.com website, reference below.

Point out NTSB Exhibit 8A which concludes no fire, uncontainments or foreign object damage to engines, when raw data shows there was fire, FOD, and uncontainment: reference below.

Point out that eight of ten latches checked is not sufficient to rule out midspan latch rupture regardless of which door had the eight latches checked. Reference basic physics of pressure inside a balloon.

Point out that NTSB AAR 92/02 UAL 811 was another high time Boeing 747 that had fuselage rupture in flight that left a sudden loud sound on the CVR and an abrupt power cut to the FDR, just like TWA 800 and others, PA 103 and AI 182, all grouped in Chart 12 of NTSB exhibit 12B.

Point out NTSB safety brief recommended to FAA to check out wiring for cargo doors in Boeing 747s, wiring which NTSB now say is suspect. Reference below.

Let us see how petulant they are when you ask for facts using their own documents to show contradictions. They impugn your reporter abilities and my research abilities. That's a mistake on their part.

I'm here to answer any questions, Jonathan. This is a quick reply and I'm still upset at personal insults. The good news is they have not ignored you and have opened the door to you, invited really.

As in:> please feel free to contact

us,

We will, thank you very much.

Regards,

Barry

My phone is 408 659 3552
551 Country Club Drive
Carmel Valley CA 93924

By the way, most of this rebutting evidence is coming from their own exhibits which they tried to suppress, 4A, 8A, and wreckage database. Why try to suppress public documents?

Discussion of wrong door:

Bob Breneman, the FAA structural engineer who made the examination and concluded forward door all latched and locked, could not have examined the forward door latches and locks because they were not recovered. They are not in the database and they are not in the wreckage reconstruction in the hangar. The forward door is only 20% recovered and sill and latches are missing.

But in the terminal field (that includes the wings and rest of headless 747 fuselage and aft door) was found on page 14 of 71 of wreckage database, "C122, RF45A 40 39 47.00 latitude, 72 37 27. 90 longitude, aft cargo door- lower sill latches & locks."

Exhibit 15 C "Examination of the lower lobe forward cargo door showed that all eight of the door latching cams remain attached (along with pieces of the door itself) to the pins along the lower door sill."

So in the hangar jumbled with wreckage days after crash, as wreckage was brought in, Bob Brenerman of FAA looked at bottom latches of a cargo door and saw them locked and hastily said forward door all latched and locked. He got the two identical doors mixed up. He never corrected his error.

The forward door reconstruction shows all the pieces of those items found in database. Most of the forward door is missing in wreckage reconstruction and most of forward door is missing in database. The sill and latches and locks are missing in database and reconstruction. 80% of forward door is still out there someplace.

NTSB Docket SA 516, Exhibit 8A, Powerplants Group
Chairman's Factual Report,

Page 2, paragraph 2, "After the engines were recovered, they were transported to the former Grumman facility at Calverton, New York, for disassembly. The disassembly of the engines commenced on August 12, 1996, in the presence of the Powerplants Group. The disassembly was completed on August 16, 1996."

Analysis by John Barry Smith>1. Wrong to send to empty hangar, right to send to engine teardown facility. Wrong thing done in haste to examine engines at Calverton. 2. Five days for four engines? One day and a bit per engine is incredibly fast to disassemble one of the most complex and precise machines on the planet. It's not a bicycle. Haste is evident.

Page 2, paragraph 3, "The disassembly of the engines consisted of removing the cowling, external components, fan, and low

pressure compressor (LPC) to expose the high pressure compressor (HPC), diffuser, combustor, high pressure turbine (HPT), low pressure turbine (LPT), and turbine exhaust cases. Engine No. 3 was disassembled further to remove and partially disassemble the HPC. The disassembly of the engines did not show any indications that any of the engines had sustained any uncontainments, case ruptures, fires, or penetrations."

Analysis by John Barry Smith>Why was only engine 3 disassembled further? What evidence was seen in No. 3 to warrant further investigation? Why were not the other three engines disassembled further? The four most important jet engines in an airplane crash in history were not given comprehensive teardowns. The conclusion statement of no uncontainments is contradicted by other exhibit which states 'stator blade' was found in right horizontal stabilizer. The conclusion statement of no fires in any engines is contradicted later in same report with raw data indicating sooting in engine number 3. The conclusion statement of no penetrations of any engine is contradicted by raw data in same report indicating soft body impacts on blades. The conclusion statement of everything normal in the engines is contradicted by photograph of TWA 800 engine retrieval showing forward stator stage missing, and irregular FDR EPR readings.

Pages 16 through 22 discuss fuel samples, mainly irrelevant in discussion about engines and teardown results. 33% of engine report is not about engines.

Page 11, paragraph 3, discussing results of engine 3 disassembly, "Of the 46 fan blades in the fan rotor, 21 blades with complete or partial airfoils and 6 root sections were recovered. All of the fan blades had sooting on the convex airfoil surfaces. Most of the

full length airfoils were bent rearward and the tips outboard of the outer midspan shroud were bent forward slightly. About half of the fan blades had impact damage to the leading and trailing edges. Almost all of the impact damage to the airfoils could be matched to contact with the midspan shroud on an adjacent blade. One full length blade had four soft body impacts along the leading edge and a partial airfoil had a soft body impact, which had some streaking extending rearward. "

Analysis by John Barry Smith>Less than half of complete fan blades in the fan rotor were recovered, not the 95% recovered figure given by Chairman Hall about TWA 800 recovered wreckage. Only 58% of the fan blades were recovered so it is very possible 'stator blade' found in right horizontal stabilizer was from engine number three. All had soot. Soot means fire. Only engine number three had any sooting inside engine. One full blade and one partial blade had 'soft body impacts'. There is nothing normally soft inside a jet engine. Soft body impact means foreign object damage. FOD means fire. Fire means soot. Missing blades in engine and one found directly aft in right horizontal stabilizer means uncontainment. Uncontainment means engine not intact at water impact but inflight. Analysis above on raw data gives conclusions engine number three alone had foreign object damage in flight, had internal fire, and had partial disintegration. Engine 3 was the only engine to give such evidence. Engine number three is next to forward cargo hold, an area known to give FOD to engine 3 when cargo door inadvertently opens in flight.

NTSB Safety Recommendation Brief

Data_Source: U.S. NTSB Safety Recommendations

Rprt_Nbr: A-91-83

Last Updated: 03-13-95

[O] On June 13, 1991, United Airlines (UAL) maintenance personnel were unable to electrically open the aft cargo door on a Boeing 747-222B, N152UA, at John F. Kennedy Airport (JFK), Jamaica, New York. The airplane was one of two used exclusively on nonstop flights between Narita, Japan, and JFK. This particular airplane had accumulated 19,053 hours and 1,547 cycles at the time of the occurrence.

Recommendations:

A-91-83. Issue an Airworthiness Directive applicable to all Boeing 747 airplanes with a flexible conduit protecting the wiring bundle between the fuselage and aft cargo door to require an expedited inspection of:

(1) the wiring bundle in the area normally covered by the conduit for the presence of damaged insulation (using either an electrical test method or visual examination);

(2) the conduit support bracket and attached standoff pin on the upper arm of the forward lift actuator mechanism;

(3) the flexible conduit for the presence of cracking in the convoluted innercore.

Wires with damaged insulation should be repaired before further service. Damage to the flexible conduit, conduit support bracket and standoff pin should result in an immediate replacement of the conduit as well as the damaged parts. The inspection should be repeated at an appropriate cyclic interval.

Dear Jonathan, let me use the emotion of the moment to reply again. I've just sent the following to Ron Schleede of NTSB, investigator on TWA 800. Note he and Mr. Breneman are the only two guys that admit examining a cargo door, all the rest relied on those two guys.

Also, on rereading your email, you refer to 'proposed story'. I thought they replied to your earlier story. I have not seen your 'proposed story' but I have faith it is the same high quality as all your stories I have read over the past two years.

Also, to point out again, the aft midspan latch of the forward cargo door of PA 103, in AAIB 2/90 shows fracture, just like UAL 811. It will all come back to PA 103, and then to AI 182.

Bad wiring is the culprit, cargo door is innocent bystander. It did 103, not a bomb.

This wrong door for NTSB and FAA is a serious error and will unlock the whole wiring/cargo door explanation. Now they can't say the forward door was all latched and all locked, so they have to check it out. With queries from you to assist their motivation. Ha!

Regards,
Barry

SCHLEDR@ntsb.gov

Dear Mr. Schleede, big big problem. 9 Apr 98

8/11/96, I said which door are you talking about.

It turns out, almost two years later, you were talking about the wrong door.

Bob Breneman, the FAA structural engineer who made the examination and concluded forward door all latched and locked, could not have examined the forward door latches and locks because they were not recovered. They are not in the database and they are not in the wreckage reconstruction in the hangar. The forward door is only 20% recovered and sill and latches are missing.

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Exhibit 15 C "Examination of the lower lobe forward cargo door showed that all eight of the door latching cams remain attached (along with pieces of the door itself) to the pins along the lower door sill."

So in the hangar jumbled with wreckage days after crash, as wreckage was brought in, Bob Breneman of FAA looked at bottom latches of a cargo door and saw them locked and hastily said forward door all latched and locked. He got the two identical doors mixed up. He never corrected his error.

The forward door reconstruction shows all the pieces of those items found in database. Most of the forward door is missing in wreckage reconstruction and most of forward door is missing in database. The sill and latches and locks are missing in database and reconstruction. 80% of forward door is still out there someplace.

What to do about it? Please pass along to Mr. Dickinson, his name is on Exhibit 15C which talks about the wrong door. Dr. Loeb would be interested to know about the wrong door, too. And for sure, Chairman Hall. I've already told Mr. Jim Wildey, author of 15C.

I suggest starting all over again about the forward cargo door starting with the wreckage reconstruction and petal bulge at aft midspan latch, red paint smears, and outward peeled skin, all like UAL 811, NTSB AAR 92/02, which we know by heart, especially the bare chafed wiring shorting on door motor to unlatch position. Bad wiring on UAL 811 and now NTSB says bad wiring on TWA 800, we think alike.

Cheers,
John Barry Smith

From: Schleede Ron <SCHLEDR@ntsb.gov>
To: barry <barry@corazon.com>
Subject: RE: TWA crash cause
Date: Sun, 11 Aug 1996 11:39:00 -0400
Encoding: 13 TEXT
Status:

I have examined the cargo door from twa 800--it is locked and latched!

From: barry
To: SCHLEDR

Subject: TWA crash cause
Date: Tuesday, 30 July, 1996 01:48

<http://www.corazon.com/TWA800PA103UA811.html> is my website for cargo door crash theory.

To: SCHLEDR@ntsb.gov
From: barry@corazon.com
Subject: Which cargo door and cam positions
Cc:
Bcc:
X-Attachments:

Mr. Schleede, thank you for your prompt response.
I have examined the cargo door from twa 800--it is locked and latched!

There are three cargo doors on TWA 800, which one are you talking about.

The front cargo door is reported to be in pieces, your sentence above implies one piece which would means other than front cargo door checked.

The lock sectors are locked, but the cams are unlocked. You do not mention cams.

What are the positions of the cam locks of the forward cargo door? John Barry Smith

From: Schleede Ron <SCHLEDR@ntsb.gov>
To: barry <barry@corazon.com>
Subject: RE: TWA crash cause ATTN Robert Francis
Date: Mon, 29 Jul 1996 15:24:00 -0400
Encoding: 17 TEXT

Status:

Be assured that we are checking that. I was the investigator in charge of the UAL flight 811 case and fully knowledgeable in its causes and factors.

Thanks for the interest.

From: barry

To: schledr

Subject: TWA crash cause ATTN Robert Francis

Date: Sunday, July 28, 1996 9:58AM

Mr. Francis. The reasonable cause of the TWA crash is the inadvertent opening of the forward cargo door. That is the mechanical cause that must be ruled out. Compare to United Flight 811 of Feb 1989.

From: John Barry Smith <barry@corazon.com>

Date: April 9, 1998 7:19:32 PM PDT

To: FAAOAI

Subject: Returned email about TWA 800

Dear Mr. Streeter, I sent the below and it got returned. I don't know if it got through. It may be too big, so I'll break it into two parts. This is part I.

Cheers,

Barry Smith

Date: Thu, 9 Apr 1998 14:37:20 -0700

From: Mail Delivery Subsystem <MAILER-DAEMON>

Subject: Warning: could not send message for past 4 hours

To: <barry@corazon.com>

MIME-Version: 1.0

Auto-Submitted: auto-generated (warning-timeout)

```
*****  
**      THIS IS A WARNING MESSAGE ONLY      **  
**      YOU DO NOT NEED TO RESEND YOUR MESSAGE      **  
**  
*****
```

The original message was received at Thu, 9 Apr 1998 10:14:30 -0700

from pm8-150.mry.redshift.com [207.204.196.150]

----- The following addresses had transient non-fatal errors -----
<Lyle.Streeter@faa.dot.gov>

----- Transcript of session follows -----
<Lyle.Streeter@faa.dot.gov>... Deferred: Connection refused by dotms2.dot.gov.

Warning: message still undelivered after 4 hours
Will keep trying until message is 5 days old

Reporting-MTA: dns; mail.redshift.com
Arrival-Date: Thu, 9 Apr 1998 10:14:30 -0700

Final-Recipient: RFC822; Lyle.Streeter@faa.dot.gov
Action: delayed

Status: 4.4.1

Remote-MTA: dns; dotms2.dot.gov

Last-Attempt-Date: Thu, 9 Apr 1998 14:37:20 -0700

Will-Retry-Until: Tue, 14 Apr 1998 10:14:30 -0700

Return-Path: barry@corazon.com

Received: from [207.204.196.150] (pm8-150.mry.redshift.com [207.204.196.150]) by mail.redshift.com (8.8.8/8.8.8) with ESMTP id KAA08957 for <Lyle.Streeter@faa.dot.gov>; Thu, 9 Apr 1998 10:14:30 -0700

Date: Thu, 9 Apr 1998 10:14:30 -0700

Message-Id: <l03020903b1524d65972c@[207.204.196.150]>

Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

To: Lyle.Streeter@faa.dot.gov

From: John Barry Smith <barry@corazon.com>

Subject: Wrong door/what to do?

Mr. Streeter, 9 Apr 98

The wrong door error is serious. It opens up the whole reexamination of the forward cargo door. I don't know how best to proceed. The enclosed correspondence from NTSB to reporter shows how petulantly the treat me.

I trust you as an aircraft accident investigator who puts solving plane crashes first and all else second. So I'm enclosing recent correspondence.

Bob Breneman and Neil Schalekamp of FAA are deeply involved and must be

informed. They told me to buzz off, they won't tell you that.

The only two officials who actually examined the sill and latches and locks were Bob Breneman of FAA and Ron Schleede of NTSB. Everyone else relied on their error of aft door checked, not forward. The whole time I'm saying check the latches of the forward door and was reassured they were all latched and locked, nobody checked.

Where to proceed from here? I don't know, but I'm here to answer any questions. So far, I have been told a lot and when I refute, I am never replied to. I am never asked questions. That is not a good sign for an investigation.

Regards,
Barry Smith

Emails below:

Dear Jonathan,

First of all, Senator McCain did not request that the NTSB meet with Mr. Smith.

Attached is letter from Senator McCain to me which I interpret as the senator asking NTSB to meet with me to relate my concerns

about the forward cargo door. That conclusion is bland, conservative, and entirely reasonable based on the wording.

The Senator asked that the Board respond to Mr. Smith's concerns, which we have done numerous times and in great detail.

Absolutely not true and close to a lie. They have never ever responded to my concerns. They have told me generalities a few times. When rebutted with facts, they never reply.

Examination of the lower lobe forward cargo door showed that all eight of the door latching cams remain attached (along with pieces of the door itself) to the pins along the lower door sill.

Now we know they looked at the wrong door. They have never examined the forward door latches because they have not been recovered to examine.

You are free to request copies of the correspondence between Mr. Smith and the Safety Board, a prudent step, I believe, before publishing such an article.

Please do so. That is a good idea. That will refute the statement above of detailed and numerous responses to me. The public record is very important.

Your story was all facts, Jonathan. Why are they so upset? Why are they annoyed?

Although Mr. Smith does display some knowledge of the Boeing 747, he has a basic misunderstanding of the facts. For example, Mr. Smith claims that there are 10 latches on the cargo door and that the Board only discusses eight in the above mentioned report. While a superficial description of the door might imply that there are 10 latches, Mr. Smith is, in fact, incorrect in implying that they all hold the door onto the fuselage. The eight at the bottom of the door, which were discussed in the report actually hold the door closed - the other two, one on each side of the door are merely "alignment latches" and do not hold the door closed.

Ah, some meat. Let's use basic physics here, Jonathan, ten latches and a hinge hold the door in. One long hinge on top, and eight latches below.

Each eight foot side has one latch. Now, do the molecules of internal air pressure at 3.5 PSI know the difference between top, bottom, or sides when they try to decompress? It's 38115 pounds of pressure on the inside of that door and it's equal on all inches, not just the bottom.

There is nothing superficial about my discussion and research into forward cargo doors on high time 747s.

And of course, there is that petal shaped rupture bulge at the aft midspan latch of forward door of TWA 800 and the aft midspan latch rupture of the forward door of UAL 811, as shown in NTSB AAR 92/02 to support circumstantial evidence.

If you have further questions or concerns, please feel free to contact us

Please do, Jonathan. I suggest pointing out to them that Exhibit 15C, which she quotes, is impossible because the forward sill and latches were not recovered but the aft cargo door sill and latches were recovered. The aft sill was found with other aft cargo door skin in the terminal debris field which is where the wings and rest of fuselage were found, far

away from the red zone and nose debris field where the forward cargo door hinge and a few pieces of top forward door skin were found, but no latches and locks and sill.

Bob Breneman of FAA looked at the wrong door.

They can't run away from that one.

By the way, they admitted for the first time the cargo door has ten latches. Very important.

I'm getting emotional here when they say I have a basic misunderstanding of the facts and they got the wrong door.

You are on to something here, Jonathan, and it all leads back to PA 103.

When you contact them again, as they encourage you to do, I suggest the following:

Ask for the correspondence between NTSB and me, as they suggest, in order to buttress your next story.

Point out the wrong door error as shown in NTSB wreckage database, on

corazon.com website, reference below.

Point out NTSB Exhibit 8A which concludes no fire, uncontainments or

foreign object damage to engines, when raw data shows there was fire, FOD, and uncontainment: reference below. Point out that eight of ten latches checked is not sufficient to rule out midspan latch rupture regardless of which door had the eight latches checked. Reference basic physics of pressure inside a balloon. Point out that NTSB AAR 92/02 UAL 811 was another high time Boeing 747 that had fuselage rupture in flight that left a sudden loud sound on the CVR and an abrupt power cut to the FDR, just like TWA 800 and others, PA 103 and AI 182, all grouped in Chart 12 of NTSB exhibit 12B. Point out NTSB safety brief recommended to FAA to check out wiring for cargo doors in Boeing 747s, wiring which NTSB now say is suspect. Reference below.

Let us see how petulant they are when you ask for facts using their own documents to show contradictions. They impugn your reporter abilities and my research abilities. That's a mistake on their part.

I'm here to answer any questions, Jonathan. This is a quick reply and I'm still upset at personal insults. The good news is they have not ignored you and have opened the door to you, invited really. As in:> please feel free

to contact
us,

We will, thank you very much.

Regards,

Barry

My phone is 408 659 3552
551 Country Club Drive
Carmel Valley CA 93924

By the way, most of this rebutting evidence is coming from their own exhibits which they tried to suppress, 4A, 8A, and wreckage database. Why try to suppress public documents?

Discussion of wrong door:

Bob Breneman, the FAA structural engineer who made the examination and concluded forward door all latched and locked, could not have examined the forward door latches and locks because they were not recovered. They are not in the database and they are not in the wreckage reconstruction in the hangar. The forward door is only 20% recovered and sill and latches are missing.

But in the terminal field (that includes the wings and rest of

headless 747

fuselage and aft door) was found on page 14 of 71 of wreckage database,

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Exhibit 15 C "Examination of the lower lobe forward cargo door showed that

all eight of the door latching cams remain attached (along with pieces of the door itself) to the pins along the lower door sill."

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brought in, Bob Brennerman of FAA looked at bottom latches of a cargo door

and saw them locked and hastily said forward door all latched and locked.

He got the two identical doors mixed up. He never corrected his error.

The forward door reconstruction shows all the pieces of those items found

in database. Most of the forward door is missing in wreckage reconstruction

and most of forward door is missing in database. The sill and latches and

locks are missing in database and reconstruction. 80% of forward door is

still out there someplace.

From: John Barry Smith <barry@corazon.com>

Date: April 9, 1998 7:19:41 PM PDT

To: FAAOAI

Subject: Part II TWA 800 message

Dear Mr. Streeter, I sent the below and it got returned. I don't know if it got through. It may be too big, so I'll break it into two parts. This is part II.

NTSB Docket SA 516, Exhibit 8A, Powerplants Group
Chairman's Factual Report,

Page 2, paragraph 2, "After the engines were recovered, they were transported to the former Grumman facility at Calverton, New York, for disassembly. The disassembly of the engines commenced on August 12, 1996, in the presence of the Powerplants Group. The disassembly was completed on August 16, 1996."

Analysis by John Barry Smith>1. Wrong to send to empty hangar, right to send to engine teardown facility. Wrong thing done in haste to examine engines at Calverton. 2. Five days for four engines? One day and a bit per engine is incredibly fast to disassemble one of the most complex and precise machines on the planet. It's not a bicycle. Haste is evident.

Page 2, paragraph 3, "The disassembly of the engines consisted of removing

the cowling, external components, fan, and low pressure compressor (LPC) to expose the high pressure compressor (HPC), diffuser, combustor, high pressure turbine (HPT), low pressure turbine (LPT), and turbine exhaust cases. Engine No. 3 was disassembled further to remove and partially disassemble the HPC. The disassembly of the engines did not show any indications that any of the engines had sustained any uncontainments, case ruptures, fires, or penetrations."

Analysis by John Barry Smith>Why was only engine 3 disassembled further? What evidence was seen in No. 3 to warrant further investigation? Why were not the other three engines disassembled further? The four most important jet engines in an airplane crash in history were not given comprehensive teardowns. The conclusion statement of no uncontainments is contradicted by other exhibit which states 'stator blade' was found in right horizontal stabilizer. The conclusion statement of no fires in any engines is contradicted later in same report with raw data indicating sooting in engine number 3. The conclusion statement of no penetrations of any engine is contradicted by raw data in same report indicating soft body impacts on

blades. The conclusion statement of everything normal in the engines is contradicted by photograph of TWA 800 engine retrieval showing forward stator stage missing, and irregular FDR EPR readings.

Pages 16 through 22 discuss fuel samples, mainly irrelevant in discussion about engines and teardown results. 33% of engine report is not about engines.

Page 11, paragraph 3, discussing results of engine 3 disassembly, "Of the 46 fan blades in the fan rotor, 21 blades with complete or partial airfoils and 6 root sections were recovered. All of the fan blades had sooting on the convex airfoil surfaces. Most of the full length airfoils were bent rearward and the tips outboard of the outer midspan shroud were bent forward slightly. About half of the fan blades had impact damage to the leading and trailing edges. Almost all of the impact damage to the airfoils could be matched to contact with the midspan shroud on an adjacent blade. One full length blade had four soft body impacts along the leading edge and a partial airfoil had a soft body impact, which had some streaking extending rearward. "

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NTSB Safety Recommendation Brief

Data_Source: U.S. NTSB Safety Recommendations

Rprt_Nbr: A-91-83

Last Updated: 03-13-95

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Cheers,
John Barry Smith

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To: barry <barry@corazon.com>
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Date: Sun, 11 Aug 1996 11:39:00 -0400
Encoding: 13 TEXT
Status:

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Subject: TWA crash cause
Date: Tuesday, 30 July, 1996 01:48

<http://www.corazon.com/TWA800PA103UA811.html> is my website for cargo door crash theory.

To: SCHLEDR@ntsb.gov
From: barry@corazon.com
Subject: Which cargo door and cam positions
Cc:
Bcc:
X-Attachments:

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What are the positions of the cam locks of the forward cargo door? John

Barry Smith

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Subject: RE: TWA crash cause ATTN Robert Francis

Date: Mon, 29 Jul 1996 15:24:00 -0400

Encoding: 17 TEXT

Status:

Be assured that we are checking that. I was the investigator in charge of the UAL flight 811 case and fully knowledgeable in its causes and factors.

Thanks for the interest.

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To: schledr

Subject: TWA crash cause ATTN Robert Francis

Date: Sunday, July 28, 1996 9:58AM

Mr. Francis. The reasonable cause of the TWA crash is the inadvertent opening of the forward cargo door. That is the mechanical cause that must be ruled out. Compare to United Flight 811 of Feb 1989.

barry@corazon.com
<http://www.corazon.com/>

From: John Barry Smith <barry@corazon.com>
Date: April 10, 1998 9:18:30 AM PDT
To: FAAOAI
Subject: Important message can't get through

Dear Mr. Streeter, 10 Apr 98

I've sent the same message three times and each time it gets returned from your end. Is everything all right?

Please confirm this short message and if you have in fact received the other ones, (one long one and the same message broken into parts).

I shall have to revert to snail mail. It's so frustrating.

<Lyle.Streeter@faa.dot.gov>... Deferred: Connection refused by dotms2.dot.gov.

<<< 421 Service not available, closing transmission channel
<Lyle.Streeter@faa.dot.gov>... Deferred: Connection reset by dotms2.dot.gov.

Do you have alternate email address?

Regards,
Barry Smith

Date: Thu, 9 Apr 1998 23:26:41 -0700

From: Mail Delivery Subsystem <MAILER-DAEMON>
Subject: Warning: could not send message for past 4 hours
To: <barry@corazon.com>
MIME-Version: 1.0
Auto-Submitted: auto-generated (warning-timeout)

** THIS IS A WARNING MESSAGE ONLY **
** YOU DO NOT NEED TO RESEND YOUR MESSAGE **
**

The original message was received at Thu, 9 Apr 1998 19:19:37
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Warning: message still undelivered after 4 hours
Will keep trying until message is 5 days old

Reporting-MTA: dns; mail.redshift.com
Arrival-Date: Thu, 9 Apr 1998 19:19:37 -0700

Final-Recipient: RFC822; Lyle.Streeter@faa.dot.gov
Action: delayed
Status: 4.5.0

Remote-MTA: dns; dotms2.dot.gov
Diagnostic-Code: smtp;
Last-Attempt-Date: Thu, 9 Apr 1998 23:26:41 -0700
Will-Retry-Until: Tue, 14 Apr 1998 19:19:37 -0700

Return-Path: barry@corazon.com
Received: from [207.204.196.171] (pm8-166.mry.redshift.com [207.204.196.166]) by mail.redshift.com (8.8.8/8.8.8) with ESMTP id TAA13760 for <Lyle.Streeter@faa.dot.gov>; Thu, 9 Apr 1998 19:19:37 -0700
Date: Thu, 9 Apr 1998 19:19:37 -0700
Message-Id: <l03020902b152cee3e978@[207.204.196.171]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
To: Lyle.Streeter@faa.dot.gov
From: John Barry Smith <barry@corazon.com>
Subject: Returned email about TWA 800

Dear Mr. Streeter, I sent the below and it got returned. I don't know if it got through. It may be too big, so I'll break it into two parts. This is part I.

Cheers,
Barry Smith

Date: Thu, 9 Apr 1998 14:37:20 -0700
From: Mail Delivery Subsystem <MAILER-DAEMON>
Subject: Warning: could not send message for past 4 hours
To: <barry@corazon.com>
MIME-Version: 1.0
Auto-Submitted: auto-generated (warning-timeout)

** THIS IS A WARNING MESSAGE ONLY **
** YOU DO NOT NEED TO RESEND YOUR MESSAGE **

The original message was received at Thu, 9 Apr 1998 10:14:30
-0700
from pm8-150.mry.redshift.com [207.204.196.150]

----- The following addresses had transient non-fatal errors -----
<Lyle.Streeter@faa.dot.gov>

----- Transcript of session follows -----
<Lyle.Streeter@faa.dot.gov>... Deferred: Connection refused by
dotms2.dot.gov.
Warning: message still undelivered after 4 hours
Will keep trying until message is 5 days old

Reporting-MTA: dns; mail.redshift.com
Arrival-Date: Thu, 9 Apr 1998 10:14:30 -0700

Final-Recipient: RFC822; Lyle.Streeter@faa.dot.gov
Action: delayed
Status: 4.4.1
Remote-MTA: dns; dotms2.dot.gov
Last-Attempt-Date: Thu, 9 Apr 1998 14:37:20 -0700
Will-Retry-Until: Tue, 14 Apr 1998 10:14:30 -0700

Return-Path: barry@corazon.com
Received: from [207.204.196.150] (pm8-150.mry.redshift.com
[207.204.196.150]) by mail.redshift.com (8.8.8/8.8.8) with

ESMTP id

KAA08957 for <Lyle.Streeter@faa.dot.gov>; Thu, 9 Apr 1998
10:14:30 -0700

Date: Thu, 9 Apr 1998 10:14:30 -0700

Message-Id: <l03020903b1524d65972c@[207.204.196.150]>

Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

To: Lyle.Streeter@faa.dot.gov

From: John Barry Smith <barry@corazon.com>

Subject: Wrong door/what to do?

Mr. Streeter, 9 Apr 98

The wrong door error is serious. It opens up the whole reexamination of the forward cargo door. I don't know how best to proceed. The enclosed correspondence from NTSB to reporter shows how petulantly they treat me.

I trust you as an aircraft accident investigator who puts solving plane crashes first and all else second. So I'm enclosing recent correspondence.

Bob Breneman and Neil Schalekamp of FAA are deeply involved and must be informed. They told me to buzz off, they won't tell you that.

The only two officials who actually examined the sill and latches and locks were Bob Breneman of FAA and Ron Schleede of NTSB. Everyone else relied on their error of aft door checked, not forward. The whole time I'm

saying
check the latches of the forward door and was reassured they
were all
latched and locked, nobody checked.

Where to proceed from here? I don't know, but I'm here to
answer any
questions. So far, I have been told a lot and when I refute, I am
never
replied to. I am never asked questions. That is not a good sign for
an
investigation.

Regards,
Barry Smith

From: John Barry Smith <barry@corazon.com>
Date: April 13, 1998 10:50:08 AM PDT
To: FAAOAI
Subject: **TWA 800 cargo door mixup**

Dear Mr. Streeter, the below is for you and could you forward the
below to Mr. McSweeny, Doug Kirkpatrick, Ron Wojnar, James
Devany, Darrell Pederson, Neil Schalekamp, Bob Breneman?

Regards,

Barry Smith

Sam Farr
Member of Congress
17th District, California

House of Representatives
Congress of the United States
Washington, DC

John McCain III
Member of Congress
Chairman, Committee on Commerce, Science, and
Transportation
United States Senate
Washington, DC

James Hall
Chairman,
National Transportation Safety Board

Robert Francis II
Vice Chairman
National Transportation Safety Board

Bernard Loeb,
Director of Aviation Safety
National Transportation Safety Board

Thomas E. Haueter
Chief, Major Investigations Division
National Transportation Safety Board

John B. Drake
Division Chief
Aviation Engineering Division
National Transportation Safety Board
Washington DC 20594

Al Dickinson,
Lead Investigator, TWA 800
National Transportation Safety Board

Ron Schleede,
Investigator, TWA 800
National Transportation Safety Board

James F. Wildey II
National Resource Specialist
National Transportation Safety Board
490 L'Enfant Plaza East, SW.
Washington, DC 20594

Peter Goelz
Director, Office of Government, Public, and Family Affairs
National Transportation Safety Board

Shelly Hazle,
Office of Government, Public, and Family Affairs
National Transportation Safety Board

Thomas McSweeney
Director, Aircraft Certification Service
FAA National Headquarters

Lyle Streeter
FAA AAI
Aircraft Accident Investigator
FAA National Headquarters
800 Independence Avenue, S.W
Building FOB 10A, Room 838,
Washington D.C 20591

Doug Kirkpatrick
Aircraft Certification Service
FAA National Headquarters

Ron Wojnar,
Manager
Federal Aviation Administration
Transport Airplane Directorate

James Devany
Acting Manager
Federal Aviation Administration
Transport Airplane Directorate

Darrell Pederson,
Assistant Manager
Federal Aviation Administration
Transport Airplane Directorate,

Neil Schalekamp
Manager, Propulsion & Mechanical Systems and Cabin Safety
Branch
Transport Standards Staff
Transport Airplane Directorate, ANM-100
1601 Lind Ave. S.W.
Renton, WA 98055-4056

Bob Breneman,
Aerospace Engineer,
Federal Aviation Administration
Transport Airplane Directorate, ANM-100
1601 Lind Ave. S.W.

Renton, WA 98055-4056

Dear Mr. Streeter,

13 Apr 98

This letter is to confirm and explain the significance of the cargo door sill mixup for TWA 800.

The aft cargo door sill, latches and locks have been recovered. The forward door sill, latches and locks have not. The aft door sill, latches and locks are in the wreckage database as found on page 14 of 71, "C122, RF45A 40 39 47.00 latitude, 72 37 27. 90 longitude, aft cargo door- lower sill latches & locks."

The aft sill was found with companion aft cargo door skin in the terminal debris field as expected which is where the wings and rest of fuselage were found, far away from the nose debris field where the forward cargo door hinge and a few pieces of top forward door skin were found as expected, but no forward door latches and locks or sill found.

To repeat: The aft sill was found where it was expected, with other aft door skin in the expected location, wing and aft fuselage debris field. The forward sill was not found where it was expected, with other forward door skin in the expected location, the nose field; it was not found at all.

When confronted with a cargo door sill, latches and locks in a crowded, noisy hangar deck floor with pieces of wreckage all around and time pressure for a conclusion, Mr. Breneman

deduced the recovered door sill, latches and locks were from the forward door, not the aft. He was wrong. He did not check later to see what debris field it was found in. That would have confirmed it was the aft door sill as it was recovered from the same area of other aft cargo door skin and hinge. He would have continued looking for the forward cargo door sill and latches and would have confirmed they were missing. They were missing then and they are still missing twenty months later.

The aft door sill was confused as the forward door sill. It's an understandable mistake. They have the same size, shape and function. The wrong suspect, the aft door, was examined and found to be mostly innocent and released while the real suspect, the forward door, lies dormant and unexamined.

Docket Number SA-516, Exhibit No. 15C, Report Number 97-82, Section 1/42 Joint, Forward Cargo Door, "Examination of the lower lobe forward cargo door showed that all eight of the door latching cams remain attached (along with pieces of the door itself) to the pins along the lower door sill," is now shown to be conclusively wrong because the forward door sill, latches and locks have not been recovered to be examined.

The forward door sill and latches and locks have not been recovered because they are not in the wreckage database of all the items recovered. They are also not in the reconstruction at Calverton. They are still out there on the ocean floor because TWA 800 certainly had the forward cargo door sill, latches and locks on board and functioning normally when it took off the night of 17 July 1996.

To summarize: Aft cargo door lower sill, latches and locks found and recovered and examined.

Forward cargo door lower sill, latches and locks not found, not recovered, and not examined.

The mixup has serious consequences.

The search for the forward cargo door of TWA 800 must be resumed, exactly as was done for UAL 811 in September/October of 1990, a year and a half after the initial event of inadvertent opening of the forward cargo door in flight over the ocean.

The investigation into TWA 800 must start from square one. As soon as the wreckage was brought into Calverton hangar, the forward door was sought out and examined by Mr. Breneman because it was suspected as having opened in flight. He was right to suspect that forward door, it has killed nine passengers already in a high time early model 747 that left a sudden loud sound on the CVR and an abrupt power cut to the FDR, exactly like TWA 800. Now that the wreckage reconstruction and database shows that 80% of the forward door is still missing, further investigation must be made to determine the status of latches and locks.

What would NTSB have done if the report from Mr. Breneman had come back correctly as forward cargo door sill and latches unrecovered and therefore latch status undetermined which means forward cargo door could have opened in flight? Continue to look for the forward door, of course, and then look at the surrounding structure of the forward cargo door. NTSB would then see what can be seen now in the wreckage reconstruction: a large rectangular outward explosive decompression zone proven by structural deformation and paint markings, as Mr. Schalekamp described it; or red paint smears, outward peeled skin, and petal

bulge at aft midspan latch of forward door, as I describe it; all indicative of forward door opening in flight, as it did for UAL 811 leaving similar evidence of structural deformation and paint markings as described in NTSB AAR 92/02.

While waiting for the forward door sill and latches to be found and retrieved, the assumption must be made that something unusual happened to the forward door for it not to have been found where expected, in the nose recovery field with the rest of the 20% recovered forward door parts such as top part of door and hinge. Eighty percent of forward door missing and not recovered after an extensive search indicates something seriously strange about that door. It was not all latched, locked and intact at water impact. If forward door had been intact, most of the pieces, including the sill, latches and locks, would have been found and recovered at the nose impact point and debris field, but they weren't. Door area shattered in flight from explosive decompression when door opened in flight. The nose tore off because of the 300 knots of slipstream pressed onto weakened nose with huge thirty by forty foot hole in it.

Once determined by reconstruction evidence that the forward door opened in flight, the cause of the opening will of course be investigated.

I offer the explanation of UAL 811: Chafed bare wire, poly X, known to be susceptible to chafing, shorted door motor on to unlatch position. For TWA 800, the midspan latches had no midspan locking sectors to be strengthened so they went to partial unlatch position and allowed the 38115 pounds of internal pressure to rupture forward door at aft midspan latch. Evidence shows petal shaped rupture hole at that location on wreckage reconstruction and missing midspan latch.

Water in the cargo hold bypassed all the four power cutoff safety switches which FAA had assumed would prevent another cargo door opening from chafed wire only. Water got into the forward cargo hold of TWA 800 because a rain storm swept over it an hour before takeoff and the door may have been open then or the seals leaked when unpressurized on the ground. I have seen water pour out of a Boeing airliner forward cargo hold myself. There is a bilge in the cargo hold so water is expected, possibly from condensed water from humid air in hold suddenly subjected to cold air from conditioning or cold skin from outside air at altitude.

Other explanations for TWA 800 forward cargo door opening in flight will be offered of center tank blew it open, as Mr. Schalekamp of FAA opined, bomb as Mr. Kallstrom of FBI offered for so many months, or missile as the wackos still do, meteor by another, electromagnetic interference by another, or some other unknown reason. All should be considered.

Bare chafed wiring has shorted on a forward cargo door motor to unlatch position fatally before and it has happened again for TWA 800. That is my claim. NTSB has urged door wiring be checked in NTSB Safety Recommendation Brief Report Number A-91-83. That recommendation by NTSB should now be followed.

What to do? I offer my time and services again to government to assist in confirming the cause of TWA 800, as I have for the past twenty months. To reject my further offer of help is just as wrong as the past of ridicule, disparagement, and disregard that officials have given me.

Chairman Hall, Mr. Schleede, Ms. Hazle, Mr. Goelz, Mr. Breneman, Mr. Schalekamp and Mr. Drake have all delivered personal insults about me to elected leaders, media, and to me indicating I don't know what I'm talking about, I bother the officials with so many letters, I don't have my facts straight, and they have been very patient with me explaining why I am wrong about the forward cargo door in great detail, but still I persist and should be ignored.

None of my factual evidence has ever been rebutted, but only a generality of that forward door was checked, all cargo doors were latched and locked and door was intact at water impact was offered to inquiries by Senator McCain, Congressman Farr, and various media persons. A meeting requested by me and seconded by Senator McCain to relate my concerns about the forward cargo door with NTSB officials was rejected. The refusal to consider forward door opening in flight was based on a false premise, door sill, latches and locks recovered belonged to the front door. Wrong, they belonged to the back door.

A recent example shows the tone; the below from NTSB spokesperson Hazle to NTSB accredited newspaper reporter on April 8, 1998, five days ago, before door mixup detected and reported:

"Your proposed article is incorrect. First of all, Senator McCain did not request that the NTSB meet with Mr. Smith. The Senator asked that the Board respond to Mr. Smith's concerns, which we have done numerous times and in great detail... Secondly, Mr. Smith is simply wrong. There is absolutely no physical evidence to support his personal theory that the forward cargo door came unlatched. Although Mr. Smith does display some knowledge of the Boeing 747, he has a basic misunderstanding of the facts.

For example, Mr. Smith claims that there are 10 latches on the

cargo door and that the Board only discusses eight in the above mentioned report. While a superficial description of the door might imply that there are 10 latches, Mr. Smith is, in fact, incorrect in implying that they all hold the door onto the fuselage. The eight at the bottom of the door, which were discussed in the report actually hold the door closed - the other two, one on each side of the door are merely "alignment latches" and do not hold the door closed."

Ha!

FAA and NTSB have made this cause of TWA 800 personal by attacking me, the messenger, instead of the message, door opened in flight. It's a mistake. It's as wrong as calling the back door the front door. And then continuing to repeat the erroneous conclusion when inundated with facts from a person who says check the door, check the door, over and over again, but never checking the actual door, is even more wrong.

Fortunately, no other early 747 has had another forward door pop open in flight in the twenty months since TWA 800, so only feelings are hurt so far.

I ask that the politicians reconcile the strained relationship between this citizen and government aviation officials. Mend the fences, start the healing process, bury the hatchet, let bygones be bygones. I'm willing; I can't do it alone; it takes two.

I continue to offer my help. I have nine years of research into this forward cargo door problem with early 747s. I am a crash survivor of a sudden night fatal jet plane accident. I'm a commercial pilot, instrument rated. I'm a retired military officer. Permit me to assist the official investigators in a volunteer

capacity or make it official, just as long as my data, facts, and conclusions can be considered for a contribution to the probable cause of TWA 800. I am an ally. Call me an outside independent consultant. Whatever, but my input is essential.

Discovery of the forward door problem for TWA 800 is very important. This cargo door mixup leads to door open in flight for TWA 800. That leads to UAL 811. That leads to PA 103 and that leads to AI 182, all early model 747s that had hull rupture in flight forward of the wing leaving a sudden loud sound on the CVR and an abrupt power cut to the FDR. The implications of PA 103 and AI 182 not being bombs but wiring caused door openings are profound and affect the entire worldwide aviation industry. The consequences of that will require very high level government actions.

That's out of my league; my league is early 747 hull ruptures in flight. My ball park is four accidents. My inning is TWA 800. My time at bat is forward cargo door. My hit was it opened in flight. My home run is the cause was water on bare chafed wire to short door motor on to unlatch to rupture at aft midspan latch. The pitch was a curve ball of explosive decompression which mimics a bomb or fuel tank explosion.

The door mixup shows that it is time for NTSB to do it right the second time, just like UAL 811. This time without FBI interference. This time with time to think it over. Find the door and in the meantime go on the assumption that a previous event happened again, even though it was not supposed to, TWA 800 forward door opened in flight from chafed wire short to door motor to aft midspan rupture.

The door mixup error is understandable; it was an unintentional

human error of judgment between two identical looking items and understandable under the circumstances of urgent wreckage assembly and inspection at Calverton hangar shortly after the accident.

Forward cargo door opening is very good news for NTSB. It opens up the pathway, the first choice pathway, of forward cargo door opening in flight that was considered closed these many months, but now with the crucial piece of evidence, the lower sill, latches and locks which was blocking the pathway, being removed by explanation of aft, not forward sill, NTSB can now go down that first choice pathway.

And sure enough, the evidence retrieved in the meantime confirms that first pathway choice: there is no yet conclusively confirmed cause of the crash, although bomb, missile, meteor, and spontaneous center fuel tank explosion were seriously considered; streak is explained as shiny object spinning away reflecting red-orange evening sunlight; the shattered outward fuselage skin around the forward door looks exactly as expected if the door were to open in flight, paint markings are as expected if door were to slam upwards into fuselage above, the CVR and FDR data match another cargo door opening flight, and on and on; all facts, data, evidence compiled by NTSB investigators.

NTSB has produced the reports, data, and interpretations from which the forward cargo door opening in flight for TWA 800 is explained. NTSB AAR 92/02 for UAL 811 is the bedrock document for cargo door explanation for TWA 800.

NTSB will show that solving airplane crashes is the most important goal and let the chips fall where they may. NTSB had the first official deduction for TWA 800, forward door opened in

flight, and it was the right one. Confirmation was delayed while other agencies had a hack at it, but eventually, with a citizen's help, the first choice pathway was cleared of confusing debris.

NTSB recommended that the door wiring bundles be checked on early 747s. NTSB has determined Poly X wiring in early model 747s is suspect and subject to vibration caused chafing. NTSB compiled the exhibits for the public docket which assisted the citizen investigation so much. NTSB has the web site that publishes all the previous accident reports from which so much valuable research was derived.

The official credit for cargo door opening in flight explanation for TWA 800 will go to NTSB. It's their data, facts, and evidence. Success has many fathers; failure is an orphan.

The new investigation requires reexamination of those NTSB facts, data, and evidence, some of which are listed below:

1. horizontal stab has red paint smear
2. stator blade in right horizontal stab behind engine number 3
3. inward movement top of cargo door matches UAL 811
4. top of door attached to hinge matches UAL 811
5. petal shape of rupture area around aft midspan latch
6. missing pieces of locking handle, latching pins, overpressure relief doors, midspan latches
7. rectangle of explosive decompression zone of outward peeled skin on right side forward of the wing on right side
8. downward movement of floor beams near cargo door
9. hoop stresses found
10. cvr sudden loud sound matches NTSB Chart 12 UAL 811
11. fdr abrupt power cut matches UAL 811
12. TWA 800 matches UAL811 in twenty five similarities
13. TWA 800 matches PA 103 in many similarities

14. TWA 800 matches AI 182 in many similarities
15. red paint smears above cargo door on white paint
16. fire and fod in engine #3 for ignition source for fireball/center tank explosion on TWA 800, also missing blades.
17. starboard side more damaged than port side.
18. inflight objects hit same things such as right wing fillet in other other accidents
19. poly x is known to be susceptible to chafing and TWA 800 had poly x.
20. section 41 is known to be weak and TWA 800 did not have the retrofit to strengthen.
21. history of cargo door openings in past in various airliners including model and type of TWA 800.
22. EPR problems on aircraft before or during fatal flight.
23. fires in forward cargo hold in the past on Boeing 747s.
24. vertical tears in fuselage skin forward of the wing on the right side match UAL 811
25. singe marks on right side of fuselage show burnt skin, then abruptly at tear line there are no singe marks.
26. red paint rubbed off revealing white paint underneath above cargo door area
27. first pieces off came from forward cargo hold just forward of the wing
28. at least nine missing never recovered bodies, just fragments.
29. initially thought to be a bomb, just like AI 182, PA 103, and UAL 811
30. wreckage debris shows cargo door in pieces at water impact.
31. aft portion of forward door which includes aft midspan latch and locking handle missing from recovery effort as well as bottom sill latches and locking sectors.
32. front spar of center tank found early in debris field is unsooted.

Actions to rule in or rule out forward cargo door involvement.

1. Check hinge overtravel impression damage to match AAR 92/02.
2. Check aft midspan latch pin for heat damage to match AAR 92/02.
3. Check aft midspan latch for damage when located.
4. Put door back together from smaller shattered pieces to clarify petal rupture at aft midspan latch.
5. Determine lone 'stator blade' from which engine
6. Check red paint matching from cargo door area to right horizontal stabilizer.
7. Find chafed wire bundles to bare wire in forward cargo hold to match AAR 92/02.
8. Search, find, and retrieve forward cargo door bottom sill, latches, and locks and examine for latch lock status.

The similarities between UAL 811 and TWA 800 are uncanny, even to both having to retrieve the door from bottom of ocean after tentative probable cause given. But this time the explanation of the forward door opening in flight will not require a new AAR, it will all be done in the first aircraft accident report.

Please use my experience, knowledge, and aviation skills. My research has much to offer in this complicated matter. I know all the explanations very well and can rebut each while pointing to documentation, facts, data, and evidence to support each facet of the wiring/forward cargo door explanation.

I volunteer. Bring me on board.

Respectfully,

John Barry Smith
408 659 3552
551 Country Club Drive,
Carmel Valley, CA 93924
barry@corazon.com
www.corazon.com

NTSB Safety Recommendation Brief

Data_Source: U.S. NTSB Safety Recommendations

Rprt_Nbr: A-91-83

Last Updated: 03-13-95

[O] On June 13, 1991, United Airlines (UAL) maintenance personnel were unable to electrically open the aft cargo door on a Boeing 747-222B, N152UA, at John F. Kennedy Airport (JFK), Jamaica, New York. The airplane was one of two used exclusively on nonstop flights between Narita, Japan, and JFK. This particular airplane had accumulated 19,053 hours and 1,547 cycles at the time of the occurrence.

Recommendations:

A-91-83. Issue an Airworthiness Directive applicable to all Boeing 747 airplanes with a flexible conduit protecting the wiring bundle between the fuselage and aft cargo door to require an expedited inspection of:

- (1) the wiring bundle in the area normally covered by the conduit for the presence of damaged insulation (using either an electrical test method or visual examination);
- (2) the conduit support bracket and attached standoff pin on

the upper arm of the forward lift actuator mechanism;

(3) the flexible conduit for the presence of cracking in the convoluted innercore.

Wires with damaged insulation should be repaired before further service. Damage to the flexible conduit, conduit support bracket and standoff pin should result in an immediate replacement of the conduit as well as the damaged parts. The inspection should be repeated at an appropriate cyclic interval.

On 08/04/98, at 21:25, Hazle Shelly <hazles@NTSB.gov> wrote:

Dear Dr. Wills,

Your proposed article is incorrect. First of all, Senator McCain did not request that the NTSB meet with Mr. Smith. The Senator asked that the Board respond to Mr. Smith's concerns, which we have done numerous times and in great detail.

Secondly, Mr. Smith is simply wrong. There is absolutely no physical evidence to support his personal theory that the forward cargo door came unlatched. In fact, there is considerable evidence to the contrary. As stated in the Metallurgist's Factual Report, Exhibit 15C (which, of

course, is a public document and available at our web site www.nts.gov):

Examination of the lower lobe forward cargo door showed that all eight of the door latching cams remain attached (along with pieces of the door itself) to the pins along the lower door sill.

Overall examination of the forward portion of the airplane showed that sections 41 and 42 contained uniform crushing damage that extended from S-39L across the bottom of the fuselage and up above the right side main cabin window belt to S-14R. This crushing damage is consistent with the intact forward portion of the airplane (including section 41 and 42) impacting the water with a right wing low attitude. The lower lobe forward cargo door was in the crush area.

Although Mr. Smith does display some knowledge of the Boeing 747, he has a basic misunderstanding of the facts. For example, Mr. Smith claims that there are 10 latches on the cargo door and that the Board only discusses eight in the above mentioned report. While a superficial description of the door might imply that there are 10 latches, Mr. Smith

is, in fact, incorrect in implying that they all hold the door onto the fuselage. The eight at the bottom of the door, which were discussed in the report actually hold the door closed - the other two, one on each side of the door are merely "alignment latches" and do not hold the door closed.

We receive numerous inquiries from the public, many with their own extensively developed theories, and we try to be responsive to all. You are free to request copies of the correspondence between Mr. Smith and the Safety Board, a prudent step, I believe, before publishing such an article.

If you have further questions or concerns, please feel free to contact us.

Sincerely,

Shelly Hazle

From: Lyle Streeter <Lyle.Streeter@faa.dot.gov>

Date: April 13, 1998 10:28:44 AM PDT

To: barry@corazon.com (IPM Return requested) (Receipt notification requested)

Subject: Re: Wrong door examined in TWA 800

Mr. Smith - The information you provided has been made available to our engineering staff.

A meeting with FAA staff would not accomplish what you are after. We do not control the direction of an investigation, nor do we determine a probable cause. You must direct your efforts at the NTSB. They are a totally independent agency, and I cannot do anything for you regarding a meeting with them.

Lyle Streeter

Reply Separator

Subject: Wrong door examined in TWA 800
Author: barry@corazon.com at Internet
Date: 4/9/98 8:37 PM

Dear Mr. Streeter, 8 Apr 98

Please may I have a meeting with aviation safety officials to present my findings? Please may I have discussion with you or your representative to

display evidence. Please may I not be ignored and refused meetings with NTSB? Please may the facts, data, and evidence from my years of research have a change to be seen and heard by aviation safety officials?

The TWA 800 wreckage database reveals aft cargo door bottom sill, latches and locked were checked but not forward door! Bob Breneman, the FAA structural engineer who made the examination and concluded forward door all latched and locked, could not have examined the forward door latches and locks because they were not recovered. They are not in the database and they are not in the wreckage reconstruction in the hangar. The forward door is only 20% recovered and sill and latches are missing.

But in the terminal field (that includes the wings and rest of headless 747 fuselage and aft door) was found on page 14 of 71 of wreckage database, "C122, RF45A 40 39 47.00 latitude, 72 37 27. 90 longitude, aft cargo door-lower sill latches & locks."

So in the hangar jumbled with wreckage days after crash, as wreckage was brought in, Bob Breneman of FAA looked at bottom latches of a cargo door and saw them locked and hastily said forward door all latched

and locked.

He got the two identical doors mixed up. He never corrected his error.

The forward door reconstruction shows all the pieces of those items found in database. Most of the forward door is missing in wreckage reconstruction and most of forward door is missing in database. The sill and latches and locks are missing in database and reconstruction. 80% of forward door is still out there someplace.

Aft door was not reconstructed in hangar as too far away from center tank.

The aft door bottom sill, latches and locks were recovered. The two doors are identical in shape, function, and size. It was an honest error.

Mr. Streeter, not only has FAA and NTSB not examined the two midspan latches of the forward cargo door, they have not examined any of the ten latches and locks. There are not sufficient facts to rule out the inflight opening of the forward cargo door in flight. The evidence shows it did by petal bulge, red paint smears, and outward peeled skin in door area.

The history shows it was bare chafed wiring shorting the cargo door motor

on to the unlatch position, just like UAL 811. Wiring is the big problem with early 747s but not for starting spontaneous center tank explosions.

Wiring is a problem for shorting and turning cargo door motor on.

I ask again, sir, please may I have a meeting with aviation safety officials to present my findings? Please may I have discussion with you or your representative to display evidence. Please may I not be ignored and refused meetings with NTSB? Please may the facts, data, and evidence from my years of research have a change to be seen and heard by aviation safety officials?

Very Respectfully,

John Barry Smith
551 Country Club Drive,
Carmel Valley, CA 93924
408 659 3552
barry@corazon.com
www.corazon.com

barry@corazon.com
<http://www.corazon.com/>

From: John Barry Smith <barry@corazon.com>
Date: April 13, 1998 10:00:56 PM PDT
To: Lyle Streeter <Lyle.Streeter@faa.dot.gov>
Subject: Re: Wrong door examined in TWA 800

Mr. Smith - The information you provided has been made available to our engineering staff.

Mr. Streeter, thank you for providing the information about the wrong door examined in TWA 800 to your engineering staff. I trust they will read it because it came from you, aviation accident investigator. By engineering I believe you mean who? Northwest Region of FAA? Well, they are the guys who most need to know about it.

A meeting with FAA staff would not accomplish what you are after.

Maybe it would and it's worth a try. Let's do it.

We do not control the direction of an investigation, nor do we determine a probable cause.

I'm not asking you to control the direction of the investigation; I'm asking to present my research, data, evidence, and conclusions for consideration. Let the evidence control the investigation.

I'm not asking you to determine a probable cause, but to determine a possible cause. Is wiring/cargo door a possible cause

for TWA 800?

You must direct your efforts at the NTSB. They are a totally independent agency,

I have, I have. Hundreds of pages, documents, offers to meet. NTSB may be totally independent but not stupid or immune from opinion from someone such as yourself, a FAA liaison official to NTSB who is also an aviation accident investigator belonging to the Office of Accident Investigation. Are you an aviation accident investigator?

and I cannot do anything for you regarding a meeting with them.

Fine, I understand. Can you do something for me regarding a meeting with FAA? Including yourself? Let us talk substantive issues via email with you and FAA engineering staff. We'll talk nuts and bolts. Then present NTSB with opinion regarding possible cause of TWA 800 and let them decide if worthy enough to pursue from possible to probable.

I appeal you to deep down, you can not permit yourself to stand idly by, a middleman, while great aviation events are passing by. You are in the chain of aviation safety for the United States government. There is no going around you. You must stop wiring/cargo door explanation or you must assist it. If you say to NTSB to forget wiring/cargo door, you checked it out and the numbers don't add up, then NTSB will ignore wiring/cargo door. As they did when officials honest mistakenly misidentified an identical looking cargo door sill as the forward when it was the aft.

Door sill mixup is real and you know the significance. You are the one who asked hoop and hatch questions to Mr. Wildey. Both questions were right on. Your hatch question led me to front spar of the same center wing tank. The front spar was found early in the earliest debris pattern. Fine, but it was unsooted. It was not burnt, scorched or singed. The parts of the wing tank that were found with the rest of wing in the terminal field did have sooting, as the sooting and burn exhibit shows. So, your maintenance hatch and my front cwt spar both show no explosion as initial event. Your hoop question shows door opened in flight. The wiring problem you mentioned is true and may have shorted the door motor on to the unlatch position, as it has done before.

I also understand the politics and blame and credit and emotions about the claim of door mixup. So what? Is there a mixup or not? If no, then tell me. If yes, tell me. The cause of the accident is paramount so that it can be fixed and not happen again.

I ask you, has the forward door sill been found? The wreckage database is on my web site, along with other government documents such as complete texts and pictures of several 747 accident reports. The documents and pictures of the TWA 800 reconstruction show it hasn't been found or recovered. You could pick up the phone and find out in two minutes. You could call Mr. Breneman or Mr. Schalekamp of FAA and ask them. They may require your assistance as they are not accident investigators and you are.

If it hasn't been found, what then? Find it?

Your opinion counts and to be neutral in this case is wrong. Either be against wiring/cargo door explanation or be for it.

Is it a possible cause of the crash of TWA 800?

If not, then OK, report your opinion, it's needed.

If yes, then OK, report your opinion, it is important.

Is wiring/cargo door explanation an appropriate discussion topic between FAA staff and a citizen? I think so. It's about aviation and the 'A' in FAA stands for aviation. Gary Dupertuis is an FAA certification pilot who passed me on my flight test for my FAA Part 135 certificate; he works out of the San Jose Flight Standards District Office. His opinion counts. He could be included.

OAI has 'A' for accident and TWA 800 was certainly that. OAI has 'I' for investigation and I ask that you do that too. Either the wiring/cargo door explanation rings true or it doesn't. I have faith in the evidence, the facts, the data, and the wreckage reconstruction.

Below is your first email to me so many months ago. You answered the phone, could have been Joseph Manno. You said you would pass along the information to "our investigators". What happened? Which investigators? Anything? Ignored? Rebutted? Agreed?

You asked questions at the public hearing about the forward cargo door of TWA 800. Again you got involved.

I'm asking for a third time.

Best Regards,

Barry Smith

Conversion: Allowed

Priority: normal

Disclose-Recipients: Prohibited

Alternate-Recipient: Allowed

Date: 04 Nov 1997 10:27:16 -0500

From: Lyle Streeter <Lyle.Streeter@faa.dot.gov>

To: barry@corazon.com (IPM Return requested) (Receipt notification requested)

Subject: for Office of Accident Investigation

----- Forwarded with Changes

From: WebmasterAAI

Date: 11/4/97 6:41AM

To: Lyle Streeter

To: Joseph Manno

Subject: for Office of Accident Investigation

----- Forwarded

From: barry@corazon.com at Internet

Date: 11/3/97 7:17PM

To: WebmasterAAI at AAI

Subject: for Office of Accident Investigation

-

Mr. Smith - thank you for your input on the TWA800 investigation. I have passed your information along to our investigators for their

consideration.

Lyle Streeter
Office of Accident Investigation

Forward Header

Subject: for Office of Accident Investigation
Author: WebmasterAAI at AAI
Date: 11/4/97 6:41 AM

Dear Webmaster, please forward to Office of Accident Investigation.

Dear Office of Investigation, below is letter in reply to FAA call to me about investigation into TWA 800. Are you involved in this?

Sincerely,
John Barry Smith

Bob Brenerman,
Aerospace Engineer,
Federal Aviation Administration
Transport Airplane Directorate, ANM-100
1601 Lind Ave. S.W.
Renton, WA 98055-4056
(206) 227-2100
Ron Wojnar, Manager
Darrell Pederson, Assistant Manager

Dear Mr. Brenerman,

31 Oct 97

Thank you for your telephone call on Thursday, 30 Oct 1997.

You told me

that a letter had been sent to me from FAA about my concerns about the

forward cargo door area in Boeing 747s rupturing in flight.

We were able to chat for a few minutes about the crash of TWA 800 and

others. You were able to tell me that:

1. The bottom sill of the forward cargo door is intact and attached to fuselage skin but in several pieces.
2. The bottom latches are latched around the locking pins.
3. AD 88-12-04 was implemented in TWA 800 including all other ADs.
4. The nose hit the water on the right side and caused inward hydraulic impact damage in door area.
5. The door did not open in flight.
6. The door was found with nose debris and did not come off first.
7. Admiral who said door was found first was wrong because metal piece was misidentified underwater.
8. Nose came off at station 741.
9. You didn't scrutinize the paint smears on TWA 800 reconstruction photo.
10. PA 103 and AI 182 were inflight breakups and would show

similar

evidence but were proven to be bombs.

11. NTSB has tagged each piece of metal of wreckage and it's plotted.

12. You referred my photos to NTSB for reply.

13. A letter is coming to me from FAA explaining the above.

Well, sir, that was a lot and thank you again for chatting with me.

For

the first time in a year and a quarter I was able to hold a scientific conversation about TWA 800 with a government authority. As an engineer and

commercial pilot we respect science. I contend fuselage rupture at cargo

door area is all science which means it is reproducible and explainable.

Your statement of inward damage to the cargo door area from impact with

water took me aback as I have not heard that before. I have had time to

digest that information and wish to reply in this letter. I invite you to

have a scientific discussion with me about metal and wreckage and air

pressure. I'm not an engineer but a pilot with aerodynamic background.

I understand your sequence of events. Essentially it is center tank explosion of unknown origin, nose comes off at station 741, plane falls and

later fireball and destruction. The nose falls intact and alone on right

side into water which hydraulic impact pushes metal skin into and past the

stringers and bulkheads in cargo door area while leaving port

side smooth
and intact. Forward cargo door is in pieces from this impact and
is in
debris field of nose. The lower part of door has latches which are
latched
and attached to bottom sill of frame indicating door did not open
in
flight.

Do you understand my sequence? Did you go to my extensive
web site which
documents my explanation? To present such a complex sequence
concisely is
difficult but I will try.

Fuselage ruptures at forward cargo door area for unknown
reason. Nose
comes off at station 741, plane falls and later fireball and
destruction.

The nose falls intact and alone on right side onto water which
gives
hydraulic impact damage to nose gear doors which drives them
inward. When
fuselage ruptures at 13700 feet the skin is burst outward and the
red
painted metal on door is slammed against white painted area
between windows
above the door and red paint is transferred leaving red smears
only above
rupture area. Fireball is ignited by flaming fodded engine number
three at
7500 feet. Sudden loud sound is explosive decompression when
fuselage
ruptures. Streak is shiny metal piece of door spinning away
reflecting

evening sunlight to ground observers. Missing bodies were ingested into number three engine. Abrupt power cut when cargo hold floor is severely disrupted. Nose comes off when huge hole appears in side of nose and 300 knot wind tears it off.

I offer that the fuselage rupture explanation explains all the evidence of streak, sudden loud sound, abrupt power cut, debris pattern, and many other observed events. I will be glad to go over them one by one with you.

Center tank explosion as initial event leaves too many contradictory conclusions such as autopsies with no burns, abrupt singed areas on fuselage skin, soundless explosion, no ignition source, etc.

As an engineer and pilot we understand the enormous internal forces of 4 pounds per square inch on a nine foot by ten foot outward opening door and the incredible power of 300 knots of slipstream on a weakened airframe. I

trust you respect reality which means things you can see, touch, hear, and

feel. In that regard, let me attempt to rebut the inward impact damage at cargo door area conclusion with the following reality which can be checked out:

If we look closely at NTSB TWA 800 reconstruction photograph there are red

paint smears on the white paint between windows alongside the fuselage.

These red paint smears are only above and slightly aft of the forward door.

The cargo door normally has red paint on it. The space between the windows

normally had white paint. The between window spaces now have red paint

smears on them in the reconstruction. This indicates the red colored metal

below expanded upward and struck the white painted area and transferred the

red to the white. If the damage had been caused by inward action of water

impact there would be no red paint smears on the white paint between the

windows. But there are many smears and that is consistent with rupture

outward, not inward.

Let us assume that the forward cargo door was latched and rode nose down

to the water. That rules out FBI innocently altering latches searching for

explosive residue in their lab, or a mistaken identity with the identical

aft cargo door, and confusion with any other of the twelve doors on the 747.

Because the door was latched does not mean there was not a fuselage

rupture at the cargo door area. In fact, I believe the picture shows such a

rupture in the shattered right side forward of the wing. I don't have three

dimensions but it appears to be a round outward rupture hole at lower left of cargo door. Doors can open at places other than where they are supposed to.

The damage on the right side is consistent with an outward opening rupture. It does not look like impact damage because it is located only around the cargo door and not far above it or aft. Of course the entire nose is not reconstructed nor is the NTSB photo complete with part of the extreme forward part missing so it is difficult to make definite conclusions based on observations of pictures, as you said in your call.

Hands on examination is needed and you have that opportunity. I am very familiar with AI 182 and PA 103 and 'they' did not 'prove' a bomb was the cause. On the contrary the evidence is very flimsy and could have gone either way of structural failure or bomb. AI 182 had structural failure as cause but said it was bomb that blew out the forward cargo hold on the right side without naming the door. AI 182 door description on the bottom of the ocean matches TWA 800 door area NTSB photo. PA 103 reconstruction drawing matches UAL 811 after landing with huge hole in side.

The importance of including other similar accidents is to group

them and then draw conclusions based upon deductions. I did not choose the flight numbers; they were included only because of the evidence of sudden loud sound on CVR, inflight damage, abrupt power cut, and many more significant similarities. If you know of any more high time Boeing 747s that have a fatal accident centered near the forward cargo hold that left a sudden loud sound, an abrupt power cut, foddred engines, missing bodies, and forward door in pieces, and I'll include them in the group. So far it's only AI 182, PA 103, UAL 811, and TWA 800. As an aerospace engineer do you not welcome a possible scientific explanation for an aviation event rather than shadowy conspiracy Sikh terrorists or evil foreign secret agents? But to talk of AI 182 and PA 103 is fraught with emotion and difficult without the reports to point to specific items. But let us at least agree that AI 182 and PA 103 and UAL 811 and TWA 800 all had inflight structural problem starting forward of the leading edge of the wing, with three of them pinpointing to forward cargo hold. I checked TWA 800 station 741 nose separation point on PA 103 and it matches too. Both noses came off at same point on fuselage give or take a

few inches.

To be specific about TWA 800 cargo door:

1. Is it confirmed it is forward and not aft or other latches?
2. Are all latches accounted for? There are eight below and one on each side for total of ten.
3. Are all latches latched around locking pins? If only one unlatches that may be sufficient for internal pressure to bulge out door into slipstream when ultimate destructive force of 300 knots tears door away and nose off.
4. Mid span latches are particularly critical as rupture appears to be in middle of door.
5. Where are the missing pieces of the door? Only about 20 percent of the door is in reconstruction. The missing portions may be the pieces that fell first and closest to event site and still unfound.

To say forward cargo door was latched is not sufficient to rule out

rupture at cargo door area as initial event for TWA 800 because:

1. Not all latches are accounted for.
2. Most of door still missing.
3. Rupture can occur with a latched door but failure at corners or middle.
4. Description of TWA 800 door area matches AI 182 door area which had door attached to fuselage skin which was explained as fuselage rupture at forward cargo hold (caused by bomb). TWA 800 was thought to be bomb also

based upon early evidence which NTSB computer simulation showed baggage spewed forth from forward cargo hold as first event. I understand the problem NTSB has with that unilateral damage on right side because a center tank explosion should give bilateral damage and doesn't. So the water impact explanation is offered. If damage at cargo door area is inward then no rupture and if latches latched then no door opening. What can be done to persuade you that rupture occurred? What evidence is there to examine? Can you confirm the direction of the metal in the forward cargo door area of TWA 800? Is that scientifically possible? If it is outward will you reconsider your conclusion of not door failure? I point to the red paint smears as evidence to warrant such an effort at confirmation of metal direction, in or out. If you should find that the right side damage is outward and not inward, or not all of the latches or pieces of door are accounted for, please reconsider your conclusion that the door area did not fail in flight and rupture. Please establish a dialogue with me. My email is barry@corazon.com and I can send and receive high resolution color photographs via email. My web

site has accident reports from DC-10 to B747 and others to support cargo door fuselage rupture. I've attached some of the web page analysis for your consideration.

I apologize for any name misspellings; my hearing is shot from thousands of hours in recips and jets and I may have heard names wrong on the phone.

I may have heard other statements wrong too and that is why I prefer writing to talking such as this letter and email. Please correct any misstatements I may have made.

Sincerely,

John Barry Smith

Email: barry@corazon.com

Page: <http://www.corazon.com/crashcontentspagelinks.html>

<http://www.corazon.com/811bigholephotobetter.html>

Lyle Streeter

Reply Separator

Subject: Wrong door examined in TWA 800

Author: barry@corazon.com at Internet

Date: 4/9/98 8:37 PM

Dear Mr. Streeter, 8 Apr 98

Please may I have a meeting with aviation safety officials to present my findings? Please may I have discussion with you or your representative to display evidence. Please may I not be ignored and refused meetings with NTSB? Please may the facts, data, and evidence from my years of research have a change to be seen and heard by aviation safety officials?

The TWA 800 wreckage database reveals aft cargo door bottom sill, latches and locked were checked but not forward door! Bob Breneman, the FAA structural engineer who made the examination and concluded forward door all latched and locked, could not have examined the forward door latches and locks because they were not recovered. They are not in the database and they are not in the wreckage reconstruction in the hangar. The forward door is only 20% recovered and sill and latches are missing.

But in the terminal field (that includes the wings and rest of headless 747 fuselage and aft door) was found on page 14 of 71 of wreckage database, "C122, RF45A 40 39 47.00 latitude, 72 37 27. 90 longitude, aft cargo door-

lower sill latches & locks."

So in the hangar jumbled with wreckage days after crash, as wreckage was brought in, Bob Brennerman of FAA looked at bottom latches of a cargo door and saw them locked and hastily said forward door all latched and locked. He got the two identical doors mixed up. He never corrected his error.

The forward door reconstruction shows all the pieces of those items found in database. Most of the forward door is missing in wreckage reconstruction and most of forward door is missing in database. The sill and latches and locks are missing in database and reconstruction. 80% of forward door is still out there someplace.

Aft door was not reconstructed in hangar as too far away from center tank. The aft door bottom sill, latches and locks were recovered. The two doors are identical in shape, function, and size. It was an honest error.

Mr. Streeter, not only has FAA and NTSB not examined the two midspan latches of the forward cargo door, they have not examined any of the ten latches and locks. There are not sufficient facts to rule out the inflight

opening of the forward cargo door in flight. The evidence shows it did by
petal bulge, red paint smears, and outward peeled skin in door area.

The history shows it was bare chafed wiring shorting the cargo door motor
on to the unlatch position, just like UAL 811. Wiring is the big problem
with early 747s but not for starting spontaneous center tank explosions.
Wiring is a problem for shorting and turning cargo door motor on.

I ask again, sir, please may I have a meeting with aviation safety officials to present my findings? Please may I have discussion with you or
your representative to display evidence. Please may I not be ignored and
refused meetings with NTSB? Please may the facts, data, and evidence from
my years of research have a change to be seen and heard by aviation safety
officials?

Very Respectfully,

John Barry Smith
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Carmel Valley, CA 93924
408 659 3552
barry@corazon.com

www.corazon.com

barry@corazon.com
<http://www.corazon.com/>

From: Lyle Streeter <Lyle.Streeter@faa.dot.gov>
Date: April 14, 1998 5:43:41 AM PDT
To: barry@corazon.com (IPM Return requested) (Receipt notification requested)
Subject: Re: TWA 800 cargo door mixup

Information forwarded as requested.

Lyle Streeter

Reply Separator

Subject: TWA 800 cargo door mixup
Author: barry@corazon.com at Internet
Date: 4/13/98 2:08 PM

-- see attachments --

Content-Type: application/octet-stream; name="Text_1"
Content-Disposition: attachment
Content-Description: Text_1
FTBP-Modification-Date: 14 Apr 1998 12:43:00 Z
FTBP-Object-Size: 26213

Attachment converted: Master:Text_1 (????/----) (00004A96)

This message has the following attachments:

file://localhost/Users/barry/Library/Mail/
Attachments/.DS_Store

From: John Barry Smith <barry@corazon.com>

Date: April 14, 1998 8:36:15 AM PDT

To: Lyle Streeter <Lyle.Streeter@faa.dot.gov>

Subject: Re: TWA 800 cargo door mixup

Information forwarded as requested.

Lyle Streeter

Thank you,

Barry Smith

From: John Barry Smith <barry@corazon.com>

Date: April 20, 1998 9:57:18 AM PDT

To: FAAOAI

Subject: Retrieve forward cargo door sill of TWA 800

Dear Mr. Streeter, snail mail for the below letter to FAA

Thomas McSweeney
Doug Kirkpatrick
Ron Wojnar,
James Devany
Darrell Pederson,
Neil Schalekamp
Bob Breneman,

and for NTSB:

James Hall
Robert Francis II
Thomas E. Haueter
John B. Drake

And emails for the others who are online. Would you please email those above that I do not have the email addresses for? Or give me their addresses and I can send it direct. When they wrote me letters, they did not include their email address, just their regular mail address.

Regards,
Barry Smith

Sam Farr
Member of Congress
17th District, California
House of Representatives
Congress of the United States
Washington, DC

John McCain III

Member of Congress
Chairman, Committee on Commerce, Science, and
Transportation
United States Senate
Washington, DC

James Hall
Chairman,
National Transportation Safety Board

Robert Francis II
Vice Chairman
National Transportation Safety Board

Bernard Loeb,
Director of Aviation Safety
National Transportation Safety Board

Thomas E. Haueter
Chief, Major Investigations Division
National Transportation Safety Board

John B. Drake
Division Chief
Aviation Engineering Division
National Transportation Safety Board
Washington DC 20594

Al Dickinson,
Lead Investigator, TWA 800
National Transportation Safety Board

Ron Schleede,

Investigator, TWA 800
National Transportation Safety Board

James F. Wildey II
National Resource Specialist
National Transportation Safety Board
490 L'Enfant Plaza East, SW.
Washington, DC 20594

Peter Goelz
Director, Office of Government, Public, and Family Affairs
National Transportation Safety Board

Shelly Hazle,
Office of Government, Public, and Family Affairs
National Transportation Safety Board

Thomas McSweeney
Director, Aircraft Certification Service
FAA National Headquarters

Lyle Streeter
FAA AAI
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FAA National Headquarters
800 Independence Avenue, S.W
Building FOB 10A, Room 838,
Washington D.C 20591

Doug Kirkpatrick
Aircraft Certification Service
FAA National Headquarters

Ron Wojnar,
Manager
Federal Aviation Administration
Transport Airplane Directorate

James Devany
Acting Manager
Federal Aviation Administration
Transport Airplane Directorate

Darrell Pederson,
Assistant Manager
Federal Aviation Administration
Transport Airplane Directorate,

Neil Schalekamp
Manager, Propulsion & Mechanical Systems and Cabin Safety
Branch
Transport Standards Staff
Transport Airplane Directorate, ANM-100
1601 Lind Ave. S.W.
Renton, WA 98055-4056

Bob Breneman,
Aerospace Engineer,
Federal Aviation Administration
Transport Airplane Directorate, ANM-100
1601 Lind Ave. S.W.
Renton, WA 98055-4056

Dear Mr. Streeter,

20 April 1998

Please do what good investigators do, go back to the crime scene and look for more evidence that should be there. You have NTSB documents that reveal you don't have all of the TWA 800 wreckage and you have NTSB documents that reveal the missing cargo door sill is very important. So, I suggest, ask, insist, demand that you go back to the scene, look for it, find it, and get it. Call out the dredgers. Everyone will understand, it's what happens in thorough investigations, and TWA 800 is certainly going to be that.

To make a human error of hasty confusion over two identical shaped and sized objects such as the aft and forward cargo door sills of Boeing 747s is understandable and forgiven when corrected.

To not correct error when detected is inhuman and not forgiven.

The error of cargo door mixup was reported to you on April 8th and subsequent days. It is now April 20, twelve days later, almost two weeks, a hundred eternities to pilots, and still no effort is apparent to retrieve door.

What is going on? Time's a wastin'!

Wiring to be checked for bare wire chafing in TWA 800 and location to search for forward cargo door follow:

Plug P3 and Plug P4 at a distance between three to four inches from plug pin tips. The P4 damage location may correspond to wire bundle clamp positions. These areas are where the chafed

bare wires shorted on the door latch actuator motor to the unlatch position for UAL 811 as described in NTSB AAR 92/02. Water also entered the door switches because water poured out of the switches when retrieved from the ocean.

Location on ocean floor to search, find, retrieve, examine, and determine ten latch status and eight locking sector status of forward cargo door of TWA 800: Forward door sill is probably within this one minute geographical coordinates of a box: 40:37:50 latitude north up to 40:38:50 degrees, minutes, seconds north by 72:39:20 west longitude over to 72:40:20 degrees, minutes, seconds of west longitude. This one mile square datum box estimate is based on NTSB wreckage database items plotted out and NTSB trajectory study items studied.

All radar track anomalies in NTSB Exhibit 13A of objects leaving TWA 800 should be plotted to ocean surface and searched at that spot.

There is much radar data on TWA 800 and the forward door can be tracked to 300 foot depth ocean probable location, just as was done with UAL 811 in which NTSB AAR 92/02, page 26, describes the procedure to track, search, locate, and retrieve the forward cargo door from the ocean floor. Radar returns, wind data, and ocean currents were used to retrieve the door from 14,200 feet on the first pass. Seven dives later they had the pieces of the forward cargo door from which the true cause of the inadvertent opening in flight as chafed bare wiring shorting on door motor to unlatch position was revealed.

The below information is from the NTSB investigator who helped locate the forward cargo door of UAL 811 in 1990:

Date: Sat, 17 Aug 1996 12:52:15 -0700
From: wmor@ix.netcom.com (William M. O'Rourke)
Subject: UAL811
To: barry@corazon.com
Status:

JBS:

I'll try to answer your questions here re. UAL811 but the answers may not be the ones you're looking for.

1. Ron Schleede was the Chief of the Accident Investigation Division at the time of the accident and oversaw much of the on-scene investigation. He is highly experienced and a reliable investigator. He started his career with the NTSB at the Denver Field Office after flying F-100's with the USAF.
2. I never saw the actual door but was informed that it was in two pieces versus the single (entire) door we based our calculations on. I learned that the USN utilized our estimate of impact point & time and applied their detailed knowledge of under water current data. The result was that they drew a 5 NM box around a point they calculated would have been the resting place of the door. Their ship then entered at the NW corner of the box steaming on a track towards the SE corner. At about the half-way point, on the first run, they located the debris field on the ocean floor in approximately 14,000 feet of water.
3. I DID NOT SEE ANY BLIPS! What I did see was a computer

printout of FAA and USN FACSFAC ground based radars which listed all primary & secondary (transponder) returns covering the area we specified in our data reduction request.

Since the Navy's FACSFAC processor (computer) was more state-of-the-art than the FAA system, plus it had more feeds, we utilized the USN data for the most accurate data presentation.

From the data in the printout, we could not tell which target was the door or which was debris. Further, we had no way of telling which was which. What the printout did tell us was whether it was a long-run length or short-run length target. Generally, you could say that a long-run target is a strong target while the short-run length was a weak target. However, the difference twixt the two is actually more of radar cross section of a target. As an example, picture a billboard of 15 feet high, 30 feet wide and 6 inches thick. If you look at the billboard staright on, you see its full 15x30 foot area or an object with a surface area of 450 sq. feet. However, when you view the same billboard from end-on, you see an object with a total area of 7.5 square feet. Hence, an excellent example of the primary difference between a long & short run length target.

With respect to the UAL811 incident, we were very lucky in that while the flight was climbing out of HNL, a WX ballon was also on its way up. This gave use very accurate winds which enabled us to validate winds aloft info recorded on the DFDR. The

largest

problem I had was to correlate the various timing involved from

all of the data sets. Since the most accurate timing source was the FAA's ARTCC tapes, we had to adjust FAA & USN radar data, CVR,

DFDR, NWS, and FAA tower tapes to one single time base.

The above are the same techniques we used in reconstruction of flight tracks of accident incident aircraft as well as the Shuttle Challenger accident.

Although my primary job was as an ATC investigator at the NTSB, I got stuck with doing radar data since I had a radar background going back to 1957 as a GCI controller, a brief stint on RC-121D's, TDY to a DDR and DER as well as TDY to VP-26 while at NQX (ASP-20).

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Mike O'Rourke
wmor@ix.netcom.com

Below letter discusses the efforts to get door examined.

From: Chris Hinch <chris@dcc.govt.nz>

To: "barry@corazon.com" <barry@corazon.com>
Subject: Cargo Doors & UAL 811
Date: Thu, 22 Aug 96 22:29:00 NZT
Encoding: 90 TEXT
Status:

Barry

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At that time, the official story was that a ground handler had damaged the latching mechanism and/or not closed the door properly. The father of a New Zealand teenager killed on the flight argued against this, and as a result, the TVNZ documentary was commissioned, presenting his theory that an electrical failure initiated the door opening sequence with the 'L' shape of the locking latches making them susceptible to deformation.

In order to create the animation sequences, we had to study and understand the issues involved. We then predicted that if the door was found, what the relative positions of the cams and interlocks would be, and that the L locking bars would be deformed by the backdriven cams.

The documentary was rebuffed by United, who said that that they were aware, prior to the accident, that the L locks could be deformed by initiating the door open sequence while locked, and

that a modification had been issued to strengthen them. As that modification had *apparently* been fitted to 811, we were "therefore" wrong. In addition, local airlines said that a special 'strengthening' modification had been fitted to their fleet of B747's, "therefore" it was okay to keep flying.

But when the door was retrieved, the locks were deformed as predicted, and the cams were in the positions we predicted. Obviously, if fitted, the modification was not strong enough. This meant that it could happen again, and I was approached by TVNZ to say so on camera. I did so but did not realise the personal and professional cost that would occur as a result.

I was not aware that the NTSB had changed their position, and I cannot tell you the personal feeling of relief, vindication and resolution that I felt reading their revised executive summary at your web site. Thank you very, very much.

But now, the horrifying feeling that our words will continue to go unheeded, and that more people will die - especially when we hear airlines continuing to say that they are "okay" because they have fitted the "special" strengthening mod.

Can you confirm if 811 had the rivetted L plates modification added? Did 800? 103? Can you confirm or determine if any one has actually initiated the opening sequence on the ground, with the door fully closed, with the L plates modification fitted? Can Boeing/NTSB categorically demonstrate that the mod fitted will prevent deformation when the cams are backdriven?

I wish you the very very best of luck. Remain focused, persistent and rational in your arguments, and they cannot argue.

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In the other accidents, were they on AP?

Cheers

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Dear gentleman, the ball is in your court. You have the facts presented to you. It is time for your action. To not act and not correct error when given startling information indicating serious error in investigative thinking is wrong.

To review:

1. Why forward cargo door pieces including sill are important to recover. It is shown in NTSB AAR 92/02 that the forward door can unlatch in flight and kill passengers in an early Boeing 747.
2. Why cargo door sill of TWA 800 is aft door sill: Because it was found in the aft fuselage debris field in which other aft cargo door pieces were found.
3. Why forward cargo door sill is missing: It was not found in the forward cargo bay debris field in which other forward cargo door pieces were found, it is not listed in the entire wreckage database, and it is not hung on wreckage reconstruction.
4. Where is it: Forward door sill is probably within this one minute geographical coordinates of a box: 40:37:50 latitude north up to 40:38:50 degrees, minutes, seconds north by 72:39:20 west longitude over to 72:40:20 degrees, minutes, seconds of

west longitude.

5. Where is wire chafed: Plug P3 and Plug P4 at a distance between three to four inches from plug pin tips. The P4 damage location may correspond to wire bundle clamp positions.

To repeat: Correct error of cargo door mixup. Retrieve forward door. Bring me into the investigation; I know a lot about the problem, I can help in this life and death matter. Question me. To use assets that are available is smart. To reject proven assets who volunteer to assist is wrong. I have been right since day one of the TWA 800 accident, I'm still right, and I will be right as new questions come up. Time is not on your side; I am.

Respectfully,

John Barry Smith
408 659 3552
551 Country Club Drive
Carmel Valley, CA 93924
barry@corazon.com
www.corazon.com

From: Lyle Streeter <Lyle.Streeter@faa.dot.gov>
Date: April 21, 1998 2:10:23 PM PDT
To: barry@corazon.com (IPM Return requested)

Subject: Re: Retrieve forward cargo door sill of TWA 800

I will forward the information when I return to the office -
unable to
accomplish from remote locations.

Lyle Streeter

Reply Separator

Subject: Retrieve forward cargo door sill of TWA 800
Author: barry@corazon.com at Internet
Date: 4/20/98 6:09 PM

Dear Mr. Streeter, snail mail for the below letter to FAA
Thomas McSweeny
Doug Kirkpatrick
Ron Wojnar,
James Devany
Darrell Pederson,
Neil Schalekamp
Bob Breneman,

and for NTSB:

James Hall
Robert Francis II
Thomas E. Haueter
John B. Drake

And emails for the others who are online. Would you please email those above that I do not have the email addresses for? Or give me their addresses and I can send it direct. When they wrote me letters, they did not include their email address, just their regular mail address.

Regards,
Barry Smith

Sam Farr
Member of Congress
17th District, California
House of Representatives
Congress of the United States
Washington, DC

John McCain III
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Chairman, Committee on Commerce, Science, and
Transportation
United States Senate
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National Transportation Safety Board
490 L'Enfant Plaza East, SW.
Washington, DC 20594

Peter Goelz
Director, Office of Government, Public, and Family Affairs
National Transportation Safety Board

Shelly Hazle,
Office of Government, Public, and Family Affairs
National Transportation Safety Board

Thomas McSweeny
Director, Aircraft Certification Service
FAA National Headquarters

Lyle Streeter
FAA AAI
Aircraft Accident Investigator
FAA National Headquarters
800 Independence Avenue, S.W
Building FOB 10A, Room 838,
Washington D.C 20591

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Manager
Federal Aviation Administration
Transport Airplane Directorate

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Branch

Transport Standards Staff

Transport Airplane Directorate, ANM-100

1601 Lind Ave. S.W.

Renton, WA 98055-4056

Bob Breneman,

Aerospace Engineer,

Federal Aviation Administration

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for more evidence that should be there. You have NTSB
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you don't have all of the TWA 800 wreckage and you have NTSB
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reveal the missing cargo door sill is very important. So, I
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408 659 3552
551 Country Club Drive
Carmel Valley, CA 93924
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<http://www.corazon.com/>

From: John Barry Smith <barry@corazon.com>
Date: April 22, 1998 12:46:42 PM PDT
To: Lyle Streeter <Lyle.Streeter@faa.dot.gov>
Subject: Re: Retrieve forward cargo door sill of TWA 800

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Reply Separator

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17th District, California
House of Representatives
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490 L'Enfant Plaza East, SW.
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Shelly Hazle,
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Thomas McSweeney
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FAA National Headquarters

Lyle Streeter
FAA AAI
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FAA National Headquarters
800 Independence Avenue, S.W
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a GCI controller, a brief stint on RC-121D's, TDY to a DDR and DER as well

as TDY to VP-26 while at NQX (ASP-20).

If you give me your snail-mail address, I send you a copy of the Factual Report - Radar Reconstruction, that I completed on this case. I

think I still have a copy of it around here somewhere.

I retired from NTSB in May 1991 after 34-years and do not even have a copy

of the amended UAL811 report. I do know that they had to amend the report

based on the information the recovered door revealed.

Mike O'Rourke

wmor@ix.netcom.com

Below letter discusses the efforts to get door examined.

From: Chris Hinch <chris@dcc.govt.nz>
To: "'barry@corazon.com'" <barry@corazon.com>
Subject: Cargo Doors & UAL 811
Date: Thu, 22 Aug 96 22:29:00 NZT
Encoding: 90 TEXT
Status:

Barry

Hang in there.

I was on a computer graphics team that developed computer animation sequences for a documentary about UAL811. The animation sequences showed how the door latching mechanisms work for the cargo door in question.

At that time, the official story was that a ground handler had damaged the latching mechanism and/or not closed the door properly. The father of a New Zealand teenager killed on the flight argued against this, and as a result, the TVNZ documentary was commissioned, presenting his theory that an electrical failure initiated the door opening sequence with the 'L' shape of the locking latches making them susceptible to deformation.

In order to create the animation sequences, we had to study and understand the issues involved. We then predicted that if the door was found, what the relative positions of the cams and interlocks would be, and that the L locking bars would be deformed by the backdriven cams.

The documentary was rebuffed by United, who said that that they were aware, prior to the accident, that the L locks could be deformed by initiating the door open sequence while locked, and that a modification had been issued to strengthen them. As that modification had *apparently* been fitted to 811, we were "therefore" wrong. In addition, local airlines said that a special 'strengthening' modification had been fitted to their fleet of B747's, "therefore" it was okay to keep flying.

But when the door was retrieved, the locks were deformed as predicted, and the cams were in the positions we predicted. Obviously, if fitted, the modification was not strong enough. This meant that it could happen again, and I was approached by TVNZ to say so on camera. I did so but did not realise the personal and professional cost that would occur as a result.

I was not aware that the NTSB had changed their position, and I cannot tell you the personal feeling of relief, vindication and resolution that I felt reading their revised executive summary at your web site. Thank you very, very much.

But now, the horrifying feeling that our words will continue to go unheeded, and that more people will die - especially when we hear airlines continuing to say that they are "okay" because they have fitted the "special" strengthening mod.

Can you confirm if 811 had the rivetted L plates modification added? Did 800? 103? Can you confirm or determine if any one has actually initiated the opening sequence on the ground, with the door fully closed, with the L plates modification fitted? Can Boeing/NTSB categorically demonstrate that the mod fitted will prevent deformation when the cams are backdriven?

I wish you the very very best of luck. Remain focused, persistent and rational in your arguments, and they cannot argue.

By the way - check 811's pilot statement (on record I believe) that the only reason the aircraft didn't come apart underneath him was

that he had
just taken it off AP and let go of the controls at the point of event
- he
felt that fighting the aircraft (or trying to keep it straight, as the
AP
would have done) would have resulted in catastrophic failure.

In the other accidents, were they on AP?

Cheers
Chris Hinch
chris@dcc.govt.nz

Dear gentleman, the ball is in your court. You have the facts
presented to
you. It is time for your action. To not act and not correct error
when
given startling information indicating serious error in
investigative
thinking is wrong.

To review:

1. Why forward cargo door pieces including sill are important to
recover.

It is shown in NTSB AAR 92/02 that the forward door can
unlatch in flight
and kill passengers in an early Boeing 747.

2. Why cargo door sill of TWA 800 is aft door sill: Because it
was found in
the aft fuselage debris field in which other aft cargo door pieces
were
found.

3. Why forward cargo door sill is missing: It was not found in the

forward
cargo bay debris field in which other forward cargo door pieces
were found,
it is not listed in the entire wreckage database, and it is not hung
on
wreckage reconstruction.

4. Where is it: Forward door sill is probably within this one
minute
geographical coordinates of a box: 40:37:50 latitude north up to
40:38:50
degrees, minutes, seconds north by 72:39:20 west longitude over
to 72:40:20
degrees, minutes, seconds of west longitude.

5. Where is wire chafed: Plug P3 and Plug P4 at a distance
between three to
four inches from plug pin tips. The P4 damage location may
correspond to
wire bundle clamp positions.

To repeat: Correct error of cargo door mixup. Retrieve forward
door. Bring
me into the investigation; I know a lot about the problem, I can
help in
this life and death matter. Question me. To use assets that are
available
is smart. To reject proven assets who volunteer to assist is wrong.
I have
been right since day one of the TWA 800 accident, I'm still right,
and I
will be right as new questions come up. Time is not on your side;
I am.

Respectfully,

John Barry Smith
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barry@corazon.com
<http://www.corazon.com/>

From: John Barry Smith <barry@corazon.com>
Date: April 22, 1998 8:45:39 PM PDT
To: FAAOAI
Subject: Please ask NTSB to retrieve door.

Please email to
Thomas McSweeny
Ron Wojnar,
Neil Schalekamp
Bob Breneman,

Sam Farr
Member of Congress
17th District, California
House of Representatives
Congress of the United States
1117 Longworth Bldg
Washington, DC 20515-2861
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Member of Congress
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Bob Breneman,
Aerospace Engineer,
Federal Aviation Administration
Transport Airplane Directorate, ANM-100

1601 Lind Ave. S.W.
Renton, WA 98055-4056

Dear Mr. Streeter, Mr. McSweeny, Mr. Wojnar, Mr. Schalekamp,
Mr. Breneman and US government officials involved with the
TWA 800 investigation,

22 April 1998

A. You know the forward cargo door of TWA 800 is very
important:

1. You checked it first as the wreckage was brought into
Calverton hangar for the very thing I say happened then and say
now, unlatching in flight of the latching cams, specifically, the aft
midspan latch.
2. The forward cargo door has unlatched several times before,
one with fatal consequences, UAL 811, which has many
significant matches of evidence including a sudden loud sound
on the cockpit voice recorder and an abrupt power cut the Flight
Data Recorder.

B. You know you don't have the forward cargo door main pieces
to include the lower sill, latches, and locks, manual locking
handle, overpressure relief doors, and the two midspan latches.

1. They are not listed in the wreckage database of items
recovered.
2. They are not hung on the wreckage reconstruction in
Calverton hangar.
3. They are never referred to correctly in any TWA 800 exhibits.

C. You know you made a misidentification mixup of aft cargo door sill latches and locks for the forward cargo door sill latches and locks.

1. They are both identical shaped and sized.
2. The aft door sill was found in the aft fuselage and aft cargo door pieces debris field.
3. The forward cargo door sill was not found in the nose and forward door parts debris field.
4. The misidentification was made in haste, under pressure, and is an understandable human error.

D. You know you need to have the forward cargo door sill, all latches and locks as well as manual locking handle.

1. It is necessary for a thorough examination of the hull rupture of TWA 800 that came apart first as shown by trajectory study and wreckage database, forward of the wing on the right side in the forward cargo bay.
2. The results of the examination of the forward cargo sill, latches and locks, and manual locking handle can change the entire probable cause of the TWA 800 accident, as was shown by the corrected AAR of UAL 811 after door was retrieved.

E. You know where it is:

1. There is extensive radar data that shows hundreds of small items that were ejected from TWA 800 and tracked to ocean surface.
2. The currents are known.
3. The winds are known.
4. The wreckage database shows latitude and longitude of various cargo door pieces and other items to leave first.
5. Forward door sill is probably within these one minute geographical coordinates of a box: 40:37:50 latitude north up to 40:38:50 degrees, minutes, seconds north by 72:39:20 west

longitude over to 72:40:20 degrees, minutes, seconds of west longitude. This one mile square datum box estimate is based on NTSB wreckage database items plotted out and NTSB trajectory study items studied.

F. You know how to get it.

1. Thousands of items have already been recovered using known retrieval procedures.
2. US Navy dredges and recovery ships as well as personnel are available to continue their previous work.

G. You know what to do with it when you get it.

1. Examine the ten latches for unlatching around the latch cams.
2. Examine the latch pins for heat damage.
3. Examine the paint for transfer marks from fuselage.
4. Examine for outward peeled skin.
5. Examine for outward petal shaped rupture/bulge at aft midspan latch.
6. Examine for soot.
7. Examine for bare chafed wires.
8. Correlate found latitude/longitude location and incorporate in breakup sequence.
9. Match door latches, skin, cams, locking sectors, overpressure relief doors, viewing ports, torque tubes, and paint to similar evidence of same items in NTSB AAR 92/02.

H. You know when to get it.

1. As soon as you knew you did not have it.
2. As soon as you knew you need it.
3. As soon as you knew how to get it.
4. As soon as you knew where to get it.

That time was two weeks ago. Every day that goes by with no

forward door sill latches and locks recovered and examined is compounding the understandable error of judgment into nonunderstandable error of negligence.

When an outfielder misjudges his position and a ball whizzes by him next to the line, a run scores and he may get an error.

When safety officials and other officials responsible for the lives of the citizens misjudge their position and an accident occurs, someone dies and they may get an error.

When the outfielder consistently misjudges his position and refuses to act to correct his misjudgment even when told by coaches, fans, and the media, and a ball whizzes by him and a run scores, he is released from active duty or retired.

When safety officials and other officials responsible for the lives of the citizens they are sworn to protect continue to misjudge their position and refuse to act to correct the misjudgment even when pointed out by elected officials, newspapers, and an informed and experienced citizen, and an accident occurs, they are prosecuted for criminal negligence.

Why the difference? One is a game and the other is real life.

I have been in a sudden, night, fiery, fatal, jet airplane crash. It is no game. It is real life.

If the carrot of satisfaction of a job well done by thoroughness of an investigation into TWA 800 does not sway you into action, then the stick of punishment may.

As a former Naval Flight Officer who has flown low level

navigation missions through Italy in training, I strongly disagree with the US prosecution for negligent homicide of the flight crew who misjudged their position and cut the cable. Apparently top level US government officials are sending a message to others in service that they are held accountable for screwups even while under orders and on duty. The crew and senior officers tried to cover it up but were quickly found out.

Quick action needs to be taken now. Search, locate, retrieve, and examine the complete forward cargo door of TWA 800 to include the sill, all ten latches, all eight locks, manual locking handle, viewing ports, overpressure relief doors, torque tubes, and missing skin.

While waiting for the recovery effort to produce the forward door sill, latches and locks:

A. Examine the extensive wreckage evidence you do have to consider as an explanation wiring short from bare wire to door unlatch motor to door rupture at aft midspan latch resulting in explosive decompression of thirty foot by forty foot hole in the nose of TWA 800 on the right side forward of the wing. The weakened nose would then be torn off by the 300 knot slipstream.

B. Check the wiring as described in Safety Recommendations Rprt_Nbr: A-91-83 and -84

(1) the wiring bundle in the area normally covered by the conduit for the presence of damaged insulation (using either an electrical test method or visual examination);

(2) the conduit support bracket and attached standoff pin on the upper arm of the forward lift actuator mechanism;

(3) the flexible conduit for the presence of cracking in the convoluted innercore.

C. And check the wiring as described in NTSB AAR 92/02: Plug P3 and Plug P4 at a distance between three to four inches from plug pin tips. The P4 damage location may correspond to wire bundle clamp positions. These areas are where the chafed bare wires shorted on the door latch actuator motor to the unlatch position for UAL 811 as described in NTSB AAR 92/02.

Retrieve Door! Time's a wastin'!

Sincerely,

John Barry Smith
551 Country Club Drive,
Carmel Valley, CA 93924
408 659 3552
barry@corazon.com

From: John Barry Smith <barry@corazon.com>
Date: April 27, 1998 1:26:33 PM PDT
To: FAAOAI
Subject: **Door sill confusion**

Dear Mr. Streeter, 27 April 1998

NTSB is now saying, from the hangar tag person, David Mayer, that the forward lower sill latches and locks were recovered but in three pieces and the latches were latched and locked. He gave reference numbers of RF 3A, 3G, and 3H for the sill pieces.

Problems:

1. Nowhere in wreckage item database is any mention of forward sill or latches and locks on any of the thirteen forward cargo door

pieces listed

2. The given reference numbers are contradicted by the database:
 - a. 3A is under the belly away from door.
 - b. 3G is described as cargo door hinge, nine feet away from bottom sill.
 - c. 3H is described as stringer with cargo door attached.
3. 80% of door still missing, including midspan latches and manual locking handle.
4. Bottom sill latches and locks not visible in photo reconstruction of TWA 800.
5. Aft cargo door sill latches and locks are specifically named in database as one piece.
6. Exhibit 15C refers to forward 'lower door sill' as one piece and not pieces.
7. If door intact at water impact then most of door should be recovered in same area, not most missing.

Confusion reigns!

Regardless, door opened in flight as shown by red paint smears, outward peeled skin, petal bulge at aft midspan latches, missing midspan latches, and most of door missing from expected location.

Although Mr. Smith does display some knowledge of the Boeing 747, he has a basic misunderstanding of the facts. For example, Mr. Smith claims that there are 10 latches on the cargo door and that the Board only discusses eight in the above mentioned report. While a superficial description of the door might imply that there are 10 latches, Mr.

Smith

is, in fact, incorrect in implying that they all hold the door onto the fuselage. The eight at the bottom of the door, which were discussed in the report actually hold the door closed - the other two, one on each side of the door are merely "alignment latches" and do not hold the door closed.

This is nonsense. Proof is UAL 811 that has forward midspan 'latch' 'alignment' pin showing no damage and the aft midspan 'latch' 'alignment' pin showing extensive heat damage. In fact, it may have been the 'latching' action of that aft midspan latch that held that door closed for the 1.5 seconds described in NTSB AAR 92/02 before door opened fully that allowed sufficient decompression that only a ten foot by twenty foot piece of fuselage skin was ripped off, instead of the thirty for forty foot hole the other planes had, thus allowing UAL 811 nose to stay on and the others to come off.

Is there not enough missing parts, enough confusion about what is what, enough history to do a thorough investigation of that forward door?

What more is needed to prod safety investigators into asking questions, checking out the contradictions, and resolving the discrepancies once and for all? This is a known killer of nine people. It is worth the effort.

Four cargo doors ruptured/fractured in flight at aft midspan latch of forward cargo door as shown by official text, drawings, and

photographs, AI 182, PA 103, UAL 811, and TWA 800.

Will someone please check out the total door and not just the 20% recovered?

There is urgency.

I invite checking my numbers. From tomorrow as zero, April 28th.

June 23, 1985, AI 182, nose off at forward cargo bay, 329 dead. No forward sill recovered.

March 10, 1987, PA 125, forward cargo door open in flight, 0 dead. Latches unlatched on forward sill.

December 21, 1988, PA 103, nose off at forward cargo bay, 270 dead. No forward sill status reported.

February 24, 1989, UAL 811, forward cargo door open in flight, 9 dead. Latches unlatched on forward sill.

June 13, 1991, UAL preflight, uncommanded aft cargo door open on ground. 0 dead. Latches unlatched on aft sill.

July 17, 1996, TWA 800, nose off at forward cargo bay, 270 dead. No forward sill recovered, possibly pieces.

AI 182 to TWA 800 is approx 3993 days.

Approx 666 days between events.

Approx 649 days since TWA 800.

Approx 17 days to go. From April 29 to May 15.

65 days minimum, four years and eleven months for maximum between events.

0 deaths to 329 deaths as consequence.

So, law of averages says an uncommanded starboard side cargo door will open on an early model Boeing 747 with varying

consequences from trivial to severe within three months of July 17th, 1996 to June 23, 2001 with the mean occurring on May 15th, 1998. The airline with the most 747s, 41, and the oldest average at 19.9 years, is Northwest Airlines.

So, a NWA 747 has uncommanded cargo door opening in May 1998 if the law of averages is enforced. I'm working on stopping that from happening.

Regards,
Barry Smith

From: John Barry Smith <barry@corazon.com>
Date: April 30, 1998 11:08:08 AM PDT
To: FAAOAI
Subject: **Cargo door sill confusion**

Dear Mr. Streeter,

Please read and forward to FAA officials.

Cheers,
Barry Smith
Sam Farr
Member of Congress
17th District, California
House of Representatives
Congress of the United States
1117 Longworth Bldg
Washington, DC 20515-2861

Washington, DC

John McCain III

Member of Congress

Chairman, Committee on Commerce, Science, and
Transportation

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Dear Mr. Streeter and FAA officials involved with TWA 800 investigation, 29 April 1998

Will you please ask again for NTSB officials to meet with me so I can relate my concerns about the forward cargo door of TWA Flight 800? It's very important.

Serious confusion exists as to the location of the suspect ten latches, ten latching cams, and eight locking sectors of the forward cargo door of TWA 800. Conclusions about location and status of door parts in official exhibits and letters are totally contradicted by other official NTSB documents.

One NTSB official in charge of wreckage identification, David Mayer, recently said the forward cargo door sill is in three pieces and gave reference numbers, RF3A for the aft two latches, locks and sill; RF3G for the mid latches, locks and sill; and RF3H for the forward latches, locks and sill.

However:

RF3A in database has no reference to sill, latches and locks.

RF3G in database describes the piece as cargo door hinge and has no reference to sill, latches and locks.

RF3H in database is described as forward portion of lower right cargo door and has no reference to sill, latches, and locks.

There is no reference in the database to any forward cargo door sill, latches or locks.

The pieces of the forward cargo door in the database match the actual pieces hung on the wreckage reconstruction.

The photograph of the reconstruction shows the keel beam, pieces of the door, the door hinge, but the sill, latches and locks

are apparently absent.

Exhibit 15C states forward cargo door sill is in one piece, not three.

Personal correspondence from an FAA official, Bob Breneman, who examined a cargo door sill, declared it to be the forward door sill and all latched and locked, said it was in one piece, not three.

Why are there no references to forward cargo door sill, latches and locks in the wreckage database and yet the conclusion made that it was all latched and locked at water impact?

An explanation is possible: Mixup with the aft cargo door sill and latches:

The aft cargo door sill was found in one piece, registered in the database and had the latches and locks attached. The aft and forward cargo door sills are the same shape and size and function the same.

How does one distinguish between two identical pieces of shattered, twisted and dirty pieces of metal? A mistake is plausible.

Most of the very important pieces of the forward door are still missing and include the manual locking handle, two overpressure relief doors, two midspan latches and viewing ports.

Regardless of status of lower door sill latches and locks, the damage start location is the aft midspan latch of the forward cargo door. This is shown by the outward petal shaped bulge in the metal door frame. It is shown as outward explosion by the outward peeled skin above cargo door. It is shown by the red paint smears between the passenger windows above cargo door.

It is shown by the absence of most of the cargo door skin and most of the complex mechanisms in the door. The aft midspan latch area has the petal shaped outward bulge indicating an explosive decompression rupture. None of the midspan latches has been recovered, not the two from the forward door nor the two from the aft door. All of the forward cargo door material around the aft midspan latch is missing from database and from wreckage reconstruction.

There is enough doubt about the status of locks and latches in the forward cargo door to initiate a thorough examination and evaluation of a forward cargo door opening in flight for TWA 800. It was the prime suspect early on and it is still the prime suspect.

The evidence of paint smears, twisted outward metal, and shape of explosive shattered outward zone proves cargo door area opened in flight. The cause of that opening may then be determined.

Regarding the recent response of Shelly Hazle of NTSB with the below excerpt:

"For example, Mr. Smith claims that there are 10 latches on the cargo door and that the Board only discusses eight in the above mentioned report. While a superficial description of the door might imply that there are 10 latches, Mr. Smith is, in fact, incorrect in implying that they all hold the door onto the fuselage. The eight at the bottom of the door, which were discussed in the report actually hold the door closed - the other two, one on each side of the door are merely "alignment latches" and do not hold the door closed."

There are 'alignment' devices in the door already, they are called, 'pull-in hooks', one hook on each side. The midspan latches do exactly that, latch. And they had to latch an eight foot slice in a pressurized hull against 38115 pounds of internal pressure for TWA 800. Proof that midspan latches latch is UAL 811 that has forward midspan latch pin showing no damage yet the aft midspan latch pin showing extensive heat damage during the forward cargo door opening event. In fact, it may have been the 'latching' action of that aft midspan latch that held that door closed for the 1.5 seconds described in NTSB AAR 92/02 before door opened fully that allowed sufficient decompression so that only a ten foot by twenty foot piece of fuselage skin was ripped off, instead of the thirty by forty foot hole the other three planes had, thus allowing UAL 811 nose to stay on and the others to come off.

NTSB implies in the quote from Ms. Hazle that the two midspan latches have not been recovered but, not to worry, they are not important, but they are not in the database and NTSB tacitly admits they have not been recovered by saying they are not important anyway.

Latches latch. All ten latches in each cargo door are essential to hold door closed.

To the claim by NTSB and FAA officials that they have responded to my concerns in great detail numerous times, the attached excerpts reveal the few times I been responded to, and always at the behest of Senator John McCain or Congressman Sam Farr. The one detail is the reiteration of the NTSB explanation of center tank as initial event with no discussion of cargo door except to conclude that eight latches latched means all latched. The few NTSB opinions about the cargo doors are

untrue and easily refuted with NTSB documents, exhibits, and photographs.

Two officials, Neil Schalekamp and David Mayer were forthcoming at first. Then, within days, both refused to talk further with an inquiring member of the public. Mr. Mayer, after being told to by Dr. Bernard Loeb, refused to even repeat public docket information he had said several days earlier.

Many high resolution pictures were taken in May 1997 of the forward cargo door in the wreckage reconstruction by Mr. Jan Staller for the New York Times but all photographs were kept by NTSB, the New York Times magazine has none. There are none of those high resolution photographs of the cargo door area in the NTSB CD-ROM which has many pictures of the TWA 800 reconstruction.

This is a civilian airliner accident during peacetime in US territorial waters with an incomplete public docket. To silence Neil Schalekamp of FAA and David Mayer of NTSB about data in the public docket is wrong and suspicious. To refuse to meet with me to discuss a safety matter supported by NTSB documents at the request of Senator McCain is strange. For Mr. Schalekamp of FAA and Mr. Drake of NTSB to point blank tell me they will not respond to me, a citizen speaking about aviation safety to safety officials, is very irregular, even negligent of their safety responsibility.

Total forward cargo door references in the wreckage database:

B250 RF3A Stringer with attached cargo door.

B008 RF3B Stringer with floor beam.

B250 RF3C Stringers with rear top portion of forward cargo

door.

B189 RF3D Stringers with top right corner of forward cargo door.

B221 RF3E Small section upper forward cargo door.

B001 RF3F Stringer.

B007 RF3G Cargo door hinge, 2 rollers.

B2017 RF3H Forward portion lower right forward cargo door.

Missing items of forward door: Lower cargo door sill, eight bottom latches, eight bottom pins, eight locking sectors, two midspan latches, two midspan pins, eight viewing ports, two overpressure relieve doors, manual locking handle, torque tubes, and approximately seventy percent of door skin.

Total aft cargo door references in the wreckage database:

C122 RF45A Aft cargo door lower sill latches and locks.

C1080 RF45E Aft cargo door surround.

C644 RF45F Piece of cargo door.

C2133 RF45G Aft cargo door fragment.

C111..... Aft cargo door cutout

.....RF54E Forward lower corner of aft cargo door cutout.

C2155 RF98 Outer frame aft cargo door panel (aft upper main cargo door sill)

C2162.....Aft cargo door doorstep.

C2252 RF30A Stringer aft cargo door hinge.

TG1.....Cargo door 7'x3'x1'.

Missing items of aft door: midspan latches, manual locking handle, torque tubes, viewing ports, two overpressure relieve doors, approximately twenty percent of door skin.

References to forward cargo door sill from FAA:

29 Oct 97 letter from Mr. Wojnar/Pederson/Breneman to JBS:
"In addition, the door latches at the bottom of the door were still attached to the fuselage lower sill structure. This indicates the door was in the 'latched and locked' position at the time of impact with the water." "However, wreckage for the entire door was recovered at the same location as the nose section and had the same impact damage as the surrounding fuselage structure on the right side. This is additional verification that the forward cargo door had not opened in flight or separated from the airplane."

18 Nov 96 letter from Mr. McSweeney/Kirkpatrick, FAA, to Congressman Farr:
"The Federal Aviation Administration (FAA) has no evidence that door failures played a role in the TWA flight 800 accident."

30 Jan 1998 letter from Neil Schalekamp, FAA, to JBS:
"While no scenario has been categorically proven to be the cause, it is believed, based upon available data, that the center wing tank (CWT) explosion preceded any separation of the forward cargo door. The paint markings and structural deformation that you cite, do indicate an outward explosion, generally accepted to be caused by the explosion of the CWT. Furthermore, you mentioned that the forward cargo door was recovered a considerable distance from the rest of the structure. This could be due to its aerodynamic characteristics and prevailing winds at the time of the accident, rather than attributing this as the primary cause of the accident."

"You may not agree with the reasoning of the official accident investigators, but I want you to understand the evidence to date indicates that the CWT explosion preceded any fuselage breakup, including damage to the forward cargo door."

19 Feb 1998 letter from Mr. Neil Schalekamp to JBS:

"The theory of an explosive decompression, due to a sudden opening of the forward cargo door was one theory that was examined. However, it has been determined that this did not occur. Based upon the existing evidence, the National Transportation Safety Board, (NTSB), the agency in charge of the accident investigation, believes that the probable cause of the accident was a center wing fuel tank (CWT) explosion, due to an internal fuel tank ignition source. The FAA agrees with the NTSB on this matter.

You apparently believe that the forward cargo door precipitated the accident scenario by initially separating from the airplane. The evidence from the reconstructed 747 airplane reveals that the forward cargo door was attached to the forward section of the airplane and was latched in the closed position when this section of the plane impacted the ocean."

References about forward cargo door from NTSB:

24 Oct 1997 letter from Chairman Hall, NTSB to Congressman Farr:

"Please be assured that our team has examined all of the structure recovered from TWA flight 800, approximately 95%--including all of the cargo door mechanisms and structures. Early on in the investigation we determined conclusively that the cargo doors were latched and locked at impact with the water, and there was no evidence of any failure of any of the latching mechanisms on the doors."

20 November 1997 Letter from Peter Goelz of Sandy Hentges of Congressman's Farr's office:

"As Congressman Farr was advised by letter dated October 24, 1997, early in the investigation we determined conclusively that

the cargo doors were latched and locked at impact with the water, and there was no evidence of any failure of any of the latching mechanisms on the doors."

19 December 1997 letter from Chairman Hall, NTSB to JBS:
"However, to repeat, the investigation of the accident involving TWA flight 800 has revealed no evidence to suggest that a failure of a cargo door precipitated the event."

12 January 1998 letter from Jim Wildey, NTSB, to JBS:
"The Safety Board has received your letter to the Chairman, dated December 30, 1997, concerning the possibility that the TWA 800 accident was related to an in-flight opening of a cargo door. As conveyed to you in previous letters we have sent you, the Safety Board believes that sufficient facts have been gathered to rule out this possibility."

10 March 1998 letter from John B. Drake, NTSB, to JBS:
"As we have stated in numerous previous responses, the investigation team has gathered sufficient facts to rule out this possibility."

17 March 1998 letter from Chairman Hall, NTSB, to JBS:
"As stated in our most recent letter dated March 10, 1998, the TWA flight 800 investigative team has gathered sufficient facts to rule out this possibility of an in-flight opening of a cargo door. We do not believe a meeting is necessary to further discuss this issue."

Responses to JBS regarding further communications:

10 March 1998 letter of John B. Drake of NTSB to JBS :

"We consider our correspondence on this subject to be complete. Should you continue to reiterate your position on this issue in

future correspondence, you should expect no further response from the Safety Board."

30 Jan 1998 letter of Neil Schalekamp of FAA to JBS :

"Please note that this office will no longer be responding to your further inquiries about these same concerns, including your February 6 and February 9 letters that I just received."

17 March 1998 letter of Jim Hall of NTSB to JBS :

"We do not believe a meeting is necessary to further discuss this issue."

The above rejections directly contradict NTSB's recent statements on their website:

Most Wanted Transportation Safety Improvements

"...a program to increase the public's awareness of, and support for, action to adopt safety steps that can help prevent accidents and save lives."

I'm a member to the public, I'm aware and support action to adopt safety steps that can help prevent accidents and save lives.

There is urgency according to my numbers:

June 23, 1985, AI 182, nose off at forward cargo bay, 329 dead. No forward sill recovered.

March 10, 1987, PA 125, forward cargo door open in flight, 0 dead. Latches unlatched on forward sill.

December 21, 1988, PA 103, nose off at forward cargo bay, 270 dead. No forward sill status reported.

February 24, 1989, UAL 811, forward cargo door open in flight, 9 dead. Latches unlatched on forward sill.

June 13, 1991, UAL preflight, uncommanded aft cargo door open

on ground. 0 dead. Latches unlatched on aft sill.
July 17, 1996, TWA 800, nose off at forward cargo bay, 270
dead. No forward sill listed as recovered.

AI 182 to TWA 800 is approximately 3993 days.
Approximately 666 days between events.
Approximately 649 days since TWA 800.
Approximately 17 days to go, from April 29 to May 15.
65 days minimum; four years and eleven months for maximum
between events.
0 deaths to 329 deaths as consequence.

The law of averages indicates an uncommanded opening of a
starboard side cargo door will occur on an early model Boeing
747 with varying consequences from three months after July
17th, 1996 to June 23, 2001 with the mean occurring on May
15th, 1998. The airline with the most Boeing 747s, 41, and the
oldest average at 19.9 years, is Northwest Airlines.

It would not be unusual for a NWA early model 747 to have an
uncommanded cargo door opening with varying consequences in
the next few months.

Quick action needs to be taken now. Search, locate, retrieve, and
examine the complete forward cargo door of TWA 800 to include
the sill, all ten latches, all eight locks, manual locking handle,
viewing ports, overpressure relief doors, torque tubes, and
missing skin.

While waiting for the recovery effort to produce the forward door
sill, latches and locks:

A. Examine the extensive wreckage evidence to consider as an
explanation: Wiring short from bare wire to door unlatch motor

to door rupture at aft midspan latch resulting in explosive decompression of thirty foot by forty foot hole in the nose of TWA 800 on the right side forward of the wing. The weakened nose would then be torn off by the 300 knot slipstream.

B. Check the wiring as described in NTSB Safety Recommendations Rprt_Nbr: A-91-83 and -84

- (1) the wiring bundle in the area normally covered by the conduit for the presence of damaged insulation (using either an electrical test method or visual examination);
- (2) the conduit support bracket and attached standoff pin on the upper arm of the forward lift actuator mechanism;
- (3) the flexible conduit for the presence of cracking in the convoluted innercore.

C. Check the wiring as described in NTSB AAR 92/02 UAL 811 cargo door accident:

Plug P3 and Plug P4 at a distance between three to four inches from plug pin tips. The P4 damage location may correspond to wire bundle clamp positions. These areas are where the chafed bare wires shorted on the door latch actuator motor to the unlatch position.

For NTSB officials to refuse to talk with the missile or meteor proponents for TWA 800 is understandable based on the evidence and lack of precedent. To refuse to talk with the wiring/cargo door proponent is not understandable based on the wreckage evidence and the precedent of faulty wiring and previously opened inflight forward cargo doors in early model Boeing 747s.

To discuss in a meeting the wiring/cargo door explanation is reasonable and understandable. Please be reasonable and understanding.

Very Respectfully,

John Barry Smith
551 Country Club Drive,
Carmel Valley, CA 93924
408 659 3552
barry@corazon.com

From: John Barry Smith <barry@corazon.com>

Date: May 12, 1998 12:38:30 PM PDT

To: FAAOAI

Subject: Cracked wiring found in TWA 800 cargo door zone.

Dear Mr. Streeter, please forward to
Thomas McSweeny
Ron Wojnar,
Neil Schalekamp
Bob Breneman.

Cheers,
Barry Smith

Sam Farr
Member of Congress
17th District, California
House of Representatives
Congress of the United States
1117 Longworth Bldg
Washington, DC 20515-2861

John McCain III
Member of Congress
Chairman, Committee on Commerce, Science, and
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United States Senate
241 Russell Senate Office Bldg
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James Hall
Chairman,
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National Resource Specialist
National Transportation Safety Board
490 L'Enfant Plaza East, SW.
Washington, DC 20594

David Mayer
NTSB Wreckage Database Manager
National Transportation Safety Board
490 L'Enfant Plaza East, SW.
Washington, DC 20594

Thomas McSweeny
Director, Aircraft Certification Service

FAA National Headquarters
800 Independence Avenue, S.W
Washington D.C 20591

Lyle Streeter
FAA AAI
Aircraft Accident Investigator
FAA National Headquarters
800 Independence Avenue, S.W
Building FOB 10A, Room 838,
Washington D.C 20591

Ron Wojnar,
Manager
Federal Aviation Administration
Transport Airplane Directorate
1601 Lind Ave. S.W.
Renton, WA 98055-4056

Neil Schalekamp
Manager, Propulsion & Mechanical Systems and Cabin Safety
Branch
Transport Standards Staff
Transport Airplane Directorate, ANM-100
1601 Lind Ave. S.W.
Renton, WA 98055-4056

Bob Breneman,
Aerospace Engineer,
Federal Aviation Administration
Transport Airplane Directorate, ANM-100
1601 Lind Ave. S.W.
Renton, WA 98055-4056

Dear Mr. Streeter, NTSB and FAA Officials involved with TWA
800 investigation, 12 May 1998

Good work finding cracks in frayed wire in Boeing airliners and taking such quick action to investigate and confirm. As the mechanic reported frayed wires detected, I report frayed wires detected. Please take the same decisive action to investigate and confirm. I ask that you expand your investigation into frayed wiring to Boeing 747s based upon the following discovery of frayed to the core wiring in TWA 800.

"Some wires found in the section of W480 from forward of station 570 and identified as BMS13-42A had numerous cracks in the insulation. Most of the cracks in this bundle were found to expose the core conductor when examined by microscope. Only within five feet of the aft end of the W480 bundle from station 570-900 were insulation cracks found." NTSB Public Docket Exhibit 9A page 116:

Please note that BMS13-42A is known faulty Poly-X wiring. Cargo door location is FS 560-670 and cracked wires are within that zone. Frayed wires in that area have shorted before and caused the forward cargo door to open in flight, NTSB AAR 92/02 UAL 811.

Other wiring events in 747 forward cargo holds:

- A. 1996, burning smell in forward cargo compartment, found damaged wiring shorted to ground, charring found.
- B. Oct 12, 1996, Wire bundle arcing and resultant fire at aft bulkhead of forward lower lobe cargo hold on 747-200 freighter.

Source: NTSB Exhibit 9C, Attachments to the Systems Group Factual Report page 44, 45, 46:

Please expand chafed Poly X wiring checks to Boeing 747s in the cargo door areas.

To review:

A. Examine the extensive wreckage evidence to consider as an explanation: Wiring short from bare wire to door unlatch motor to door rupture at aft midspan latch resulting in explosive decompression of thirty foot by forty foot hole in the nose of TWA 800 on the right side forward of the wing. The weakened nose would then be torn off by the 300 knot slipstream.

B. Check the cargo door wiring as described in NTSB Safety Recommendations Rprt_Nbr: A-91-83 and -84

(1) the wiring bundle in the area normally covered by the conduit for the presence of damaged insulation (using either an electrical test method or visual examination);

(2) the conduit support bracket and attached standoff pin on the upper arm of the forward lift actuator mechanism;

(3) the flexible conduit for the presence of cracking in the convoluted innercore.

C. Check the cargo door wiring as described in NTSB AAR 92/02 UAL 811 cargo door accident:

Plug P3 and Plug P4 at a distance between three to four inches from plug pin tips. The P4 damage location may correspond to wire bundle clamp positions. These areas are where the chafed bare wires shorted on the door latch actuator motor to the unlatch position.

D. Examine for wiring cracks five feet of the aft end of the W480 bundle from station 570-900 as described in TWA 800 Public Docket Exhibit 9A, page 116.

E. Check for damaged wiring in forward cargo compartment as described in NTSB Exhibit 9C.

Regarding the recent response of Shelly Hazle of NTSB with the below excerpt:

"For example, Mr. Smith claims that there are 10 latches on the cargo door and that the Board only discusses eight in the above mentioned report. While a superficial description of the door might imply that there are 10 latches, Mr. Smith is, in fact, incorrect in implying that they all hold the door onto the fuselage. The eight at the bottom of the door, which were discussed in the report actually hold the door closed - the other two, one on each side of the door are merely "alignment latches" and do not hold the door closed."

If you believe that four eight foot slices into a large sausage shaped pressurized hull do not need 'latches' then you are beyond reason. Please be reasonable. There are four eight foot slices in a 747 hull, two each for each cargo door. All four slices have one midspan latch to latch the door closed by its latching action of latching cam around the latching pin. One latch for eight feet of slice. And it has no locking sector to stop the latching cam from becoming unlatched around its latching pin when the door unlatch motor turns on when cracked Poly X wiring shorts, as it has done exactly before. That one midspan latch cam around the latching pin may be sufficient provided there is no effort to unlatch it. If there is, it unlatches slightly and internal 3.5 pressure differential ruptures door at aft midspan latch of the

forward cargo door, as it has done before. As the photograph of TWA 800 shows with outward peeled skin, red paint smears, and outward petal shaped bulge at aft midspan latch, that aft midspan latched and ruptured cargo door in flight, as it has done before.

Latches latch. All ten latches in each cargo door are essential to hold door closed. All midspan latches have not been recovered to be examined. The master locking handle has not been recovered to determine manual locking status.

Cracked wiring causes bad things to happen. You are checking the fuel tank explosion consequence, please check the cargo door opening in flight consequence. You now know that cracked to the bare core wiring was found in TWA 800 cargo door zone. You know that cracked wiring caused cargo door to open in flight before causing fatalities. You know that cracked wiring has caused fires in the forward cargo bay before, very close to center fuel tank. Please check out the cracked wiring caused forward cargo door to open in flight explanation for TWA 800.

I ask again for NTSB officials to meet with me so I can relate my concerns about the forward cargo door of TWA Flight 800.

Very Respectfully,

John Barry Smith
551 Country Club Drive,
Carmel Valley, CA 93924
408 659 3552
barry@corazon.com

From: Lyle Streeter <Lyle.Streeter@faa.dot.gov>
Date: May 13, 1998 8:03:25 AM PDT
To: barry@corazon.com (IPM Return requested)
Subject: Re: Cracked wiring found in TWA 800 cargo door zone.

Forwarded as requested.

Respectfully,

Lyle Streeter

Reply Separator

Subject: Cracked wiring found in TWA 800 cargo door zone.
Author: barry@corazon.com at Internet
Date: 5/12/98 15:57

Dear Mr. Streeter, please forward to
Thomas McSweeny
Ron Wojnar,
Neil Schalekamp
Bob Breneman.

Cheers,
Barry Smith

Sam Farr

Member of Congress
17th District, California
House of Representatives
Congress of the United States
1117 Longworth Bldg
Washington, DC 20515-2861

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NTSB Wreckage Database Manager

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Director, Aircraft Certification Service
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Lyle Streeter
FAA AAI
Aircraft Accident Investigator
FAA National Headquarters
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Building FOB 10A, Room 838,
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Renton, WA 98055-4056

Neil Schalekamp
Manager, Propulsion & Mechanical Systems and Cabin Safety
Branch
Transport Standards Staff
Transport Airplane Directorate, ANM-100
1601 Lind Ave. S.W.
Renton, WA 98055-4056

Bob Breneman,
Aerospace Engineer,
Federal Aviation Administration
Transport Airplane Directorate, ANM-100
1601 Lind Ave. S.W.
Renton, WA 98055-4056

Dear Mr. Streeter, NTSB and FAA Officials involved with TWA
800
investigation, 12 May 1998

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Most of the
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station 570-900 were insulation cracks found." NTSB Public
Docket Exhibit

9A page 116:

Please note that BMS13-42A is known faulty Poly-X wiring.
Cargo door
location is FS 560-670 and cracked wires are within that zone.
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bulkhead of
forward lower lobe cargo hold on 747-200 freighter.

Source: NTSB Exhibit 9C, Attachments to the Systems Group
Factual Report
page 44, 45, 46:

Please expand chafed Poly X wiring checks to Boeing 747s in
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To review:

A. Examine the extensive wreckage evidence to consider as an
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Wiring short from bare wire to door unlatch motor to door
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B. Check the cargo door wiring as described in NTSB Safety Recommendations

Rprt_Nbr: A-91-83 and -84

(1) the wiring bundle in the area normally covered by the conduit for the

presence of damaged insulation (using either an electrical test method or

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C. Check the cargo door wiring as described in NTSB AAR 92/02 UAL 811 cargo

door accident:

Plug P3 and Plug P4 at a distance between three to four inches from plug

pin tips. The P4 damage location may correspond to wire bundle clamp

positions. These areas are where the chafed bare wires shorted on the door

latch actuator motor to the unlatch position.

D. Examine for wiring cracks five feet of the aft end of the W480 bundle

from station 570-900 as described in TWA 800 Public Docket

Exhibit 9A, page
116.

E. Check for damaged wiring in forward cargo compartment as described in NTSB Exhibit 9C.

Regarding the recent response of Shelly Hazle of NTSB with the below excerpt:

"For example, Mr. Smith claims that there are 10 latches on the cargo door and that the Board only discusses eight in the above mentioned report. While a superficial description of the door might imply that there are 10 latches, Mr. Smith is, in fact, incorrect in implying that they all hold the door onto the fuselage. The eight at the bottom of the door, which were discussed in the report actually hold the door closed - the other two, one on each side of the door are merely "alignment latches" and do not hold the door closed."

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door to open
in flight explanation for TWA 800.

I ask again for NTSB officials to meet with me so I can relate my
concerns
about the forward cargo door of TWA Flight 800.

Very Respectfully,

John Barry Smith
551 Country Club Drive,
Carmel Valley, CA 93924
408 659 3552
barry@corazon.com

barry@corazon.com
<http://www.corazon.com/>

From: John Barry Smith <barry@corazon.com>

Date: May 20, 1998 5:56:40 PM PDT

To: FAAOAI

Subject: **Orange zone/door wiring**

Dear Mr. Streeter, please forward to:

Thomas McSweeny

Ron Wojnar,

Neil Schalekamp

Bob Breneman,

If I had their email addresses I could send it directly to them, so thanks for the effort.

Cheers,

John Barry Smith

Sam Farr

Member of Congress

17th District, California

House of Representatives

Congress of the United States

1117 Longworth Bldg

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John McCain III

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Aircraft Accident Investigator

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Neil Schalekamp
Manager, Propulsion & Mechanical Systems and Cabin Safety
Branch
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Bob Breneman,
Aerospace Engineer,
Federal Aviation Administration
Transport Airplane Directorate, ANM-100
1601 Lind Ave. S.W.
Renton, WA 98055-4056

Dear Mr. Streeter,

21 May 1998

The missing eighty percent of the forward cargo door of TWA
800 may be in the Orange debris field. The retrieved items have
tag numbers 9000 to 9999:

Public Docket SA-516, Exhibit No. 7A, Structures Group Chairman's Factual Report of Investigation, page 5, "In addition, an area 2.7 nautical miles in radius, centered at 40 degrees 38 minutes 54 seconds North, 072 degrees 40 minutes 23 seconds West, was defined. The portions of this area that did not already lie in either the Red, Yellow or Green zone were designated the Orange Zone. The center of this zone corresponds to the last secondary radar return from the aircraft."

"The database created to track recovered parts is known as the TAGS database. A series of metal tags were issued to be attached to the recovered parts as durable identification tags. The metal tags were colored one of six possible colors."

"Orange Recovered from areas other than Areas 1, 2 or 3 during the trawling operation."

"9000-9999 Issued by the trawlers working the western half of the Orange zone."

Gentlemen, please note there are no Orange Zone pieces in the TAGS database. There is no mention anywhere of the pieces which were found in the Orange zone by trawlers and issued 9000 series metal identification tags. Eighty percent of the forward cargo door is missing. The NTSB Trajectory Study Exhibit, page 50, shows pieces from the forward cargo bay were the first to leave TWA 800 and left at the same time as the last secondary radar beacon was returned. It is very likely that the missing pieces of the forward cargo door are in the Orange zone and may have already been retrieved and tagged with 9000 series tags.

Where are the Orange zone pieces recovered from TWA 800?

What pieces were they? Where did they come from on the aircraft? Where are the missing eighty per cent of the forward cargo door?

I direct the questions for answers to Mr. David Mayer, the person in charge of the wreckage database.

The larger point is this, chafed wiring to the core is reported on TWA 800 in NTSB Public Docket Exhibit 9A page 116:

"Some wires found in the section of W480 from forward of station 570 and identified as BMS13-42A had numerous cracks in the insulation. Most of the cracks in this bundle were found to expose the core conductor when examined by microscope. Only within five feet of the aft end of the W480 bundle from station 570-900 were insulation cracks found."

Please note that BMS13-42A is known faulty Poly-X wiring. Cargo door location is FS 560-670 and cracked wires are within that zone. Frayed wires in that area have shorted before and caused the forward cargo door to open in flight, NTSB AAR 92/02 UAL 811.

Fuel tank wiring is shown to be chafed to bare wire. The TWA 800 NTSB document shows cargo door area wiring is chafed to bare wire also. FAA and NTSB officials are taking efforts to inspect fuel tank wiring. Cargo door wiring should also be inspected, especially since cargo door wiring is a known killer of nine in UAL 811 accident.

There's more reason to inspect cargo door wiring in 747s as stated in NTSB Exhibits:

"A. 1996, burning smell in forward cargo compartment, found damaged wiring shorted to ground, charring found.

B. Oct 12, 1996, Wire bundle arcing and resultant fire at aft bulkhead of forward lower lobe cargo hold on 747-200 freighter. Source: NTSB Exhibit 9C, Attachments to the Systems Group Factual Report page 44, 45, 46."

These are real reports of real events showing real danger. They are reported to you, Mr. McSweeney.

To be blind to the red paint smears above the cargo door of TWA 800 is not right; your rods and cones respond to color the same as mine. Those red paint smears indicate door opened in flight, just like paint smears indicated door opened in flight for UAL 811. Are they not there? Are there not many? Are they not red?

I see them and Mr. Schalekamp of FAA saw them, so I know they exist as well as being in pictures on the NTSB CD-ROM of TWA 800. They are not going to fade away with time.

The forward cargo door opened in flight for TWA 800. To disregard paint smears, outward peeled skin on the side and bottom of fuselage, and the petal shaped outward bulge at the aft midspan latch of the forward cargo door is very strange, it's not right. It's not worthy of NTSB.

It's one thing to be forceful in prosecuting the center tank as the initial villain, but it's another thing to ignore a previous killer of nine that left very similar evidence to this crime as in another crime.

To check the cargo door wiring as well as the fuel tank wiring is wise and prudent. To not do so is reckless in the face of

compelling evidence. I direct that opinion to Dr. Loeb.

A citizen has done much research into high time Boeing 747 accidents involving hull ruptures in flight. I ask that I be allowed a meeting during which I may present evidence for consideration and discussion to government aviation safety officials.

I pose that request to Congressman Farr and Senator McCain. It is apparent the aviation officials themselves will not comply without orders from above. I need help.

To me, the following is reasonable and prudent:

1. Check known faulty Poly X wiring in cargo door areas of early 747s for chafed to bare wires.
2. Offer explanation of red paint smears, outward peeled skin, and petal bulge at aft midspan latch of forward cargo door of TWA 800.
3. Locate missing eighty percent of forward cargo door by either finding it in Orange Zone, Calverton hangar, or locating it on the bottom of the ocean.
4. Meet with citizen, as the suggestion of a Senator, to discuss and consider real evidence as discovered in research of NTSB and FAA documents regarding wiring/cargo door explanation for TWA 800.

Will you please be reasonable and prudent?

I ask that question of all.

Respectfully,
John Barry Smith
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barry@corazon.com

From: John Barry Smith <barry@corazon.com>
Date: May 29, 1998 12:12:58 PM PDT
To: FAAOAI
Subject: Wiring/cargo door evidence from US government documents

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Member of Congress
17th District, California
House of Representatives
Congress of the United States
1117 Longworth Bldg
Washington, DC 20515-2861

John McCain III
Member of Congress
Chairman, Committee on Commerce, Science, and
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Dear elected, appointed, and employed US government officials
involved with TWA 800 investigation, 29 May 1998

Gentleman, I respectfully address all as if this were a cyberspace meeting and it is my turn to speak. Most of us have exchanged letters, emails, conversations in person or telephone calls in the past. The case for wiring/cargo door opening in flight as an explanation for the TWA accident grows stronger every day with evidence such as this:

Quote from TWA 800 Public Docket 516A, Exhibit 9A Systems

Group Chairman's Factual report of Investigation, Page 47, "A Boeing telefax of June 25, 1997, stated that: The Poly-X wire was used as general purpose wire on the RA164 (TWA 800) aircraft. Wire insulation known as Poly-X had three in-service problems:

- Abrasion of the insulation in bundles installed in high vibration areas.

(This problem was corrected by Boeing Service Bulletin No. 747-71-7105, Dated July 19, 1974)

- Random flaking of the topcoat.

- Insulation radial cracks in tight bend radii.

Radial cracking phenomenon of the Poly-X wire was mainly associated with mechanical stress. Bend radius is the largest contributor to mechanical stress in installed wire or cable.

Presence of moisture in conjunction with mechanical stress is also a contributor."

The Systems Exhibit 9A continues on same page 47, "Evidence of arcing or short circuiting was found in the fuselage of N93119, (TWA 800) in addition to what was found in the wiring from the raceway below the left cabin floor and near the forward wing spar.

The Systems Exhibit 9A continues, page 116:

"Some wires found in the section of W480 from forward of station 570 and identified as BMS13-42A had numerous cracks in the insulation. Most of the cracks in this bundle were found to expose the core conductor when examined by microscope. Only within five feet of the aft end of the W480 bundle from station 570-900 were insulation cracks found."

(Please note that BMS13-42A is Poly-X wiring. Cargo door location is FS 560-670 and cracked wires discovered are within

that zone. Frayed wires in that area have shorted before and caused the forward cargo door to open in flight, NTSB AAR 92/02 UAL 811. Water has been seen pouring out of a forward cargo bay of a Boeing airliner. Water and leaking electricity make a powerful conductor. Both are known to exist in Boeing airliners.)

NTSB Exhibit 9C, Attachments to the Systems Group Factual Report, page 44:

"Response: There was one reported wire insulation abrasion on the 747 in 1996. There operator reported that a burning smell was noted during cargo loading in the forward cargo compartment. Cargo loading system wiring was found damaged and shorted to ground below the cargo floor at station 650, below the aft right corner of a large ball mat. A wiring loom "p" clip was found broken enabling the wire to chafe against structure. A hole was found burned through the bottom angle of the cargo floor cross member, where the wiring clip attached, and charring was evident in the surrounding insulation blanket. Repairs were made."

Page 44: "Response: There were seven reported wiring fires on the 747 in 1996."

Page 45: "f. 747-200 reported on October 12, 1996 Wire bundle arcing and resultant fire at aft bulkhead of forward lower lobe cargo hold on a747-200 freighter. This occurred with the airplane on the ground, during post C-check functional test. Note: Portions of the damaged wire bundles were forwarded to Boeing for evaluation in determining the cause of the damage. The results of the analysis indicated the primary conductor(s) sustained mechanical or thermal damage prior to the application of electrical power."

Page 46, "g. 747-400 reported on November 1, 1997, (see response to question 1)

There was one reported wire insulation abrasion on the 747 in 1996. The operator reported that a burning smell was noted during cargo loading in the forward cargo compartment. Cargo loading system wiring was found damaged and shorted to ground below the cargo floor at station 650, below the aft right corner of a large ball mat. A wiring loom "p" clip was found broken enabling the wire to chafe against structure. A hole was found burned through the bottom angle of the cargo floor cross member, where the wiring clip attached, and charring was evident in the surrounding insulation blanket. Repairs were made."

Page 57, Letter from Commander Naval Air Systems Command to National Electrical Manufacturers Association, 1 Oct 82, "As you know, the problems with poly-x wire are well known to headquarters and its use had been curtailed."

FAA Aircraft Certification Service Mission Statement:

<http://www.faa.gov/avr/air/hq/mission.htm>

"Aviation Safety Begins With Safe Aircraft

The Aircraft Certification Service is responsible for the safety of civil aircraft. The inherent safety of an aircraft is a function of its design integrity and its manufacturing quality. It is the mission of the Aircraft Certification Service to promote safety by:

Prescribing safety standards governing the design, production quality, and airworthiness of civil aeronautical products;

Administering design, production quality, and finished product certification programs in compliance with the prescribed safety standards;

Monitoring safety performance, and acting to provide continued

operational safety of aircraft;

Working in partnership with aviation safety authorities of other countries to continuously improve the safety of the international air transportation system and achieve international harmonization of aircraft certification standards and practices.

Our program priorities are:

ÊÊÊÊFIRST: Continued operational safety including surveillance.

ÊÊÊÊSECOND: Safety standards, policies, and procedures.

ÊÊÊÊTHIRD: Type, production, and airworthiness certification."

Text of 1 May 98 letter from Congressman Farr:

"Dear Mr. Smith:

Thank you for contacting me recently regarding your ongoing interest in the forward cargo door of TWA flight 800. I appreciated hearing from you.

I am, of course, glad to help, and am therefore in touch with the appropriate government agency on your behalf. I will write to you again as soon as a response is available, but please let me know if there is anything further that I can do for you in the interim.

Sincerely,

Sam Farr
Member of Congress

Text of 12/19/86 email Senator McCain:

Dear Mr. Smith,

Thank you again for contacting me with your concerns regarding the potential hazards involving Boeing 747s.

As you know, I have passed the information you sent to Chris Paul and he has informed me of your findings. I have since forwarded the material you sent to the Commerce, Science and Transportation Committee for their review.

Again, thank you for contacting me. I am always glad to have the opportunity to be of assistance.

Sincerely,
John McCain
U.S. Senator
JM/jes

Excerpt of 4 Mar 98 letter from Senator John McCain to me: "I have received your letter regarding the forward cargo door of TWA Flight 800, and your interest in meeting with someone at the National Transportation Safety Board (NTSB) relating your concerns.

I have contacted the NTSB on your behalf, about your concerns. I have asked for a prompt response to be sent directly to you."

FAA and NTSB and manufacturers are taking efforts to inspect fuel tank wiring on all airliners. Cargo door wiring on Boeing 747s should also be inspected. A wiring caused inadvertent opening of the forward cargo door of TWA 800 in flight should also be investigated.

It's prudent.

1. Check known faulty Poly X wiring in cargo door areas of early 747s for chafed to bare wires.

2. Figure out explanation of red paint smears, outward peeled skin, and petal bulge at aft midspan latch of forward cargo door of TWA 800.
3. Attempt to locate missing eighty percent of forward cargo door by either finding it in Orange Zone, Calverton hangar, or from the bottom of the ocean.
4. Meet face to face with a citizen, as the suggestion of Senator McCain, to discuss and consider real evidence as discovered in research of NTSB and FAA documents regarding wiring/cargo door explanation for TWA 800.

Following the example of Congressman Farr of open discussion of TWA 800 and the inclusion of relevant correspondence in letters, I have put all your correspondence to me on my web site www.corazon.com. All emails and scanned letters are seen at [<http://www.corazon.com/correspondence.html>](http://www.corazon.com/correspondence.html)

Democracy and the internet in action.

Regards,

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From: John Barry Smith <barry@corazon.com>
Date: June 5, 1998 9:41:57 AM PDT
To: FAAOAI
Subject: **Inspect cargo door wiring too.**

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Chairman, Committee on Commerce, Science, and
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Dear Mr. Streeter and Official Persons who feel responsibility in
explaining TWA 800, 5 June 1998

There are cracked wires to the bare conductors in the cargo door area of TWA 800 as described by NTSB Systems Exhibit 9A, page 116:

"Some wires found in the section of W480 from forward of station 570 and identified as BMS13-42A had numerous cracks in the insulation. Most of the cracks in this bundle were found to expose the core conductor when examined by microscope. Only within five feet of the aft end of the W480 bundle from station 570-900 were insulation cracks found." Page 47 also states, "Evidence of arcing or short circuiting was found in the fuselage of N93119, (TWA 800) in addition to what was found in the wiring from the raceway below the left cabin floor and near the forward wing spar.

That's a fact and NTSB told me so. To be prudent, determine if the forward cargo door unlatch motor power on wire is among those cracked to the bare wires located by NTSB in TWA 800. NTSB did it before with UAL 811 in AAR 92/02 where a bare

chafed wire turned on the forward cargo door unlatch motor. There is a precedent of bare wires in that area causing a fatal accident in a high time Boeing 747. It would be prudent to rule out that event happening again by checking the bare wires discovered by NTSB in TWA 800 wreckage in cargo door area to see if it is the door unlatch motor wire.

True power always wants to know if it may be wrong and immediately take steps to confirm or rebut. True power knows error is weakness and will immediately correct the error to become strong again. Fake power ignores any evidence of error. It is weak and will fail. NTSB discovers the cause and makes recommendations to FAA. FAA orders the manufacturer to fix the problem. The problem is old cracked wiring. I come to elected officials, NTSB, and FAA officials because only you have to power to persuade the manufacturer to replace defective, old, and chafed wiring if necessary and it is necessary.

Very many, very red, and very large red paint smears exist on TWA 800 above the forward cargo door area on top of normal white paint in between the passenger windows. That's a fact and NTSB showed it to me by presenting the TWA 800 reconstruction photograph in which the many, large, red paint smears are clearly evident. <<http://www.corazon.com/TWA800hullrupture.html>> A precedent has been set of paint transfer marks in that area by UAL 811 as described in NTSB AAR 90/01 and AAR 92/02. <<http://www.corazon.com/811page42paintondoor.html>>

It would be prudent to confirm or rule out the red paint smears indicating an open cargo door in flight or not. One way would be to examine the cargo door hinge for overtravel impression damage, another precedent set by UAL 811 in NTSB in AAR

92/02. <<http://www.corazon.com/811reportcontentpage.html>>

There is outward peeled skin high up on the right side of TWA 800, also more outward shattered skin on the belly, and most of all, there is outward peeled skin forward of the wing on the right side, centered around the outward petal shaped bulge at the aft midspan latch of the forward cargo door. That's a fact and I know that because NTSB presented the photograph of TWA 800 wreckage reconstruction and described the outward peeled skin in NTSB exhibits.

Main deck floor beams above the forward cargo hold were broken downward in UAL 811 during the explosive decompression. That also happened in TWA 800. An explanation was offered by Mr. James Wildey of NTSB: Docket No. SA-516, Exhibit No. 18A, Sequencing Study, page 20, "The initial opening of the fuselage lower lobe (e.g. LF6A) would have the expected result of rapid depressurization accompanied by collapse of the main deck floor for some distance forward of STA 1000. The red area recovery of interior components as far forward as STA 600 would not be inconsistent with this floor collapse and associated structural breakup."

The red paint smears and the outward peeled skin strongly indicate the forward cargo door opened in flight, an opinion shortly held by Mr. Fred Schalekamp of FAA:

30 Jan 1998 letter from Neil Schalekamp, FAA, to JBS: "The paint markings and structural deformation that you cite, do indicate an outward explosion, generally accepted to be caused by the explosion of the CWT."

That's a fact and NTSB and FAA told me so in a letter and shown

in sooting diagrams in exhibits. To not see the very red, very many, and very large unusual paint smears, and to not see the outward, not inward, peeled skin is to defy reality. The red smears, downward floor beams, and the outward skin are there and strongly indicate cargo door opened in flight based on physics and precedent.

The forward cargo door did open in flight, but not by the overpressure of a center tank explosion because the cargo door pieces were unsooted, just like the forward pieces of the center fuel tank.

What else could cause the forward cargo door to open inflight? There is a precedent, UAL 811, as described in NTSB AAR 90/01 and AAR 92/02 in which a high time Boeing 747 suffered a hull rupture in flight forward of the wing which left a sudden loud sound on the CVR and an abrupt power cut to the FDR, paint transfer marks in cargo door area, and outward peeled skin, all caused by chafed to bare wire conductor in the cargo door area. <<http://www.corazon.com/811reportcontentpage.html>>

TWA 800 had a hull rupture forward of the wing which left a sudden loud sound on the CVR and an abrupt power cut to the FDR, paint transfer marks in cargo door area, outward peeled skin, and chafed to bare wire conductor discovered in cargo door area.

That is enough of a match to justify inspection of cargo door wiring in early Boeing 747s irrespective of other corroborative evidence of faulty Poly-X wiring discovered in Boeing airliners under NTSB and FAA orders.

Bare shorted wires have also caused fires in forward cargo holds

of Boeing 747s before.

NTSB Exhibit 9C, Attachments to the Systems Group Factual Report page 44, 45, 46. "1996, burning smell in forward cargo compartment, found damaged wiring shorted to ground, charring found.

B. Oct 12, 1996, Wire bundle arcing and resultant fire at aft bulkhead of forward lower lobe cargo hold on 747-200 freighter."

It would be prudent to inspect cargo door wiring in the forward cargo hold of early 747s since that wiring has been shown to be faulty in general, early Boeing airliner wiring has been shown to be faulty in particular, UAL 811, and faulty cargo door area wiring has shown up in the same area on a new fatal accident, TWA 800.

A solution to the mystery of the ignition source of the fireball and center tank fire may well be a fodded and on fire engine number 3 igniting disintegrating wing fuel tanks thousands of feet lower and seconds later than the initial event.

TWA 800 engine number three shows foreign object damage, fire, and uncontainment in the NTSB powerplant report and the structures report.

Exhibit 8A, page 11, paragraph 3, discussing results of engine 3 disassembly, "Of the 46 fan blades in the fan rotor, 21 blades with complete or partial airfoils and 6 root sections were recovered. All of the fan blades had sooting on the convex airfoil surfaces. Most of the full length airfoils were bent rearward and the tips outboard of the outer midspan shroud were bent forward slightly. About half of the fan blades had impact damage to the

leading and trailing edges. Almost all of the impact damage to the airfoils could be matched to contact with the midspan shroud on an adjacent blade. One full length blade had four soft body impacts along the leading edge and a partial airfoil had a soft body impact, which had some streaking extending rearward."

Exhibit No. 7A, Structures Group Report, page 33: "5.1 Horizontal Stabilizer, "Some of the items found in the horizontal stabilizer are sections of seat track, a stator blade from turbine section, and glitter." On 5.1.1 Right Horizontal Stabilizer, page 34, "An engine stator blade from turbine section penetrated the upper honeycomb surface near the outboard trailing edge.

A prudent action would be to rule in or rule out the precedent of UAL 811 applied to TWA 800. A risky action is to ignore many large red paint smears, downward broken floor beams, and much outward peeled skin and their clear implication of cargo door open in flight. The red paint smears will not fade away; they will always be many, large, and red in the photographs on the NTSB CD-ROM. The floorbeams will always be broken in Exhibit 18A. The outward peeled skin will always be shattered outward on the belly, the upper fuselage, and around the aft midspan latch of the forward cargo door in the photographs of TWA 800 on the NTSB CD-ROM. Engine number three will always be sooted, blades missing, and have soft body impacts as shown by NTSB Exhibit 8A.

A more prudent action is to ground all Boeing 747s with Poly-X wiring for total inspections and replacement of that wiring. A total wiring inspection casts the net wider to catch faulty wiring. By inspecting all the wiring to include the fuel tank wiring, the yaw damper wiring, and the known previously faulty cargo door power wiring, all wiring can all be cleared as intact and pose no

danger of shorting on, as has happened before fatally.

I understand the difficulty and turmoil the grounding would cause. Boeing would have much work to rewire the planes if necessary. If not feasible, new airliners would have to be built and the grounded ones used for parts, similar to what the Navy has done with their Poly-X F-14 Tomcats.

Am I a traitor? Does my belief of a wiring cargo door fault for TWA 800 and other early 747s hurt my country? Specifically, the Northwest quadrant which has an economy derived from the design, manufacture, and selling of 747s.

Here's my answer to myself on that one. No, I am not a traitor, I am a patriot. Here's why.

Seattle is successful and must remain so. Seattle is successful because nearby is built successful airplanes. Successful airplanes are the best selling ones. The best selling ones are the most made ones. The most made ones are the ones that make the most money. The ones that make the most money are the ones that fly the most. The ones that fly the most are the safest ones. The safest airplane is the most successful airplane. Period.

So, to present an explanation for an unsafe event, the crash of TWA 800, an early Boeing 747, is a good thing to do, even if proven wrong later. The goal is to make safe airplanes which will fly the the most and be sold the most and be made the most, thereby keeping our country's economy thriving.

My personal goal is to prevent death by preventing airplane crashes by preventing hull ruptures in flight on early 747s by preventing cracked bare wires shorting on the door unlatch motor

thereby allowing the aft midspan latch to rupture and allow the middle of the forward cargo door to burst open causing a large explosive decompression which allows the 300 knot slipstream to tear nose off. This inner goal was determined by the selfless action of my pilot who saved my life in a sudden night fiery fatal jet plane crash years ago and which I have never forgotten.

It is the duty of aviation professionals to strive to explain TWA 800. And yet, this loyal citizen is rebuffed when presenting to NTSB NTSB derived evidence of a supplemental explanation to TWA 800. Why is that?

If I can't have a real conversation with NTSB or FAA officials regarding TWA 800, here is an imaginary one that sums up the past two years.

JBS: "Hello, NTSB, I'm answering your plea for public assistance regarding the cause of TWA 800."

NTSB: "What do you want?"

"I believe the initial event is moisture meeting chafed to bare wire and shorting on cargo door motor to unlatch position causing rupture at aft midspan latch of forward cargo door in flight leading to thirty by forty foot hole of explosive decompression which allows 300 knot slipstream to tear nose off which leads to disintegrating aft fuselage, wings, and tail which ignite into fireball when fiery foddred engine number three meets vaporizing fuel thousands of feet lower and seconds later."

"No."

"There are many similarities to an event that happened before,

UAL 811, and TWA 800."

"You're crazy. Who are you?"

"Commercial licensed pilot, instrument rated, 1000 PIC hours, Navy jet navigator, aircraft owner, FAA Part 135 certificate holder, avionics technician, and survivor of sudden night fiery fatal jet airplane crash talking about a sudden night fiery fatal jet airplane crash."

"Go away."

"The evidence of red paint smears, outward peeled skin, and petal bulge at aft midspan latch support conclusion forward cargo door opened in flight, just like UAL 811."

"I'm ignoring you and will not respond to further comments."

"You are safety aviation officials who say you turn over every stone, who check out every explanation, who really want to know what happened to TWA 800, regardless of cause. Listen to me; talk to me."

"You are a wacky guy on the internet, you are bothering the real investigators and getting in the way, you have been told over and over again in great detail that you are wrong and we are right, you don't have your basic facts straight about the door, you should check with us before you say your nonsense to others, and you are a flake and we don't like you."

"Maybe, but so what? The messenger's style is independent of the truth of his content. Moisture and shorted wiring caused the crash of TWA 800. Why do you not ask questions to me, as real

investigators do, as I ask you?"

"We don't ask questions of citizens that we don't already know the answers to, we just make statements such as this: No, you're wrong, you're crazy, go away, we will not respond, goodbye, and thank you your for your interest in aviation safety."

Below is real:

10 March 1998 letter of John B. Drake of NTSB to JBS :

"We consider our correspondence on this subject to be complete. Should you continue to reiterate your position on this issue in future correspondence, you should expect no further response from the Safety Board."

30 Jan 1998 letter of Neil Schalekamp of FAA to JBS :

"Please note that this office will no longer be responding to your further inquiries about these same concerns, including your February 6 and February 9 letters that I just received."

17 March 1998 letter of Jim Hall of NTSB to JBS :

"We do not believe a meeting is necessary to further discuss this issue."

Summarized conversation between me and ordinary citizens who visit my web site:

Visitor: "What does NTSB and FAA say when you tell them about wiring/cargo door explanation for TWA 800?"

JBS: "They write that all cargo doors were all latched, all locked, and all intact at water impact, they have told me that over and over again and they will not respond to any further inquiries from me."

"What do they say about the red paint smears?"

"They pretend they don't exist except one FAA official who did but changed his mind and now pretends they don't exist."

"What do they say about the outward peeled skin?"

"They say it was caused by inward water impact."

"What do they say about the petal outward bulge at aft midspan latch of forward cargo door?"

"They pretend it does not exist except one FAA official who did but changed his mind and now pretends it doesn't exist."

"What do they say about the missing manual locking handle, the two overpressure relief doors, the viewing ports, the torque tubes, the two pull-in hooks, the midspan latches, and the other eighty percent of forward cargo door skin?"

"They say they are unimportant."

"What do they say about the Orange Zone pieces, the possible mixup in cargo door sills, the unsooted pieces of center fuel tank, the thirty by forty foot shattered skin zone forward of the wing on the right side, the chafed to bare wire discovery in cargo door area, and the many significant matches to UAL 811?"

"Nothing. They say nothing. Well, actually they told me to go away, and stay away."

"Have you gone to your congressman?"

"Yes, Sam Farr, and he has asked many time to NTSB and FAA for information."

"What happened?"

"They wrote to him that the door was all latched, all locked, all intact at water impact, they have told me that many times, and thanked him for his interest in aviation safety."

"Did you contact any other elected politician?"

"Yes, Senator John McCain, jet plane crash survivor and Chairman of the Committed that oversees NTSB."

"What happened?"

"He reviewed my data and submitted it to his committee for review. He asked me to wait until the hearings. He asked the NTSB to meet with me to related my concerns about the forward cargo door of TWA 800."

"What happened?"

"The Committee on Commerce, Science and Transportation still has the matter under review, I waited until the hearings, I went to the hearings. The suggested meeting by Senator McCain between NTSB officials and me was refused by Chairman Hall of NTSB saying there was sufficient evidence to rule out the cargo door opening in flight, he has told me that many times in great detail and a meeting was not necessary."

"Have you tried the press?"

"Yes, I've had several radio and TV interviews. Some get airplay and some don't."

"Have you tried Boeing?"

"Yes, Boeing and McDonnell Douglas both contacted before the merger. The two safety officers were polite and referred me to NTSB. Boeing engineers referred me to the Public Relations office of Boeing. The Boeing Public Relations office referred me to the NTSB. NTSB told me to go away."

"Have you tried the internet?"

Yes, I have a 1200 page, 100 meg website which has been online since July, 1996 and visited about 70000 times, according to page counters."

"What are you doing now?"

"I'm continuing to write to appropriate officials presenting the evidence and trusting it will speak for itself. It's not going to go away."

"Have you tried calling them?"

"No, my wife and daughter were approached in my home by two armed federal agents within twenty four hours of me posting an email to Senator McCain about Air Force One crashing. Calling on the telephone out of the blue would be much too aggressive. Prior to the Secret Service interrogation, phone calls usually ended up with the official shouting and hanging up. So now I continue to write non-threatening, polite, full of facts letters and

emails."

"Are you saying government public safety aviation officials in writing refuse to adequately respond to your request for a meeting to discuss facts, evidence, documents, photos, which clearly indicate a forward cargo door opening in flight on TWA 800?"

"Yes."

"They will not call you, write to you, or respond to polite letters with sources listed?"

"Nope."

"Are these the same guys that say safety is priority number one, they will turn over every stone, never give up to get a full explanation, and respond to every public inquiry?"

"Yup."

"Who are you? A wacky guy on the 'net?"

"Maybe, although I use government AARs for sources, and I'm also a survivor of a sudden night fiery fatal jet airplane crash, a commercial licensed pilot, instrument rated, FAA Part 135 certificate holder, light aircraft owner, jet carrier navigator, avionics technician including radar operator, and a retired military officer in a converted garage with a computer and a phone line."

"And you've tried for almost two years to meet face to face with the public officials involved with TWA 800?"

"Yes."

What happened?

"Nothing yet. But I'm still trying. It's only been two years for TWA 800. The investigation is open and active. The evidence is not changing or going away."

And I am still trying:

Real facts presented by NTSB about TWA 800 in exhibits, photographs, text, drawings, and testimony:

1. right horizontal stab has red paint smear
2. stator blade in right horizontal stab behind engine number 3
3. inward crush top of cargo door
4. top of cargo door attached to hinge
5. petal shape of rupture area around aft midspan latch
6. missing pieces of forward cargo door include locking handle, latching pins, overpressure relief doors, midspan latches
7. rectangle visible of explosive decompression zone of outward peeled skin on right side forward of the wing on right side
8. downward movement of floor beams near cargo door
9. hoop stresses found
10. CVR sudden loud sound
11. FDR abrupt power cut
12. missing turbine blades in engine number 3.
13. soft body impacts on blades in engine number 3.
14. outward peeled skin near top of nose, under belly, and in cargo door area.
15. red paint smears above cargo door on white paint
16. soot on most blades of engine 3.

17. starboard side more damaged than port side
18. intact R2 door near shattered cargo door.
19. poly x is known to be susceptible to chafing and present
20. section 41 is known to be weak
21. history of cargo door openings in past in various airliners
22. EPR problems on aircraft before or during fatal flight.
23. fires in forward cargo hold in the past on Boeing 747s.
24. vertical tears in fuselage skin forward of the wing on the right side
25. singe marks on right side of fuselage show burnt skin, then abruptly at tear line there are no singe marks
26. red paint rubbed off revealing white paint underneath on skin above cargo door area
27. first pieces off plane came from forward cargo hold just forward of the wing
28. at least nine missing never recovered bodies, just fragments
29. initially thought to be a bomb
30. wreckage debris shows cargo door shattered in many pieces
31. aft portion of forward door which includes aft midspan latch and locking handle missing from recovery effort
32. no soot on maintenance hatch
33. no soot on front spar of center wing tank
34. no burned bodies forward of the wing and very few burned at all
35. aft cargo door sill, latches, and locks recovered
36. forward cargo door sill, latches, and locks not recorded in data base
37. no orange zone pieces recorded in database
38. no orange zone discussion in public record other than identification
39. chafed to bare wires found in cargo door area
40. wiring defects found on Boeing airliners
41. water observed pouring out of forward cargo hold of a

Boeing airliner, cargo holds have bilges.

42. no soot on keel beam forward of the wing
43. compression fractures right side forward of the wing
44. tension fractures left side forward of the wing
45. seats in the rows in the explosive shatter zone above cargo door are in red zone and not sooted
46. aft cargo door sill is sooted
47. many witnesses said they saw downward streak that was red-orange
48. NTSB official said possibility of forward door popping open was intriguing.
49. FAA official said, then recanted, that paint smears and structural deformation indicated outward explosion.
50. initial event time was 20:31:12 at 13700 on 17 July 1996 eight miles off coast of Long Island.

Reasonable conclusions derived from facts above:

1. water in forward cargo bay.
2. chafed bare wire touched by water.
3. electrical short occurs.
4. forward door motor turns on to unlatch position.
5. aft midspan latch of forward cargo door partially unlatches.
6. pressurized hull ruptures at aft midspan latch.
7. cargo door tears into pieces, some pieces stay with nose, some don't.
8. shiny metal pieces spin away reflecting evening sunlight and perceived as red-orange streak to observers far away.
9. explosive decompression occurs shattering cargo door area forward of the wing on right side exposing twenty foot by forty foot hole in nose producing sudden loud sound on CVR.
10. 300 knots slipstream tears weakened nose off.
11. ejected debris is ingested by starboard engines which catch fire.

12. wing and wing fuel tanks; engines, tail, and fuselage fall and disintegrate on way down.
13. fiery starboard engine ignites fuel vapor clouds from disintegrating tanks, including center tank.
14. fireball observed on the ground.
15. water impact of wreckage, cargo bay material first to hit water.

I may not be alone: "NTSB investigators have suggested unofficially that the streaks the pilots saw could have been light reflections from the skin of the aircraft, tongues of flame from the airliner or the forward door of the aircraft popping open, a possibility that still intrigues investigators, the second official said." AW&ST 3/10/97

Regarding the Aviation Week and Space Technology article quoted above, the following is supplied: <<http://www.corazon.com/800avweekintrigue.html>>

Monica Warnock
Washington Bureau
Aviation Week & Space Technology

Dear Ms. Monica Warnock,

21 May 1998

You wrote to me:> You must remove these articles and any other Aviation Week copyrighted material from your website immediately, or we will consider legal action.

I replied>Consider it done. And not because you threatened me, but because you may be right."

Ms. Warnock, I now believe you to be wrong.

I'm putting the 10 March 97 Aviation Week and Space Technology article in dispute back up on my web site at www.corazon.com at one minute after midnight on 1 June 1998.

Here's why: The content is everything and the content of the article is very, very important. I agree with the content. AvWeek agrees with content. The public officials quoted in your article agree with the content. The content quotes a public NTSB official who says that the cause of TWA 800 may have been forward door popping open. It also said the streak seen before TWA 800 crash may have been reflection off the skin of aircraft. I agree with that. It is very important. Let us call it the door pop streak article.

Ms. Warnock, you have done your job well by searching the web for Avweek articles. You found one. You then followed orders and directed it be removed. It was removed. The problem is now above your level of authority. So I direct my comments to your boss: Mary Francis Koerner, the Manager of Bureaus.

Will you please see that this letter goes to her?

Dear Ms. Koerner, I am told several things:

1. Get the door pop streak article off my web site.
2. I should ask permission to put AvWeek articles on web site.
3. Permission will be denied.

I asked permission. It was denied. You were right.

You have done all you can do. The problem is now above your

level of authority. I assume you would refer me to 'The Lawyers.'
I direct my statements to the lawyers.

Will you please see that this letter goes to them?

Dear AvWeek lawyers:

Ah, copyright, don't you love it?

My name is John Barry Smith. I have a 1200 page, 100 meg website at www.corazon.com mainly devoted to high time Boeing 747 accidents in which the hull ruptures in flight forward of the wing. It contains mostly government scanned in aviation accident reports, AARs, and occasionally copyrighted material from media, such as yours.

Please note, let us stipulate:

1. My site is non profit. I have not made a penny on anything related to that website. In fact, much of my money has gone out, nothing has come in, a problem as my wife will attest.
2. It is research oriented with airplane crash related comments, investigations, reports, pictures, and text.
3. I give full and clear credit to the sources I quote. AvWeek was clearly stated as the author of the door pop streak 10 Mar 97 article in question. In fact, that is very important, that's why I quote clearly and give credit to Aviation Week by scanning in the entire article instead of paraphrasing, which would be quicker to download but not have the authority of the best aviation magazine on the planet, Aviation Week and Space Technology. And I omitted the advertising on the pages, too.

Now for argument:

1. I stole nothing from you.
2. It's fair use.
3. I can publish that article without your permission if certain conditions are met, and are: Non profit, small parts used, and credit given.

"Fair use and implied licenses.

Fair use is a legal license to use others' work, whether they approve or not. It constitutes one of the most important, and least clear cut, limits to copyright. The basic problem is that words like "fair" or "reasonable" cannot be defined with the precision non-lawyers (or many law students) would like. Until 20 years ago, fair use did not appear in U.S. legislation, but it now occupies about half of the copyright statute. In the U.S., partial or limited reproduction of another's work may be permitted under this doctrine.

On the one hand, fair use offers an especially liberal defense to uses that advance public interests such as education or scholarship. On the other hand, it is unlikely to be available if one fails to credit the original artist or author. It is not apt to be available to those who profit or interfere with original artists' or authors' ability to derive income from their works."

" 1998 Franklin Pierce Law Center. All rights reserved." (I hope I have fair use to quote the above.)

I believe I advance the public interest in aviation safety, I credit the original speaker, the reporter, and the magazine, and I do not profit from it. I have fair use.

Conclusion: It will take a Judge to order me to remove the 10 March 97 AvWeek article from my website after it is put back up

on 1 June 1998 or to permit me to continue to post it.

So, Lawyers, the problem is above your level of authority. I turn my attention to the Managing Editor:

Will you please see that this letter goes to him?

Dear Managing Editor,

What's the beef? You and your reporter, David Fulghum, have done a fine piece of work. You have pinpointed the cause of a mystery crash now under current investigation, TWA 800. It was the door popping open in flight. The NTSB official you quoted was correct. The streak was the skin spinning away reflecting evening red orange sunlight to observers below. The official was correct and he was quoted correctly by your aviation reporter. The implications of the truth you printed are profound. The cause now leads to chafed wiring shorting on cargo door unlatch motor and allowing rupture at aft midspan latch of forward cargo door which opened in flight. Exactly as has happened before with UAL 811 as described in NTSB AAR 92/02. The 300 knot slipstream tore the nose off TWA 800 because the explosive decompression shatter zone was much bigger on TWA 800 than on UAL 811, as shown by NTSB reconstruction photo of TWA 800 wreckage.

I encourage you to do a follow up story on the wiring/cargo door explanation as described on the website in question, www.corazon.com. Mr. Fulghum and Mr. McKenna are familiar with the details of TWA 800 and wiring cargo door explanation.

Attached:

1. Correspondence between AvWeek Ms. Warnock and me.
2. Three .jpgs of the images published on website of 10 March door pop streak article.
3. Recent email to Government officials regarding this matter. Please note accurate numbers and sources given.

So, I must publish your copyrighted material, the 10 March 97 article on my website at URL <http://www.corazon.com/800avweekintrigue.html> on June 1, 1998.

I'm at email barry@corazon.com or 408 659 3552 or 551 Country Club Drive, Carmel Valley, CA 93924.

I encourage discussion regarding this matter. It's a hot story even though almost two years old. Wiring is the main culprit, not the door, not the center tank. NSTB is in the right church but the wrong pew. Wiring is the problem and it's in places other than the fuel tank tubes. It's in the cargo door unlatching motor circuits.

Cheers,
John Barry Smith

From: monica_warnock@mcgraw-hill.com
Date: Thu, 14 May 98 10:24:37 -0500
To: <barry@corazon.com>
Subject: Aviation Week
Mime-Version: 1.0

To: barry@corazon.com

Dear Sir,

Your website "<http://www.corazon.com/800avweekintrigue.html>" contains several scanned-in pictures of the Aviation Week & Space Technology article "ANG Pilot: TWA Hit By Object," March 10, 1997. Our records do not show that you requested permission to use these articles on your website.

Aviation Week & Space Technology is covered by copyright law which states that permission must be granted before our material is used.

Your website is in violation of this law. You must remove these articles and any other Aviation Week copyrighted material from your website immediately, or we will consider legal action.

Sincerely,
Monica Warnock
Washington Bureau
Aviation Week & Space Technology
monica_warnock@mcgraw-hill.com
(202)383-2314

To: monica_warnock@mcgraw-hill.com
From: John Barry Smith <barry@corazon.com>
Subject: Request permission to present article on website.
Cc:
Bcc:

X-Attachments:

To: barry@corazon.com

Dear Sir,

Your website "<http://www.corazon.com/800avweekintrigue.html>" contains several scanned-in pictures of the Aviation Week & Space Technology article "ANG Pilot: TWA Hit By Object," March 10, 1997. Our records do not show that you requested permission to use these articles on your website.

Dear Madam, 14 May 1998

A thousand pardons. I immediately request permission to reprint Aviation Week & Space Technology article "ANG Pilot: TWA Hit By Object," March 10, 1997 on my website, www.corazon.com. (Corazon is my wife's name.)

The reason I scanned in exact image instead of paraphrasing text was to be precise and show source, very important for a research paper.

Should my request be denied, I shall of course, immediately comply with your request and remove the article from my web site.

AWST is a fine magazine and one which I have read diligently for over thirty years. I have watched AWST's web site mature as

time goes on. <http://awgnet.com/awgnews.htm> is on my bookmarks list and I check it first thing every morning. I'm in your database of subscribers. Keep up the good work!

Regarding this life and death matter of a sudden night fiery fatal jet plane crash about which I have published a 1200 page website presenting my shorted wiring opening forward cargo door in flight explanation to the general public in a non profit effort:

1. You surely understand I can not alter my website just on an unsolicited email out of the blue from:

Monica Warnock
Washington Bureau
Aviation Week & Space Technology
monica_warnock@mcgraw-hill.com
(202)383-2314

The absence of title indicates your request may be personal in nature and not official. Please confirm your official title which corresponds to your request that I delete an article from AWST from my site. You may be spoofing me and my asking for credentials is prudent and an established protocol.

2. Your response indicates an interest in the subject of TWA 800. Could you refer a reporter to me so I can present my wiring/ cargo door explanation to him/her? I would appreciate the opinion of an aviation professional regarding my nine years of amateur research into hull ruptures of hour high time Boeing 747s. Your reporter, David Fuhlgum, in the referenced article, was able to elicit important material from NTSB officials regarding TWA 800; the forward door may have popped open in flight, and the streak may have been pieces of the aircraft

reflecting evening sun. I am able to amplify those observations by an anonymous NTSB 'second official' using NTSB documents and photographs. It's a good story and one worthy of AWST's interest. FAA, NSTB, and Boeing are all saying wiring in older Boeing airliners is fraying and shorting causing problems, and so am I, long before the officials came to the realization.

3. >or we will consider legal action.

Why, O why did you threaten me? Your first contact, out of the blue, and it contains a threat of 'legal action'. What does that mean? I don't think it means a good thing. It just sets a wrong tone. Is politeness gone from even presentations about a plane crash?

4. >Your website is in violation of this law.

Whoa! You are calling me a criminal? Just like that? I'm breaking the law? I'm a lawbreaker? This is very disturbing. Maybe that's the way AWST works with the big boys who only respond to threats, not to polite requests with explanation attached. I'm not a big boy. I'm a retired military officer working out of a converted garage in California. I don't like anybody telling me I'm breaking the law unless it's a policeman, judge, or jury. And I still don't like it, but I obey. I really can't tell my friends that I changed my cherished web site because of a strange unauthenticated email from some babe named Monica at McGraw-Hill, now can I? I mean, am I a man or a mouse?

See, a threat always turns a pleasant conversation into stressful one. Squeek, squeek.

To review:

1. I respectfully request permission to display scanned in images of Aviation Week & Space Technology article "ANG Pilot: TWA Hit By Object," March 10, 1997 on my personal website, www.corazon.com.
2. Please to show credentials, madam.
4. Refer reporter to me regarding a subject that you feel strongly enough to want to affect with correspondence, TWA 800.
5. Keep up the good work covering aviation subjects around the world.

Cheers,

John Barry Smith
551 Country Club Drive,
Carmel Valley, CA 93924
408 659 3552
barry@corazon.com
www.corazon.com

From: monica_warnock@mcgraw-hill.com
Date: Thu, 14 May 98 13:48:41 -0500
To: <barry@corazon.com>
Subject: Re: Request permission to present article on website.
Mime-Version: 1.0

Dear Mr. Barry,

I am an editorial assistant in the Washington Bureau of

Aviation Week

& Space Technology. I work for Mary Francis Koerner. She is the Manager of Bureaus and she is the official contact for Reprints & Permission. We will periodically search the web for Aviation Week on outside websites and that is what brought me to your site.

Unfortunately, at present, Aviation Week & Space Technology does not allow its material to be reprinted on any websites other than our own.

We appreciate your interest in Aviation Week & Space Technology; however, we must ask that you remove the article from your website, as you have indicated you are willing to do.

My interest in this regard is not related to TWA800 but protecting the magazine in general. Many people are not aware of the rules regarding copyright on the internet. You may reference the section "Photocopy and Rights & Permission" on the Contact Us page of Aviation Week if you have any future requests for permission.

James McKenna would be the best editor to send your correspondence to regarding TWA 800. He is located in the Washington bureau: 1200 G

Street, NW Suite 922, Washington, DC 20005. (202)
383-2332.

I will mail you a hard copy of this letter on Aviation Week &
Space

Technology letterhead to satisfy any concerns you might have
about my

identity. Thank you for your understanding.

Monica Warnock

Editorial Assistant, Washington Bureau

Aviation Week & Space Technology

To: monica_warnock@mcgraw-hill.com

From: John Barry Smith <barry@corazon.com>

Subject: Re: Request permission to present article on website.

Cc:

Bcc:

X-Attachments:

Dear Mr. Barry,

I am an editorial assistant in the Washington Bureau of
Aviation Week

& Space Technology. I work for Mary Francis Koerner. She is
the

Manager of Bureaus and she is the official contact for Reprints
&

Permission. We will periodically search the web for Aviation
Week on

outside websites and that is what brought me to your site.

Dear Ms. Monica,

Thank you for your prompt reply. I am saddened by the denial to present the AWST article on my web site. I shall search through it and delete it. Do I need permission to post your email in its place to explain why the article was deleted? I should explain why the article was removed to squelch any conspiracy coverup nonsense that pervades this TWA 800 investigation.

Unfortunately, at present, Aviation Week & Space Technology does not allow its material to be reprinted on any websites other than our own.

So sad.

We appreciate your interest in Aviation Week & Space Technology; however, we must ask that you remove the article from your website, as you have indicated you are willing to do.

As soon as I am finished with this upcoming TV interview about wiring/cargo door explanation, I will. The TV station is KOMO-TV, Channel 4, ABC, in Seattle Washington and the arrive within the hour. I'm preparing for it so am unable now to find page, delete, change links, upload it to server right now. But how long to I have? Is 48 hours OK?

My interest in this regard is not related to TWA800 but protecting the magazine in general. Many people are not aware of the rules regarding copyright on the internet. You may reference the section

"Photocopy
and Rights & Permission" on the Contact Us page of Aviation
Week if
you have any future requests for permission.

Protecting the magazine? Well, OK, if you say so. I feel that
quoting AWST in a non profit website about aviation safety helps
AWST, but what do I know.

James McKenna would be the best editor to send your
correspondence to
regarding TWA 800. He is located in the Washington bureau:
1200 G
Street, NW Suite 922, Washington, DC 20005. (202)
383-2332.

Thank you very much, ma'm, and I shall. I shall say you referred
me, is that OK?

I will mail you a hard copy of this letter on Aviation Week &
Space
Technology letterhead to satisfy any concerns you might have
about my
identity. Thank you for your understanding.

Fine, can I put that on my website?

Let me get back to you on this. I will delete offending article and
then send you URL of the new page so you can confirm I have
cleansed the dirty deed.

Cheers,
John Barry Smith

Monica Warnock
Editorial Assistant, Washington Bureau
Aviation Week & Space Technology

From: monica_warnock@mcgraw-hill.com
Date: Thu, 14 May 98 14:47:54 -0500
To: <barry@corazon.com>
Subject: Re[2]: Request permission to present article on website.
Mime-Version: 1.0

Mr. Smith,

I will mail your letter today. When it arrives, you are welcome to place it on your website. We understand that you are busy right now- as long you are able to delete the pages by next Friday, that's fine with us. The complete URL is <<http://www.corazon.com/800avweekintrigue.html>> If you do contact Mr. McKenna, you may tell him I referred you. Again, thank you for your interest in Aviation Week.

Monica Warnock
Editorial Assistant, Washington Bureau
Aviation Week & Space Technology

To: monica_warnock@mcgraw-hill.com
From: John Barry Smith <barry@corazon.com>
Subject: Done
Cc:

Bcc:

X-Attachments:

Dear Ms. Warnock,

You must remove these articles and any other Aviation Week copyrighted material from your website immediately, or we will consider legal action.

Consider it done. And not because you threatened me, but because you may be right.

<http://www.corazon.com/800avweekintrigue.html>

is the URL which now has deleted article. Completed 6:57PM 14 May 97, nine hours after your request. The TV interview went swimmingly. In fact, the interviewer from KOMO TV ABC Seattle, asked that I send him an email of the article in question. He was interested to hear about your request.

I just want you to know that you have made an old man very very sad. I shall have to research the web, as is my wont, to find out for sure if the copyright laws exist to keep non profit websites from fairly using one article of a magazine to support an aviation safety hypothesis. I make no money from this site, on the contrary, it costs me money to keep it up. The site is 1200 pages deep with on one page assigned to article. The goal of the website is aviation safety, a common goal with Aviation Week. The officials quoted on the article are public officials whose comments are public.

It seems to me that permission should not be necessary for me to

put your article on my website as long as I give credit to the author and make no money from it.

It seems to me that when permission was requested to put the article on my website, permission should have been granted.

You said 'protect your magazine,' as motive for requesting I delete the article. Protection from whom? Me? Aviation Week needs protection from me? I am a retired guy working out of a converted garage with a computer and a modem. You have nothing to fear from me, we are on the same side, aviation safety.

Regardless, the excellent article by David Fulghum in the March 10, 1997 issue has been deleted at your request. Should it become apparent that I do have the fair right to use your article under conditions which I fulfill, then, pop! up it goes again. I shall let you know in advance so you may attempt to dissuade me if you wish. It just seems that a guy ought to be able to pull out old magazine articles to quote from when he's trying to persuade visitors of an aviation safety point. In case I'm wrong, and I'm never wrong, I have erred on the side of safety and complied with your request.

Cheers,
John Barry Smith

Mr. Smith,

I will mail your letter today. When it arrives, you are welcome to place it on your website. We understand that you are busy right now- as long you are able to delete the pages by next Friday, that's

fine

with us. The complete URL is

<<http://www.corazon.com/800avweekintrigue.html>>

If you do contact Mr. McKenna, you may tell him I referred you. Again,

thank you for your interest in Aviation Week.

Monica Warnock

Editorial Assistant, Washington Bureau

Aviation Week & Space Technology

DAVID A. FULGHUM/WASHINGTON

Two New York Air National Guard pilots, with the best view of the crash of

TWA Flight 800 last July, are disagreeing about what they saw immediately

before destruction of the Boeing 747-131 jetliner.

One believes the airliner was struck by a fast-moving object coming from the

east, while the other saw only a fiery trail from the west.

However, both believe a violent explosion ripped the aircraft apart,

propelling some of its passengers high enough that they did not hit the

water's surface until 3-4 min. after the initial explosion.

Maj. Frederick C. Meyer, pilot of an HH-60 helicopter from the ANG's 106th

Rescue Wing, has just been freed from an FBI gag order preventing him from

giving interviews about the 1996 disaster off Long Island, N.Y. The copilot, Capt. Christian Baur, remains under FBI restrictions not to speak about the accident. But two officials familiar with his testimony told Aviation Week & Space Technology in detail what he told investigators.

In the days immediately after the accident, before being ordered not to speak, Meyer discussed his initial impressions with news media (AW&ST July 29, 1996, p. 32). Last week, he chose Aviation Week as the first news organization to hear a detailed account of his recollections and his testimony to federal investigators.

Meyer and Baur were in one of the wing's two aircraft operating north of the crash site. The helicopter was operating over Long Island about 12 mi. north of the TWA crash site. Baur, the copilot, was at the controls practicing instrument approaches. The crew was awaiting darkness so they could begin training with night vision goggles.

The key point on which the two pilots disagree is whether a streak of light appeared from the opposite direction of the flight of TWA 800 (which was flying from west to east after takeoff from Kennedy Airport), a

possible
indication of an intercepting missile or some other object.

Meyer's attention was first called to the area of the sky where the accident occurred "by a streak of light moving from my right (west) to my left (east)," the same direction as the TWA flight, he said.

Baur's account differs on this point. According to the two officials who have heard both pilots' accounts, Baur, on the left side of the cockpit, saw a streak moving from left to right toward the approaching TWA aircraft before the initial explosion.

"Almost due south [of the helicopter], there was a hard white light, like burning pyrotechnics, in level flight," Baur told investigators from the National Transportation Safety Board, FBI and a Federal anti-terrorist task force. "I was trying to figure out what it was. It was the wrong color for flares. It struck an object coming from the right and made it explode."

Baur's first impression was that there had been a midair collision, possibly between two light aircraft that tow banners along the beach.

"They had witnessed these aircraft come very close to each other

at that time
of day, and that's what they assumed," the second official said.

NTSB investigators have suggested unofficially that the streaks
the pilots
saw could have been light reflections from the skin of the
aircraft, tongues
of flame from the airliner or the forward door of the aircraft
popping open,
a possibility that still intrigues investigators, the second official
said.

Meyer could not actually see the aircraft, but only the streak, and
he admits
that Baur, a younger man, has better eyesight. Moreover, Meyer
adds,
"Whatever Chris saw on the left side I didn't see because he
blocked my
view." Baur disputes this, saying that the explosions and crash
were
virtually dead ahead of the aircraft.

The helicopter was executing a missed approach and was about
halfway down
Runway 24 at the Francis S. Gabreski International Airport at
Westhampton
Beach, N.Y. It had started a climbing left turn to the south when
the
accident occurred. The Sun had not yet set and the sky was still
bright.

According to Meyer, the streak was about 15-20 deg. above his
line of sight

and perhaps 15 deg. left of the aircraft's centerline.

"I don't know if it was a missile that struck the airliner," Meyer said.

"Nothing at that moment said 'missile' to me. I spent a number of years in Vietnam and had seen missiles fired, some of them at me. But, that was 25-year-old missile technology, which left smoke trails. I understand today that they are made with smokeless rocket fuel and don't leave trails. What I saw was a streak of light, not a smoke trail."

The streak of light that Meyer saw made a very shallow, gradually descending arc. He points out that he never saw the actual airframe of the TWA 747 within the streak or subsequent explosions or smoke trails. It was virtually identical to the trajectory of a meteor, with only a slight curve. But unlike a meteor, the streak was red-orange in color, he said.

Meyer observed the descending streak for 3-5 sec. Then there was what Meyer describes as a hard, very sudden, yellowish-white explosion that looked identical to the detonation of an anti-aircraft shell. He did not suggest an anti-aircraft weapon was fired at TWA Flight 800, however.

"It left a cloud of smoke just like a flak explosion does," Meyer

said. "One to two seconds later, there was a second, hard explosion almost pure white in color. The position of that explosion appeared to be slightly below and behind where one would have anticipated the streak of light to have gone. The trajectory at that point appeared to be slightly bent down and slowed."

A new detail in Meyer's story was that almost immediately there was a third explosion and fireball. Meyer doesn't remember if there was an explosion and fireball or if the third explosion turned into the fireball.

"That was a soft explosion unlike the first two," Meyer said. "It began as a tiny point and it grew very rapidly into a huge fireball four times the diameter of the Sun. I was dumbstruck."

Baur also saw three explosions. But he contends that they started from left (east) and went to right (west). He said the explosions created a "huge waterfall of flame that cascaded down," the first official said. "The column of flame was being whipped around violently. First it was tumbling, and then it refined itself into a spiral. The explosions were all before the cascade of flame began."

In the helicopter, Baur spoke first, asking if it was pyrotechnics.
ANG
operations that night were to have included flares dropped by a
HC-130
transport aircraft. The crew then called the Gabreski tower.

"We said we'd observed a fireball south of the field and we would
like
clearance to the beach to investigate," Meyer said. Baur actually
made the
call and reported a possible midair collision, the second official
involved
in the investigation said.

The crash time has been variously reported as being from 8:31 to
8:45 p.m.,
Meyer said. He believes the earlier time is more likely to be
correct
although he can't be sure.

Baur continued to fly the helicopter during the search while
Meyer functioned
as copilot and primary communicator. As they approached the
crash site, after
about 4 min. of flight, debris was still falling so they slowed to
avoid
being hit.

"As they got closer, within two or three miles, Baur could see the
aircraft
body, not tumbling, but in a vortex almost like inside a tornado,"
the second

official said.

Meyer made another revelation that was the result of long reflection after the accident.

"I was looking ahead . . . as we approached the crash site," Meyer said. "I saw some debris at 1,200-1,300 ft. falling at terminal velocity and fuselage fragments tumbling at 40-50 mi. per hour. The things falling at high speed were bodies still strapped in their seats. That is logically inconsistent if they came from the same explosion at the same time. On reflection, I have concluded that the bodies must have been blown upward before they came down. That indicates a violent explosion."

On this point, the two pilots' accounts agree, the officials said.

"Debris was falling like snow," according to Baur's testimony. "Among the particulate there was metal and paper, some of it glowing. Through all of that, things would come racing through -- two or three high-speed objects like sacks of potatoes. I believed them to be bodies that had been blown upward."

The pilots' opinion differ from the conclusion of inspectors that all the

passengers were in the fuselage when it ripped apart from aerodynamic forces.

In an attempt to debunk the most egregious coverup and conspiracy theories, Meyer and other ANG officials remain adamant that their unit was not part of any larger, undisclosed, multiservice operation. Operations the night of the crash were standard training flights to maintain currency with night vision goggles, rescue operations and in-air refueling.

The HH-60 flight was to be of about two hours' duration and would not extend more than 2 mi. off the Long Island southern coast. The HC-130 would drop flares, rafts and a para-rescueman and later refuel the helicopter in a communications-out, lights-out operation.

"No other people of other services were on the base at the time," Meyer said. Nor were there indications of the operations of drone aircraft, another theory that has surfaced as the possible cause of the crash. "No, there would have been some kind of notice."

AW&ST 3/10/97

Until the streak is adequately explained, the missile explanation will always be possible. I say missile explanation will always be

could be, but wasn't. The evidence refutes every missile explanation suggested event. Likewise for meteor and bomb explanations, they will always be could have been, but weren't.

The center tank did catch fire and there was a fireball, so center tank explanation will always be could have been and was, the only issue is when.

The wiring/ cargo door explanation explains the streak, refutes the bomb and meteor, and supplements the center tank explanation.

The wiring/cargo door explanation for TWA 800 is the more correct, more complete explanation.

I urge that Boeing 747s with Poly-X wiring be grounded until wiring is checked in cargo door areas known to have been faulty in the past.

I again request to meet with NTSB officials to present my wiring/ cargo door explanation.

Sincerely,

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Major: US Army Retired
Pilot: Commercial, instrument rated, FAA Part 135 certificate.
Navigator: RA5C Vigilante
Owner: Mooney M20C
Survivor: Sudden night fiery fatal jet plane crash.

From: John Barry Smith <barry@corazon.com>
Date: June 12, 1998 2:41:40 PM PDT
To: FAAOAI
Subject: **Red Paint Transfer Marks TWA 800 Cargo Door Area**

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Dear Mr. Streeter Official Persons who feel responsibility in
explaining TWA 800,

Docket No. SA-516, Exhibit No. 7A, Structures Group Report,
page 34, A section of the structure outboard of H7 exhibited
evidence of red paint transfer marks on the upper skin (H8); only
the remnants of the shattered logo light window remain in the
window frame.

The above details a red paint transfer mark on the right
horizontal tail surface of TWA 800 directly aft of the red painted
trim in cargo door area. This area shows missing red paint clearly
in NTSB photo displayed at URL <<http://www.corazon.com/>

redpaintsmearssoloprint.html>

The NTSB photographs are clear in color and detail. The TWA 800 reconstruction photograph shows abnormal green, white and red paint on the right side forward of the wing.

Normal TWA red trim paint scheme is seen at <<http://www.corazon.com/twapaintpixweb.html>> Only above the forward cargo door of the reconstructed fuselage of TWA 800 is seen the abnormal red paint smears.

The sequence is thus: bare aluminum skin is cleaned, primed, base coat of white applied, then red trim on top of white, then decals. This sequence is basic painting for Boeing 747s and confirmed by aviation professionals.

It is not red paint trim on primer with overspray, mask off, then paint white base coat around the trim.

The red trim is always on top of white base coat and means that the many, red, and large red paint smears between the passenger windows are red paint transfer marks. The red paint marks are not red paint exposed when white above is worn away, it is always red on top of white, not underneath.

This is further proven by skin which has red paint missing and thus exposing white undercoat. This is seen at URL <<http://www.corazon.com/TWA800hullrupture.html>> The white is always underneath the red. The green is always underneath the white.

Additionally, the added red paint between the windows is next to the missing red paint in the trim above the cargo door. Red paint

went from one area to another.

The many red and large red paint transfer marks above the forward cargo door of TWA 800 indicate the cargo door opened in flight. The precedent of cargo door paint transfer marks was set by UAL 811 as described in NTSB AAR 92/02, page 41.

The red paint transfer marks indicate the red door below ruptured/opened in flight and slammed into the white paint above, removing the red trim paint and transferring it on top of the white paint. This is clearly seen between the passenger windows.

The red paint evidence coupled with the outward peeled skin on the side, and in the door area, and in the belly proves an explosive event occurred inflight in the cargo door area.

The downward crushed main floor beams confirm the explosive event. Docket No. SA-516, Exhibit No. 18A, Sequencing Study, page 20, "Downward separation directions were noted at STA 900, 880, 840, 820, 800, and 780..." and ""The initial opening of the fuselage lower lobe (e.g. LF6A) would have the expected result of rapid depressurization accompanied by collapse of the main deck floor for some distance forward of STA 1000. The red area recovery of interior components as far forward as STA 600 would not be inconsistent with this floor collapse and associated structural breakup."

The petal shaped outward bulge at the aft midspan latch of the forward cargo door pinpoints the location of the initial rupture of the hull of TWA 800 as seen at URL <<http://www.corazon.com/petalbulge.html>> The aft latch is missing, the door frame is curved outward, and surrounding skin is shaped circular.

The analysis of red paint markings and structural deformation indicating an outward explosion was briefly held by FAA Branch Manager Neil Schalekamp of Northwest Region in a letter to me on 30 Jan 1998. "The paint markings and structural deformation that you cite, do indicate an outward explosion, generally accepted to be caused by the explosion of the CWT."

The cause of the outward cargo door explosion being the center tank is refuted by the lack of soot on the few recovered forward cargo door pieces and other right side fuselage pieces.

Exhibit 20A page 129. Fire and Explosion Group Factual Report.

"RF2 C-004 No sooting No sooting

RF3A-H These pieces are part of the forward main cargo door.

Some have grimy corrosion inhibiting compound (CIC), but there is no apparent sooting.

These pieces are part of the forward main cargo door.

Some have grimy corrosion inhibiting compound (CIC), but there is no apparent sooting.

RF4 B-103 No sooting No sooting

RF5 A-071 No sooting No sooting

RF6A B-2004 No sooting No sooting

RF6B B-240 No sooting No sooting

RF6C B-318 No sooting No sooting

RF7 A-033 No sooting No sooting

RF8A No sooting No sooting

RF8B B-256 No sooting No sooting

RF8C B-263 No sooting No sooting

RF8D B-068 No sooting No sooting

RF8E B-268 No sooting No sooting
RF8F B-248 No sooting No sooting
RF9A C-117 No sooting No sooting
RF9B C-117 No sooting No sooting
RF9C C-259 No sooting No sooting"

NTSB investigators also are intrigued by the aircraft forward door popping open in flight, an explanation supported by red paint smears, outward peeled skin, downward floor beams, and petal shaped bulge at aft midspan latch. "NTSB investigators have suggested unofficially that the streaks the pilots saw could have been light reflections from the skin of the aircraft, tongues of flame from the airliner or the forward door of the aircraft popping open, a possibility that still intrigues investigators, the second official said." AW&ST 3/10/97

Basic NTSB generated evidence for TWA 800 in photos, text, sooting diagrams, tables, and drawings, a NTSB produced report AAR 92/02, and your visual interpretations of NTSB photograph at <http://www.corazon.com/redpaintsmearssoloprint.html> and on NTSB CD-ROM proves that the forward cargo door of TWA 800 opened in flight.

The evidence above proves the the cargo door was not all latched, all locked, and all intact at water impact, as previously believed based upon examination of only eight of the ten cargo door latches. Docket Number SA-516, Exhibit No. 15C, Report Number 97-82, Section 41/42 Joint, Forward Cargo Door, "Examination of the lower lobe forward cargo door showed that all eight of the door latching cams remain attached (along with pieces of the door itself) to the pins along the lower door sill."

The cause of the door opening in flight is probably the same as UAL 811, as described in AAR 92/02; chafed wiring shorting on door unlatch motor based upon NTSB evidence for TWA 800 in Docket Exhibit 9A page 116: "Some wires found in the section of W480 from forward of station 570 and identified as BMS13-42A had numerous cracks in the insulation. Most of the cracks in this bundle were found to expose the core conductor when examined by microscope. Only within five feet of the aft end of the W480 bundle from station 570-900 were insulation cracks found."

NTSB agrees that a new explanation for the destruction sequence is possible based on new interpretations of the evidence such as shown by the red paint smears. Docket No. SA-516, Exhibit No. 18A, Sequencing Report, page 30: "It is therefore possible that new scenarios (sequences) may emerge as new information is acquired whether it be from newly identified parts, or simply a new interpretation of current information."

The wiring/cargo door explanation for TWA 800 must be thoroughly investigated to rule in or rule out the reasonable conclusions reached by the careful analysis of red paint smears, outward peeled skin, downward floor beams, petal shaped bulge at aft midspan latch, and cracked to bare conductor wires discovered in TWA 800 by NTSB.

The wreckage of TWA 800 is the victim at autopsy. It is the victim saying look at me, I exploded in flight, right there at the aft midspan latch. Just like I did before in 1989 with UAL 811 and left paint smears, outward peeled skin, aft midspan latch rupture, sudden loud sound on the CVR and power cut to the FDR. Don't ignore me; don't deny me; do something about me.

Sincerely,

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Pilot: Commercial, instrument rated, FAA Part 135 certificate.
Navigator: RA5C Vigilante
Owner: Mooney M20C
Survivor: Sudden night fiery fatal jet plane crash.

Facts presented by NTSB about TWA 800 in exhibits,
photographs, text, drawings, and testimony:

1. right horizontal stab has red paint smear
2. stator blade in right horizontal stab behind engine number 3
3. inward crush top of cargo door
4. top of cargo door attached to hinge
5. petal shape of rupture area around aft midspan latch
6. missing pieces of forward cargo door include locking handle, latching pins, overpressure relief doors, midspan latches
7. rectangle visible of explosive decompression zone of outward peeled skin on right side forward of the wing on right side
8. downward movement of floor beams near cargo door
9. hoop stresses found
10. CVR sudden loud sound

11. FDR abrupt power cut
12. missing turbine blades in engine number 3.
13. soft body impacts on blades in engine number 3.
14. outward peeled skin near top of nose, under belly, and in cargo door area.
15. red paint smears above cargo door on white paint
16. soot on most blades of engine 3.
17. starboard side more damaged than port side
18. intact R2 door near shattered cargo door.
19. poly x is known to be susceptible to chafing and present
20. section 41 is known to be weak
21. history of cargo door openings in past in various airliners
22. EPR problems on aircraft before or during fatal flight.
23. fires in forward cargo hold in the past on Boeing 747s.
24. vertical tears in fuselage skin forward of the wing on the right side
25. singe marks on right side of fuselage show burnt skin, then abruptly at tear line there are no singe marks
26. red paint rubbed off revealing white paint underneath on skin above cargo door area
27. first pieces off plane came from forward cargo hold just forward of the wing
28. at least nine missing never recovered bodies, just fragments
29. initially thought to be a bomb
30. wreckage debris shows cargo door shattered in many pieces
31. aft portion of forward door which includes aft midspan latch and locking handle missing from recovery effort
32. no soot on maintenance hatch
33. no soot on front spar of center wing tank
34. no burned bodies forward of the wing and very few burned at all
35. aft cargo door sill, latches, and locks recovered
36. forward cargo door sill, latches, and locks not recorded in

data base

37. no orange zone pieces recorded in database
38. no orange zone discussion in public record other than identification
39. chafed to bare wires found in cargo door area
40. wiring defects found on Boeing airliners
41. water observed pouring out of forward cargo hold of a Boeing airliner, cargo holds have bilges.
42. no soot on keel beam forward of the wing
43. compression fractures right side forward of the wing
44. tension fractures left side forward of the wing
45. seats in the rows in the explosive shatter zone above cargo door are in red zone and not sooted
46. aft cargo door sill is sooted
47. many witnesses said they saw downward streak that was red-orange
48. NTSB official said possibility of forward door popping open was intriguing.
49. FAA official said, then recanted, that paint smears and structural deformation indicated outward explosion.
50. initial event time was 20:31:12 at 13700 on 17 July 1996 eight miles off coast of Long Island.

Reasonable conclusions derived from facts above:

1. water in forward cargo bay.
2. chafed bare wire touched by water.
3. electrical short occurs.
4. forward door motor turns on to unlatch position.
5. aft midspan latch of forward cargo door partially unlatches.
6. pressurized hull ruptures at aft midspan latch.
7. cargo door tears into pieces, some pieces stay with nose, some don't.
8. shiny metal pieces spin away reflecting evening sunlight and

- perceived as red-orange streak to observers far away.
9. explosive decompression occurs shattering cargo door area forward of the wing on right side exposing twenty foot by forty foot hole in nose producing sudden loud sound on CVR.
 10. 300 knots slipstream tears weakened nose off.
 11. ejected debris is ingested by starboard engines which catch fire.
 12. wing and wing fuel tanks; engines, tail, and fuselage fall and disintegrate on way down.
 13. fiery starboard engine ignites fuel vapor clouds from disintegrating tanks, including center tank.
 14. fireball observed on the ground.
 15. water impact of wreckage, cargo bay material first to hit water.

From: John Barry Smith <barry@corazon.com>

Date: June 23, 1998 4:44:08 PM PDT

To: FAAOAI

Subject: **My errors corrected**

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Dear Mr. Streeter, June 23, 1998

NTSB just sent me a two page letter. It was indirectly from Dr.

Bernard Loeb. The first page was a form letter from NTSB reporting that I had used the wrong zip code on my hand addressed letter to Dr. Bernard Loeb. The second page was a copy of the misaddressed letter which was my 13 March 1998 letter to everyone addressed above.

This recent letter from NTSB tells me much. It tells me Dr. Bernard Loeb received the letter all right because the correction came from NTSB which means NTSB received it all right and everyone in NTSB knows Dr. Bernard Loeb as the Director of Aviation Safety and point man for TWA 800. I assume that Director Loeb gives close scrutiny to my letters to catch a one digit zip code error from incorrect 20591 to correct 20594. I assume this is a way for Director Loeb to point out errors in my correspondence.

And he's right. It was an error. It may be trivial in this case but potentially catastrophic when flying. As a navigator I recognize a serious error and the lack of attention to detail in a wrong number. It is a mistake I shall remember always. Dr. Bernard Loeb has shown me the need to check my numbers. Accuracy is everything in aviation and one digit being wrong is enough to kill. It happened with a Korean flightcrewmember avoiding the digit '4' and putting in a different number into his inertial navigation computer which then led him, his plane and his passengers over enemy territory which led to a shootdown, KAL 007. It happened to me when hand addressing envelopes of hard copy letters to back up the electronic emails. I checked out the error and traced it to a mixup of zip codes between NTSB and FAA. NTSB is 20594 and FAA is 20591 and I mixed them up.

There is an additional error on my address to Dr. Bernard Loeb. I put "490 L'Enfant Plaza East SW" instead of the correct "490

L'Enfant Plaza SW."

The principle is the same: Errors kill and accuracy counts.

I shall follow the example of NTSB and recognize the error and correct it.

I may have made another error recently in regard to TWA 800: I said that the many large red paint marks between the passenger windows above the forward cargo door of TWA 800 wreckage were 'transfer marks'. I stated they were red marks from the red fuselage skin below coming up and smashing into the white and leaving the red paint on top, similar to UAL 811.

There is now serious dissent that states the many large red paint marks are red paint from overspray of the trim below. The red marks are revealed white paint between the passenger windows is peeled back, revealing the red underneath. Several painters of airliners give conflicting opinion. The conclusive evidence is on the wreckage of TWA 800.

I ask NTSB and Director Loeb, can you confirm the paint sequence for the many large red paint marks between the passenger windows as seen in URL <http://www.corazon.com/redpaintsmearssoloprint.html> and <http://www.corazon.com/TWA800hullrupture.html>? Are they red on top of white paint, or are they red underneath white paint? Is the red underneath or on top?

It's vitally important. If red is underneath white, then I have made another error and wish to correct it. If red on top of white then it appears that the red could have come from skin below opening up and slamming together causing paint transfer marks,

thus confirming cargo door opened in flight.

There is no expense involved, only a short time for a metallurgist to climb up on a stepladder with a magnifying glass and look at the TWA 800 red paint marks.

As NTSB pointed out to me, numbers are to be accurate. I believe NTSB also respects numbers.

That's why eight is not ten. And never will be. That's why all ten of the forward cargo door latches must be recovered and examined and determined to have been operating normally before the cargo door is ruled out as culprit. That conclusive examination of all ten has not been done and that's why the forward cargo door can not be ruled out.

As NTSB told me to use the right numbers in my zip code, I ask NTSB to use the right numbers on the forward cargo door. There are ten identical latching pins and cams on that door and examining only eight is not good, not trivial, and wrong for NTSB.

For me to write NTSB zip code accurately is right for me. To check all ten latches is right for NTSB.

The two missing midspan latches that NTSB have not examined have been shown to carry loads as reported in AAR 92/02 where the aft midspan latch pin showed heat damage from hard contact. All ten latches are vital for proper operation of that door.

Only checking eight of ten is as bad as putting 20591 instead of 20594.

So, I acknowledge an error pointed out to me by NTSB and I remark on another error nearby, and corrected both.

I ask that NTSB do the same for themselves.

There is additional NTSB evidence which is perplexing if the center tank explosion as initial event is to be confirmed:

Docket No. SA-516, Exhibit No. 7A, Structures Group Report, page 33: "5.1 Horizontal Stabilizer, "Some of the items found in the horizontal stabilizer are sections of seat track, a stator blade from turbine section, and glitter." On 5.1.1 Right Horizontal Stabilizer, page 34, "An engine stator blade from turbine section penetrated the upper honeycomb surface near the outboard trailing edge." And same page: "A section of the structure outboard of H7 exhibited evidence of red paint transfer marks on the upper skin (H8); only the remnants of the shattered logo light window remain in the window frame."

Seat track, glitter, stator blade and red paint all had to come from up front because that's where they were. All of these items must have become embedded in the horizontal stabilizer in flight, because it's the only way they could have gotten there based upon the separation of nose and tail long before water impact. The only way for the stuff in front to get to the back in flight is for it to come out of the forward baggage hold. One very good way, a reasonable way, a way that's happened before, is for the forward cargo door to come open inflight and allow glitter contents of cargo bins, a seat track, and red painted door top to be blown aft. It also allows a fodded engine three to cause stator blade to be thrown out and back into right horizontal stabilizer.

A way to rule a repeat door opening event out is to examine the

door and determine if it was functioning normally. That can not be done yet because only eight of ten latches have been recovered as well as on 20% of the door structure. Until door totally recovered it can not be totally ruled out. Until cargo door totally ruled out, TWA 800 investigation is not totally complete.

Examining many large red paint markings can assist in that determination. Are the red paint marks on top of the white paint or underneath the white paint between the passenger windows above the forward cargo door?

Sincerely,

John Barry Smith
551 Country Club Drive
Carmel Valley, CA 93924
408 659 3552
barry@corazon.com
www.corazon.com
Citizen: USA
Major: US Army Retired
Pilot: Commercial, instrument rated, FAA Part 135 certificate.
Navigator: RA5C Vigilante
Owner: Mooney M20C
Survivor: Sudden night fiery fatal jet plane crash

From: John Barry Smith <barry@corazon.com>

Date: July 2, 1998 9:32:38 PM PDT

To: FAAOAI

Subject: Response to Chairman Hall's letter to Congressman

Farr.

Sam Farr
Member of Congress
17th District, California
House of Representatives
Congress of the United States
1117 Longworth Bldg
Washington, DC 20515-2861

John McCain III
Member of Congress
Chairman, Committee on Commerce, Science, and
Transportation
United States Senate
241 Russell Senate Office Bldg
Washington, DC 20510-0303

James Hall
Chairman,
National Transportation Safety Board
490 L'Enfant Plaza East, SW.
Washington, DC 20594

Robert Francis II
Vice Chairman
National Transportation Safety Board
490 L'Enfant Plaza East, SW.
Washington, DC 20594

Bernard Loeb,
Director of Aviation Safety
National Transportation Safety Board

490 L'Enfant Plaza East, SW.
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Thomas E. Haueter
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Ron Wojnar,
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Neil Schalekamp
Manager, Propulsion & Mechanical Systems and Cabin Safety
Branch
Transport Standards Staff
Transport Airplane Directorate, ANM-100

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Bob Breneman,
Aerospace Engineer,
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Dear Mr. Streeter,

July 2, 1998

Congressman Sam Farr sent me a letter on June 16th enclosing a letter to him from Chairman Jim Hall on June 8th discussing TWA 800 and cargo door cause. The letter from Chairman Hall to Congressman Hall contains various inaccuracies which require clarification:

Chairman Hall, "...Mr. Smith expressed his belief that the failure or cargo door led to the accident."

Chairman Hall has misstated my 'belief.' My belief is a wiring short led to the accident. As NTSB states a wiring short led to center tank explosion led to the accident, I say a wiring short led to cargo door rupturing in flight leading to the accident. Cargo door did not 'fail'; it did what it was told to do, unlatch.

Chairman Hall, "...numerous letters..."

Yes, that's correct. Three hundred and thirty eight to NTSB officials since July 20, 1996, three days after TWA 800, all with

same consistent explanation; hull rupture forward of the wing on the right side at cargo door area. After researching hull ruptures on high time 747s for seven years, it was readily apparent that TWA 800 matched the previous accidents, one of which was confirmed as wiring/cargo door caused, UAL 811.

Chairman Hall, "Examination of the wreckage has not revealed any evidence..."

This is the Chairman of NTSB's opinion about a probable cause and is same as the Chairman of NTSB's opinion in 1990 about the forward cargo door for UAL 811 in AAR 90/01 which was in error and corrected with AAR 92/02. The forward cargo door has opened and fooled before.

Chairman Hall, "The cargo doors were found with their respective fuselage sections..."

Not accurate. Only 60% in pieces of the aft cargo door and only 20% in pieces of the forward cargo door were found, recovered and examined. Twenty percent of a door is not 'a door.'

Chairman Hall, "...the examination of the cargo door latches found that they were closed at the time of impact."

Not true. There are ten latches on each door and only eight of the forward door were examined because only eight were recovered. Above quote also implies some latches opened but not in flight. What is the status of the forward midspan latches? Found? Open or closed? Damaged? They are not in the wreckage database, they are not hung on wreckage reconstruction, and they are not discussed in the forward cargo door Exhibit 15C.

Chairman Hall, "Safety Board metallurgists and structures engineers have carefully examined the cargo door..."

Not true because it's impossible. Only 60% in pieces of the aft cargo door and only 20% in pieces of the forward cargo door were found so it was impossible to carefully examine the cargo doors. Missing from the forward cargo door recovery are two midspan latches, manual locking handle, eight viewing ports, two overpressure relief doors, and 80% of the door skin. Most of the forward cargo door is not in wreckage recovery database nor hung on wreckage reconstruction. Who is the 'metallurgist'? Mr. Wildey? Who is the 'structures engineer'? Mr. Breneman?

Asking someone who said something once to say it again is not an impartial confirmation of a questioned evaluation.

Chairman Hall, "...carefully examined...the latching mechanisms..."

Not true. Only eight of the ten latching mechanisms were recovered to be examined. Two latches have not been examined at all.

Chairman Hall, "...carefully examined...the surrounding structure..."

Not accurate. Most of the surrounding structure is missing. Many nearby large red unusual paint markings were not evaluated.

Chairman Hall, "...found no evidence of pre-impact failure..."

Not supported opinion. There is much clear visual evidence of pre-impact failure with petal shaped rupture at aft midspan latch, outward peeled skin on side and belly, unilateral shattered

fuselage in cargo door area, downward floor beams, and several large red paint markings between passenger windows only above cargo door.

Chairman Hall, "...no evidence...that the door had opened in flight."

Not true. A FAA structures engineer at one time agreed that paint markings and structural deformation indicated an outward explosion in cargo door area. There is much hard, real, and documented evidence below that forward cargo door ruptured/opened in flight.

1. right horizontal stab has red paint smear
2. stator blade in right horizontal stab behind engine number 3
3. inward crush top of cargo door
4. top of cargo door attached to hinge
5. petal shape of rupture area around aft midspan latch
6. missing pieces of forward cargo door include locking handle, latching pins, overpressure relief doors, midspan latches
7. rectangle visible of explosive decompression zone of outward peeled skin on right side forward of the wing on right side
8. downward movement of floor beams near cargo door
9. hoop stresses found
10. CVR sudden loud sound
11. FDR abrupt power cut
12. missing turbine blades in engine number 3.
13. soft body impacts on blades in engine number 3.
14. outward peeled skin near top of nose, under belly, and in cargo door area.
15. red paint smears above cargo door on white paint
16. soot on most blades of engine 3.
17. starboard side more damaged than port side

18. intact R2 door near shattered cargo door.
19. poly x is known to be susceptible to chafing and present 20. section 41 is known to be weak
21. history of cargo door openings in past in various airliners
22. EPR problems on aircraft before or during fatal flight.
23. fires in forward cargo hold in the past on Boeing 747s.
24. vertical tears in fuselage skin forward of the wing on the right side
25. singe marks on right side of fuselage show burnt skin, then abruptly at tear line there are no singe marks
26. red paint rubbed off revealing white paint underneath on skin above cargo door area
27. first pieces off plane came from forward cargo hold just forward of the wing
28. at least nine missing never recovered bodies, just fragments
29. initially thought to be a bomb
30. wreckage debris shows cargo door shattered in many pieces
31. TWA 800 matched to AI 182, PA 103, and UAL 811.
32. no soot on maintenance hatch
33. no soot on front spar of center wing tank
34. no burned bodies forward of the wing and very few burned at all
35. aft cargo door sill, latches, and locks recovered
36. forward cargo door sill, latches, and locks not recorded in data base
37. no orange zone pieces recorded in database
38. no orange zone discussion in public record other than identification
39. chafed to bare wires found in cargo door area
40. wiring defects found on Boeing airliners
41. water observed pouring out of forward cargo hold of a Boeing airliner, cargo holds have bilges.
42. no soot on keel beam forward of the wing

43. compression fractures right side forward of the wing
44. tension fractures left side forward of the wing
45. seats in the rows in the explosive shatter zone above cargo door are in red zone and not sooted
46. aft cargo door sill sooted
47. many witnesses said they saw downward streak that was red-orange
48. NTSB official said possibility of forward door popping open was intriguing.
49. FAA official said, then recanted, that paint smears and structural deformation indicated outward explosion.

I again ask for a meeting with an NTSB representative to present my nine years of research for an impartial evaluation of the evidence derived from official governmental aviation agencies.

Sincerely,

John Barry Smith

From: "Lyle Streeter" <lyle_streeter@faa.gov>
Date: August 14, 1998 11:35:36 AM PDT
To: <barry@corazon.com>
Subject: Re: Pretend Reality Does Not Exist

Why would I pretend that? I asked the question, didn't I? In a public forum, too, as I recall.

Lyle Streeter

Reply Separator

Subject: Pretend Reality Does Not Exist
Author: barry@corazon.com at Internet
Date: 8/13/1998 1:31 PM

-- see attachments --

From: John Barry Smith <barry@corazon.com>
Date: August 14, 1998 12:52:41 PM PDT
To: "Lyle Streeter" <lyle_streeter@faa.gov>
Subject: Re: Pretend Reality Does Not Exist

Why would I pretend that? I asked the question, didn't I? In a public forum, too, as I recall.

Lyle Streeter

Dear Mr. Streeter, Good question.

The whole tone of that letter was bitter and sarcastic, I'm afraid. It was not right. It's what happens when I knock my head against the wall for two years trying to get a wiring/cargo door turn while waiting patiently in line and see others like HIRF crowd in.

The mean meaning was that the hoop stress question, to me, shows that that area that showed the hoops stress area, the cargo door area, was compromised in flight, not on water impact. If door intact, then no hoop stresses. If door gone and big hole open, then hoop stresses. After your hoop stress question, I researched the area and found NTSB exhibits show compression fractures on starboard side and tension stresses on port side, both

forward of the wing. That confirms that nose bent to right as it tore off.

Your maintenance hatch question brought my attention to it and I now offer the suggestion that that is the entrance into which the fiery foddled exhaust of 3 ignited the vapors in the CWT. Rumor has it that the Norwegian company trying to pinpoint start of explosion has found the location. I predict it will be a point in thin air inside tank but near maintenance hatch opening.

Based upon the new photos it appears that both midspan latch areas have blown out outward peeled and shattered skin in the door frame area. The original NTSB photo had the forward midspan area cropped out and I was unable to see the other big outward peeled hole at forward midspan latch area.

That damage is so clearly outward from a powerful force and so clearly not pillowing water impact. Both the outward peeled skin and red paint markings are real evidence that conflicts with center tank as initial event and door intact at water impact.

Why is NTSB ducking me?

Can you refer your engineers to those TWA 800 photos for analysis? <http://www.corazon.com/Forwarddoorblowupphoto.html>

What is their opinion of the red paint markings and structural deformation that Mr. Schalekamp of FAA originally said indicated an outward explosion? He was right. The photos confirm it. FAA was right on that.

If forward cargo door ruptured in flight can be confirmed, then the reasons why can be discussed and cause determined. Why not

the center tank blowing out door as Mr. Schalekamp suggested? Until then, it's pretend the red paint markings and outward peeled skin are not there. And that is very frustrating to me as I look at them.

If door had been intact at water impact, Mr. Wildey would have said no to your question of whether hoop stresses were found. There would have been tension, compression, tearing, shattering, but no hoop stresses. But he said yes on stringers in cargo door area. And that indicates door opened in flight allowing that circumferential twisting action to occur. Well, that's not proof door opened in flight but it does suggest that it did and requires corroboration. Which I contend exists.

But, thanks for reply. The answer to your question is that by pretending you did not ask that question then you would not hear the yes answer, by not hearing the yes answer you would not be led to believe that the yes answer indicates door opened in flight, by not knowing that indications are that door opened in flight you would not be compelled by conscience and profession to pursue the door open in flight or not question. By not pursuing question of door open in flight you would not embroil yourself in TWA 800 quagmire which Mr. Schalekamp found himself in and quickly back tracked out by saying he agreed and with NTSB and he would not talk about it anymore.

I of course, hope you do agree you asked the question which indicates that door may have opened in flight and pursue it to rule it in or rule it out, to satisfy your curiosity.

What do you think, did the door of 800 open in flight or not? What are those red paint markings? Why are the door frames opposite the midspan latches blown and shattered outward?

Where is the remaining 80% of the door skin and hardware?

I am not talking about an innocent piece of hardware here, it is a confirmed cause of fatal accidents before and early on suspected for TWA 800. I am not asking for something that was not asked already by FAA and NTSB. I'm asking to do an indepth investigation of the wiring/cargo door cause and although FAA is not NTSB, FAA safety is still safety. If I can do exhaustive analysis of door cause based on public information, FAA can do it, too.

Normally, I try to avoid emotional approach like sarcasm of pretending something does not exist that obviously does, but the NTSB riled me with the 'peddling' remark and telling me I don't know what I'm talking about when I tell them there are ten latches and they've only checked eight. Maybe they goaded me into an error. Well, I am trivial, the evidence is everything. The sudden loud sound, the red paint markings, and the outward peeled skin at midspan latches are real, regardless of my amateur style of presentation.

I'm sorry if I offended.

Respectfully,
John Barry Smith

From: "Lyle Streeter"<lyle_streeter@faa.gov>
Date: August 17, 1998 12:46:36 PM PDT

To: <barry@corazon.com>

Subject: Re[2]: Pretend Reality Does Not Exist

You did not offend. I read what you say, as I read volumes from many people with ideas on what happened.

Although the NTSB's rules pretty much preclude me from speaking openly on this matter, I do pay attention to what people are saying.

Some are very hesitant to admit ignorance. I am not. After more than two years of investigation, I do not know what ignited the center tank fumes. There are many sound theories, and some that appear to be not quite so sound. Some of those theories are backed by evidence, others are not. I have been assured by the NTSB that all of the evidence has been or is being examined, but I have no way to respond to the questions you raise without effectively removing myself from the investigation. This is a move I am not willing to take.

Sincerely,

Lyle Streeter

Reply Separator

Subject: Re: Pretend Reality Does Not Exist

Author: John Barry Smith <barry@corazon.com> at smtpgate
Date: 8/14/1998 12:51 PM

Why would I pretend that? I asked the question, didn't I? In a public forum, too, as I recall.

Lyle Streeter

Dear Mr. Streeter, Good question.

The whole tone of that letter was bitter and sarcastic, I'm afraid. It was not right. It's what happens when I knock my head against the wall for two years trying to get a wiring/cargo door turn while waiting patiently in line and see others like HIRF crowd in.

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<http://www.corazon.com/Forwarddoorblowupphoto.html>

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everything. The sudden loud sound, the red paint markings, and the outward

peeled skin at midspan latches are real, regardless of my amateur style of

presentation.

I'm sorry if I offended.

Respectfully,
John Barry Smith

barry@corazon.com
<http://www.corazon.com/>

From: John Barry Smith <barry@corazon.com>
Date: August 17, 1998 3:22:20 PM PDT
To: "Lyle Streeter" <lyle_streeter@faa.gov>
Subject: **Theories with evidence and those without**

You did not offend. I read what you say, as I read volumes from many people with ideas on what happened. Although the NTSB's rules pretty much preclude me from speaking openly on this matter, I do pay attention to what people are saying.

17 Aug 98

Dear Mr. Streeter, NTSB rules? Like you are not FAA and under

Executive branch and NTSB is under legislative branch and the two branches are equal and separate? It's like the court system saying they can't talk about it because of FAA rules.

If FAA rules preclude you, then I understand. And it scares me to hear you say you can't speak 'openly'. This is not wartime, this is not a foreign carrier, this is not another country's land, nor is this VIP on board or other sensitive material. Is this the state of the country, where a government aviation safety official can not speak 'openly' in peacetime on a US territory civil crash?

Answer, yes.

OK, it's very delicate, I am not in your shoes, you know best on that, so I accept you can not speak openly because of whoever rules.

But, you do say you listen. To me and others. Fine.

Some are very hesitant to admit ignorance. I am not. After more than two years of investigation, I do not know what ignited the center tank fumes.

Me either, although my suggestion is better than scavenge pump, frayed wires in tank, static electricity, HIRF, power surge, or unknown. Mine has precedent. Mine has evidence: foddled number 3 engine. Foddled engines make long fiery exhaust. Center tank had big hole where maintenance hatch was. A fiery exhaust entering vapor filled aft tank could give the ignition in thin air and leave no proof.

A center tank fire needs three legs to stand on: Ignition source, fuel, proper combustion mixture. Let us assume the tank was not empty or full but had 50 to 100 gallons of fuel, one leg complete. Let us assume the mixture, the temperature, the volatility was such as to allow a fire, second leg complete. No ignition source. Stool falls down for center tank explosion as initial event. And that third leg for stool has been sought for two years. It is not going to magically appear and make NTSB happy with a complete stool.

Using wiring/cargo door explanation, the three legs of stool are there with ignition source being the engine that has soot on blades, soft body impacts, missing blades and was near scene of explosion, engine number 3, fireball at 7500 feet at time :50.

Just because engine number three refutes center tank as initial event and supports wiring cargo door explanation is no reason to not consider it as mystery ignition source. A real investigation checks everything out. Fiery engine three is a real possibility based on evidence, NTSB evidence in Exhibit 8A showing soot, missing blades, and soft body impacts inside engine.

So you see my frustration. Even when the evidence is on my side it is not considered but ignored.

I admit ignorance on several key places in the wiring/cargo door explanation. One is when exactly did the wiring short occur? On the ground or in the air?

I also do not know but suspect why the added red, the missing white, and the strange gray exist.

I possibly know why the red between windows, why white when should be red, why gray, and why outward.

Transfer, peel, and soot and explosive decompression.

(<http://www.corazon.com/Forwarddoorblowupphoto.html> It's a picture of what we are talking about. Federal servers can't receive pictures so the next best thing is web site at above URL.)

Transfer matches 811. Peel matches 811. Gray matches 800 upper fuselage gray sooted skin. Outward matches 811, 182, and 103.

Explosive decompression matches 182, 103, 811, and 800.

Need confirmation of transfer, peel, and soot, and outward.

Is the red between passenger windows on top white or underneath white. Where is the missing red paint in trim line? Is gray metal in lower cargo bay area soot? Is the metal exploded outward in peeled skin around both the midspan latches?

Until I have proof, I conject, and the conjecture is based on what I know such as UAL 811 paint transfer in door area, red between windows matches red TWA 800 trim below, gray below matches soot color above, and white is underneath red trim. My conclusions of red paint smears from paint transfer, and missing red was peeled from trim, and gray is soot are based on fact and only hands on evidence can refute those conclusions. I ask and invite hands on refutation. The implications of those conclusions, if not rebutted, are door opened in flight.

Why not the center tank blowing

out door as Mr. Schalekamp suggested?

30 Jan 1998 letter from Neil Schalekamp, FAA, to JBS:

"While no scenario has been categorically proven to be the cause, it is believed, based upon available data, that the center wing tank (CWT) explosion preceded any separation of the forward cargo door. The paint markings and structural deformation that you cite, do indicate an outward explosion, generally accepted to be caused by the explosion of the CWT.

Mr. Schalekamp replied openly saying a common sense thing. Was he chastised for that? Is that what is going on, suppression of open discussion on a national aviation mystery crash?

I've been in a fatal jet crash and that experience says let's talk about it and let's stop fatal jet crashes from happening again. That experience does not tell me to refer all discussion to someone else.

Sooner or later you will have to make a choice and a commitment, Mr. Streeter. You are in the right place and the right time to act on possibly the most important event of your aviation career, TWA 800. If you can't speak openly, are you thinking openly? Can you ask me questions? Open minds in this matter ask similar questions. Are you allowed to ask questions in an open manner? I await any questions you have and will give them full and serious consideration.

There are many sound theories, and some that appear to be not quite so sound.

Sound, as in could be, or possible, or maybe...center tank exploding on its own, meteor, missile from good guys or bad

guys, bomb, and a hull rupture forward of the wing by unknown structural problem.

Unsound, as in could be but wasn't by evidence and history:
Methane gas, HIRF, midair with Stealth fighter, drone, sonobouy from P3, magnetic resonance event, external fuel leak explosion.

All the sound ones have been investigated but one, the structural failure one which includes history precedent and common sense: Old wiring cracks, shorts and turn something on which causes a door to rupture leading to big hole in side which allows 300 knot force to tear nose off. And the nearby to the door engine sucks in baggage, fods, catches fires, falls, vibrates lose, spins and thousands of feet lower and many seconds after initial event at time :50 and alitude 7500 feet the fiery exhaust ignites through the missing hatch hole the vapors in center tank into fireball. Fireball seen at time :50 by other pilot, McClaine of Eastwind. Event time of :12 by CVR and FDR data. Fireball at 7500 feet by eyewitness.

Some of those theories are backed by evidence, others are not.

I trust you put wiring/cargo door theory into sound and backed by evidence category.

I have been assured by the NTSB that all of the evidence has been or is being examined,

Well, has it? Or do my pictures and text and reports refute that? How many latches on door? How many checked? The numbers are not the same are they? They don't have all the evidence to

examine. It's still out there. If they had it, it would be in the wreckage database or hung on the reconstruction or produced instead of saying we don't have it but it's not important. Very important point: There is no 'door' there are only a few 'pieces' of door. To refer to a few pieces of a door as a 'door' is like looking at a leg and an arm and calling it a 'body'.

Assurances from NTSB...please....opinions are something, facts are another. NTSB assured the world UAL 811 door was improperly latched. It wasn't; they wrote a new report and corrected their erroneous 'assurance'. It was important they did because that knowledge is used nine years later. Assurances are not evidence, opinions are not evidence. A picture of outward peeled skin at both midspan latches of the forward cargo door of TWA 800 is evidence. Assurances that the door was all latched all locked and all intact at water impact by NTSB is not evidence, it's wishful thinking.

<http://www.corazon.com/Forwarddoorblowupphoto.html>

I offer to you, Mr. Streeter, evidence of photo of TWA 800 closeup of door showing missing and shattered and outward peeled skin with missing red paint and added red paint between windows. NTSB offers assurances 'it's closed and everything was normal about that door. Really. And we've told Mr. Smith over and over again and we are not going to give him assurances anymore.'

Ah, if only the door had eight and not ten latches and if only 80% of the door were not missing and the rest shattered outward, then the assurances might be reassuring.

but I have no way to respond to the questions you raise without effectively removing myself from the investigation.

I don't understand that. That implies you are in the investigation. Are you? If you are, then great. Do not respond openly to me, do not respond to my questions, but do check them out for your own reasons. Why? I offer professionalism, curiosity, and satisfaction of mystery solved as motive.

On your own or with other investigation team members check out:

1. Why the gray color on lower cargo door pieces? Is it soot?
2. Are the red paint markings between the passenger windows above forward cargo door on top of the white indicating transfer or are they underneath indicating peeled white paint? Regardless, what caused the unusual markings?
3. Why are the red paint markings where they shouldn't be and why is the red paint missing from below the windows?
4. Is there overtravel impression damage on the hinge knuckles?
5. How many of the twenty cargo door latches have been recovered and examined?
6. What is the status of the one recovered overpressure relief door, open or closed?
7. Have the midspan latch pins been recovered and does the aft pin show heat damage?
8. Have the two identical cargo door sills been recovered and do both have all the lower eight latches latched and locked?
9. Why are the lower cargo door pieces not labeled and what are the labels?
10. Why is port side forward of the wing so smooth and the

starboard, cargo door side so shattered outward?

I'm talking hands on examination of the evidence by a government official involved in the investigation. Why? Because of new evidence of photos of door area, and hindsight and reflection suggest that the right side forward of the wing is worthy or repeat close examination.

It is an area that has previously been suspected, so to go back is not weird.

If you do check it out and can show in your own mind that the door opened in flight, then do what you have to do officially to examine why, which I offer UAL 811 reason of old wiring shorting but it could be center tank explosion or other reason.

If the door opened in flight, very clear evidence should be present. Is it there?

I say yes with hoops stresses, paint, peeled skin, and missing latches.

If door was intact at water impact, very clear evidence should be there. Is it?

I say no by shattered skin, nearby R2 door very intact, inward crushing damage on some parts of lower fuselage, missing door hardware when it should all be nearby if intact until water impact.

Door open in flight or not is the question, not what ignited center fuel tank.

JBS>What do you think, did the door of 800 open in flight or not? What are those red paint markings? Why are the door frames opposite the midspan latches blown and shattered outward? Where is the remaining 80% of the door skin and hardware?

Below was sent to NTSB eleven months ago, 9/97. NTSB has yet to acknowledge publicly or in exhibits at hearing that those clear unusual red paint markings exist. Only FAA Mr. Schalekamp admits they exist. Is that not strange?

Why is NTSB ducking me?

14 Sep 97

To: DICKINAntsbgov

From: John Barry Smith <barry@corazon.com>

Subject: Paint/hinges/half door/streak

Cc:

Bcc:

X-Attachments:

Mr. Dickinson,

Analysis of NTSB photo of starboard side of TWA 800 reveals match of UAL 811 as shown in pictures and text in AAR 92/02, specifically:

1. The red paint which is not normally present is between the windows of 800. The paint was transferred from door top to fuselage when door slammed upwards, the same way fuselage paint got on the UAL 811 door. The two pieces of metal met at

high force.

2. The hinges of 800 are intact and appear to be in working order, just as UAL 811 hinges were reported to be. <http://www.corazon.com/811page35analydoor.html> has whole hinge analysis, next page too, from NTSB report.

<http://www.corazon.com/811page40doorhinge.html> has picture of 811 hinge that looks like 800 hinge.

3. Top half of door of 800 is attached to hinge and fuselage skin which is then torn away, just as described in UAL 811 report. This piece may be the piece seen as streak as it fell from high and slowed down from fast and reflected evening sunlight to observers on ground.

4. Bottom half of door of 800 is missing, just as bottom half of UAL 811 was broken in half longitude wise at mid span latches.

Overall the picture of damage area of TWA 800, which is supposed to be start of event, shows evidence consistent with bottom of cargo door unlatching, being blown out and away by internal pressure and 300 knot slipstream, the top half peeling upwards taking hinges and skin with it. Paint from door is transferred to area between windows. 300 knots then hits weakened nose and tears it off and rest of damage ensues.

The extensive damage to door area of TWA 800 compared to UAL 811 can be explained that nose of UAL 811 did not come off, only the door and hinge and skin, while TWA 800, nose came off and exposed rest of fuselage to 300 knots.

Forward cargo door area, a worthy place for intense examination.

End.

To support fiery engine 3 as ignition source:

NTSB Exhibit 8A, Page 11, paragraph 3, discussing results of engine 3 disassembly, "Of the 46 fan blades in the fan rotor, 21 blades with complete or partial airfoils and 6 root sections were recovered. All of the fan blades had sooting on the convex airfoil surfaces. Most of the full length airfoils were bent rearward and the tips outboard of the outer midspan shroud were bent forward slightly. About half of the fan blades had impact damage to the leading and trailing edges. Almost all of the impact damage to the airfoils could be matched to contact with the midspan shroud on an adjacent blade. One full length blade had four soft body impacts along the leading edge and a partial airfoil had a soft body impact, which had some streaking extending rearward.

To support red paint markings exist officially:

30 Jan 1998 letter from Neil Schalekamp, FAA, to JBS:

"While no scenario has been categorically proven to be the cause, it is believed, based upon available data, that the center wing tank (CWT) explosion preceded any separation of the forward cargo door. The paint markings and structural deformation that you cite, do indicate an outward explosion, generally accepted to be caused by the explosion of the CWT. Furthermore, you mentioned that the forward cargo door was recovered a considerable distance from the rest of the structure. This could be due to its aerodynamic characteristics and prevailing winds at the time of the accident, rather than attributing this as the primary cause of the accident."

To support NTSB assurances that the door was all latched, all

locked and all intact at water impact:

19 December 1997. Chairman Jim Hall of NTSB writes me and states, "However, to repeat, the investigation of the accident involving TWA flight 800 has revealed no evidence to suggest that a failure of a cargo door precipitated the event."

20 November 1997. Mr. Peter Goelz of NTSB writes to Sandy Hentges of Congressman Farr's office and states, "As Congressman Farr was advised by letter dated October 24, 1997, early in the investigation we determined conclusively that the cargo doors were latched and locked at impact with the water, and there was no evidence of any failure of any of the latching mechanisms on the doors."

24 October 1997. Chairman NTSB Jim Hall writes Congressman Farr and states, ""Please be assured that our team has examined all of the structure recovered from TWA flight 800, approximately 95%--including all of the cargo door mechanisms and structures. Early in the investigation we determined conclusively that the cargo doors were latched and locked at impact with the water, and there was no evidence of any failure of any of the latching mechanisms on the doors. This information has been forwarded to Mr. Smith by our investigators on previous occasions."

19 May 1997, Mr. Ron Schleede emails me and states, "As I have told you before, the cargo door was locked and latched at impact."

22 April, 1997. Mr. James Wildey II signs report No. 97-82 of Docket No. SA-516, Exhibit 15C, Section 41/42, Forward Cargo Door, dated 22 April 1997, with Mr. Al Dickinson, AS-10, listed

as investigator. Report states, "Examination of the lower lobe forward cargo door showed that all eight of the door latching cams remain attached (along with pieces of the door itself) to the pins along the lower door sill."

Comment:

Ah, if only the door had eight and not ten latches and if only 80% of the door were not missing and the rest shattered outward the assurances might be reassuring.

To review your latest email Mr. Streeter:

1. I did not offend when I used the rhetorical device of pretending reality does not exist.
2. You read what citizens send in.
3. You pretty much can not speak openly about your opinions.
4. You do pay attention to what people are saying.
5. You state that the ignition source of center tank is not determined at this time.
6. There are sound explanations and unsound explanations, some have evidence and some do not.
7. NTSB has assured you center tank did it and wiring/cargo door didn't.
8. You can not 'respond' to questions without removing yourself from investigation.

My summary:

I defer to your judgment of what you can and can not say openly. I offer wiring/cargo door explanation as sound and with evidence.

Thanks for listening.

Ask questions openly.

Please check out the added red, the missing red, the gray, the

outward, the missing hardware, and answer question in your mind, "did the door rupture/open in flight or not".

Cheers,
John Barry Smith

Attachment below to support NTSB admits two midspan latches are not recovered, not examined, and not latched and locked. (And also to support my claim NTSB thinks I'm stupid, and says so openly to foreign news reporter.)

Dear Dr. Wills,

Your proposed article is incorrect. First of all, Senator McCain did not request that the NTSB meet with Mr. Smith. The Senator asked that the Board respond to Mr. Smith's concerns, which we have done numerous times and in great detail.

Secondly, Mr. Smith is simply wrong. There is absolutely no physical evidence to support his personal theory that the forward cargo door came unlatched. In fact, there is considerable evidence to the contrary.

As stated in the Metallurgist's Factual Report, Exhibit 15C (which, of course, is a public document and available at our web site www.nts.gov):

Examination of the lower lobe forward cargo door

showed
that all eight of the door latching cams remain attached (along
with
pieces of the door itself) to the pins along the lower door sill.

Overall examination of the forward portion of the
airplane showed that sections 41 and 42 contained uniform
crushing
damage that extended from S-39L across the bottom of the
fuselage and up
above the right side main cabin window belt to S-14R. This
crushing
damage is consistent with the intact forward portion of the
airplane
(including section 41 and 42) impacting the water with a right
wing low
attitude. The lower lobe forward cargo door was in the crush
area.

Although Mr. Smith does display some knowledge of the Boeing
747, he has
a basic misunderstanding of the facts. For example, Mr. Smith
claims
that there are 10 latches on the cargo door and that the Board
only
discusses eight in the above mentioned report. While a
superficial
description of the door might imply that there are 10 latches, Mr.
Smith
is, in fact, incorrect in implying that they all hold the door onto
the
fuselage. The eight at the bottom of the door, which were
discussed in

the report actually hold the door closed - the other two, one on each side of the door are merely "alignment latches" and do not hold the door closed.

We receive numerous inquiries from the public, many with their own extensively developed theories, and we try to be responsive to all. You are free to request copies of the correspondence between Mr. Smith and the Safety Board, a prudent step, I believe, before publishing such an article.

If you have further questions or concerns, please feel free to contact us.

Sincerely,

Shelly Hazle

From: John Barry Smith <barry@corazon.com>
Date: September 8, 1998 11:33:08 AM PDT
To: FAAOAI
Subject: Bare wiring found in TWA 800

Dear Mr. Streeter, 8 Sep 98

You were bang on with wiring a concern months ago. I was bang

on with wiring a concern with wiring/cargo door explanation also. Please request thorough examination of all cargo door area wiring on early model 747s.

The Systems Exhibit 9A continues, page 116:

"Some wires found in the section of W480 from forward of station 570 and identified as BMS13-42A had numerous cracks in the insulation. Most of the cracks in this bundle were found to expose the core conductor when examined by microscope. Only within five feet of the aft end of the W480 bundle from station 570-900 were insulation cracks found."

There's the reason, bare wire found in TWA 800 carcass in same area as caused another fatal 747 accident caused by bare wiring turning on door unlatch motor in UAL 811. It's a precedent based on reality of bare wire discovered and not on wishful thinking of bare wire around center fuel tank not found but hoped to be there.

Swissair is looking like a Kapton fire caused event. Can you know request a wiring check of 747s in cargo door area? To even have a noncatastrophic fire in any 747 cargo bay caused by wiring is terrible based upon what we know now. That area must be thoroughly examined and FAA can do it.

Cheers,
Barry

Below sent January 8th, 1998

Conversion: Allowed
Priority: normal
Disclose-Recipients: Prohibited

Alternate-Recipient: Allowed
Date: 08 Jan 1998 16:04:05 -0500
From: Lyle Streeter <Lyle.Streeter@faa.dot.gov>
To: barry@corazon.com (IPM Return requested) (Receipt notification requested)
Subject: Re: Wiring before door, door before center tank

Mr. Smith - latest word in on the Cairo divert is that there was no fire, but a faulty detection system. Wiring problems are still a potential area of concern.

I have passed your comments along to the investigators in TWA800.

Lyle Streeter

Quote from TWA 800 Public Docket 516A, Exhibit 9A Systems Group Chairman's Factual report of Investigation, Page 47, "A Boeing telefax of June 25, 1997, stated that: The Poly-X wire was used as general purpose wire on the RA164 (TWA 800) aircraft. Wire insulation known as Poly-X had three in-service problems:

- Abrasion of the insulation in bundles installed in high vibration areas.

(This problem was corrected by Boeing Service Bulletin No. 747-71-7105, Dated July 19, 1974)

- Random flaking of the topcoat.

- Insulation radial cracks in tight bend radii.

Radial cracking phenomenon of the Poly-X wire was mainly

associated with mechanical stress. Bend radius is the largest contributor to mechanical stress in installed wire or cable. Presence of moisture in conjunction with mechanical stress is also a contributor."

Quote from TWA 800 Public Docket 516A, Exhibit 9A Systems Group Chairman's Factual report of Investigation, Page 47, "A Boeing telefax of June 25, 1997, stated that: The Poly-X wire was used as general purpose wire on the RA164 (TWA 800) aircraft. Wire insulation known as Poly-X had three in-service problems:

- Abrasion of the insulation in bundles installed in high vibration areas.

(This problem was corrected by Boeing Service Bulletin No. 747-71-7105, Dated July 19, 1974)

- Random flaking of the topcoat.

- Insulation radial cracks in tight bend radii.

Radial cracking phenomenon of the Poly-X wire was mainly associated with mechanical stress. Bend radius is the largest contributor to mechanical stress in installed wire or cable.

Presence of moisture in conjunction with mechanical stress is also a contributor."

The Systems Exhibit 9A continues on same page 47, "Evidence of arcing or short circuiting was found in the fuselage of N93119, (TWA 800) in addition to what was found in the wiring from the raceway below the left cabin floor and near the forward wing spar.

The Systems Exhibit 9A continues, page 116:

"Some wires found in the section of W480 from forward of station 570 and identified as BMS13-42A had numerous cracks in the insulation. Most of the cracks in this bundle were found to expose the core conductor when examined by microscope. Only

within five feet of the aft end of the W480 bundle from station 570-900 were insulation cracks found."

(Please note that BMS13-42A is Poly-X wiring. Cargo door location is FS 560-670 and cracked wires discovered are within that zone. Frayed wires in that area have shorted before and caused the forward cargo door to open in flight, NTSB AAR 92/02 UAL 811. Water has been seen pouring out of a forward cargo bay of a Boeing airliner. Water and leaking electricity make a powerful conductor. Both are known to exist in Boeing airliners.)

Trans World Airlines Flight 800:

"The wire that carried electrical power from the cockpit to the tape recorder mounted in the rear of TWA Flight 800 ran down the right side of the airplane. The wire that carried power to the flight data recorder ran down the left side. Yet the two were severed within an instant, without any warning."

FAA LTR DTD: 11/1/91

The FAA agrees with the intent of these safety recommendations and is considering the issuance of a notice of proposed rulemaking to address these issues. I will provide the Board with a copy of any document that may be issued.

NTSB LTR DTD: 11/27/91

These recommendations were issued as a result of the Board's investigation of an incident in which the rear cargo door on a Boeing 747-222B initially would not open electrically and then opened electrically without activation of the door open switches. Your letter indicates that the Federal Aviation Administration

agrees with the intent of these recommendations and is considering the issuance of a notice of proposed rulemaking to address these issues. The Board urges the FAA to move expeditiously on the recommendations. Pending receipt of additional information concerning the action to be taken by the Federal Aviation Administration, the Safety Board is classifying Safety Recommendations A-91-83 and -84 as "Open--Acceptable Action."

FAA LTR DTD: 4/5/93

The Federal Aviation Administration (FAA) agrees with the intent of these recommendations. On February 18, 1992, the FAA issued a notice of proposed rulemaking (NPRM) applicable to certain Boeing Model 747 series airplanes. This NPRM proposed to require inspection of the flexible conduit, wiring, and support brackets between the fuselage and the forward and aft cargo doors. Since the issuance of this NPRM, the FAA has further reviewed the circumstances surrounding this door opening incident and has confirmed that an inadvertent in-flight opening of the cargo door cannot be caused solely by wire chafing. The FAA has determined that in addition to chafing at least four independent failures must also occur in order to drive the door latches to the open position. In light of these findings, the FAA determined that the requirements proposed by the NPRM were unnecessary. On December 21, 1992, the FAA withdrew the NPRM. I have enclosed a copy of the notice of withdrawal for the Board's information.

Airworthiness Directive (AD) 90-09-06 (Docket No. 89-NM-148-AD) mandates the installation of a door warning switch located on the lock sector, as well as a reinforcement of the lock sector to ensure that the latches remain locked against

backdriving of the latches by the latch power drive unit. Failure of lock sectors that are reinforced in accordance with AD 90-09-06 has been shown to be unlikely and, even in the event of such a failure, an indication by means of the door warning switch will warn the flightcrew of the problem. The modifications, tests, and inspections required in AD 90-09-06 provide an acceptable level of safety to preclude inadvertent actuation of the cargo door power drive unit and possible injury to maintenance or cargo handling personnel. I have enclosed a copy of the AD for the Board's information. The FAA believes that the current requirements of AD 90-09-06 address the full intent of these safety recommendations to preclude an uncommanded opening of the forward and aft cargo doors.

I consider the FAA's action to be completed, and I plan no further action on Safety Recommendations A-91-83 and -84.

NTSB LTR DTD: 11/8/93

The National Transportation Safety Board has reviewed the Federal Aviation Administration (FAA) response of April 5, 1993, to Safety Recommendations A-91-83 and -84. These recommendations asked that the FAA issue an airworthiness directive applicable to all Boeing 747 airplanes with a flexible conduit protecting the wiring bundle between-the-fuselage and aft cargo door to require an expedited inspection of:

- (1) the wiring bundle in the area normally covered by the conduit for the presence of damaged insulation (using either an electrical test method or visual examination);
- (2) the conduit support bracket and attached standoff pin-on the upper arm of the forward lift actuator mechanism;
- (3) the flexible conduit for the presence of cracking in the convoluted innercore.

The Board further recommended that wires with damaged insulation be repaired before further service. Damage to the flexible conduit, conduit support bracket, and standoff pin should result in an immediate replacement of the conduit as well as the damaged parts. The inspection should be repeated at an appropriate cyclic interval.

The Safety Board then asked, in Safety Recommendation A-91-84, that the FAA evaluate the design, installation, and operation of the forward cargo door flexible conduits on Boeing 747 airplanes so equipped and issue, if warranted, an airworthiness directive for inspection and repair of the flexible conduit and underlying wiring bundle, similar to the provisions recommended in Safety Recommendation A-91-83.

The FAA's April 5, 1993, response listed a number of findings of an FAA review of the circumstances surrounding the subject door opening. Among the findings, the FAA confirmed that an inadvertent inflight opening of the cargo door cannot be caused solely by wire chafing. Further, the FAA determined that at least four independent failures must occur to drive the door latches to the open position. The FAA also stated that failure of lock sectors that are reinforced in accordance with AD 90-09-06 has been shown to be unlikely and, even in the event of such a failure, the door warning switch would warn the flightcrew, of the problem.

Based on these findings, the FAA has decided that the requirements of AD 90-09-06 address the full intent of these recommendations-to preclude an uncommanded opening of the forward and aft cargo doors.

FAA staff has also expressed concern that the recommended inspections could result in damage to the wire bundle insulation

during the intrusive inspection. Therefore, based on the level of redundancy that now exists to prevent inadvertent door opening in flight, the Safety Board has classified Safety Recommendations A-91-83 and -84 as "Closed-Reconsidered. The Board will closely monitor incidents related to the uncommanded opening of cargo doors on 747 airplanes to further document this position.

NTSB Safety Recommendation Brief

Data_Source: U.S. NTSB Safety Recommendations

Rprt_Nbr: A-91-84

Last Updated: 03-13-95

[O] On June 13, 1991, United Airlines (UAL) maintenance personnel were unable to electrically open the aft cargo door on a Boeing 747-222B, N152UA, at John F. Kennedy Airport (JFK), Jamaica, New York. The airplane was one of two used exclusively on nonstop flights between Narita, Japan, and JFK. This particular airplane had accumulated 19,053 hours and 1,547 cycles at the time of the occurrence.

Recommendations:

A-91-84. Evaluate the design, installation, and operation of the forward cargo door flexible conduits on Boeing 747 airplanes so equipped and issue, if warranted, an Airworthiness Directive for inspection and repair of the flexible conduit and underlying wiring bundle, similar to the provisions recommended in A-91-83.

Responses:

FAA LTR DTD: 11/01/91

The FAA agrees with the intent of these safety recommendations and is considering the issuance of a notice of proposed rulemaking to address these issues. I will provide the Board with

a copy of any document that may be issued.

NTSB LTR DTD: 11/27/91

These recommendations were issued as a result of the Board's investigation of an incident in which the rear cargo door on a Boeing 747-222B initially would not open electrically and then opened electrically without activation of the door open switches. Your letter indicates that the Federal Aviation Administration agrees with the intent of these recommendations and is considering the issuance of a notice of proposed rulemaking to address these issues. The Board urges the FAA to move expeditiously on the recommendations. Pending receipt of additional information concerning the action to be taken by the Federal Aviation Administration, the Safety Board is classifying Safety Recommendations A-91-83 and -84 as "Open-Acceptable Action."

FAA LTR DTD: 4/5/93

The Federal Aviation Administration (FAA) agrees with the intent of these recommendations. On February 18, 1992, the FAA issued a notice of proposed rulemaking (NPRM) applicable to certain Boeing Model 747 series airplanes. This NPRM proposed to require inspection of the flexible conduit, wiring, and support brackets between the fuselage and the forward and aft cargo doors. Since the issuance of this NPRM, the FAA has further reviewed the circumstances surrounding this door opening incident and has confirmed that an inadvertent in-flight opening of the cargo door cannot be caused solely by wire chafing. The FAA has determined that in addition to chafing at least four independent failures must also occur in order to drive the door latches to the open position. In light of these findings, the FAA

determined that the requirements proposed by the NPRM were unnecessary. On December 21, 1992, the FAA withdrew the NPRM. I have enclosed a copy of the notice of withdrawal for the Board's information.

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NTSB LTR DTD: 11/8/93

The National Transportation Safety Board has reviewed the Federal Aviation Administration (FAA) response of April 5, 1993, to Safety Recommendations A-91-83 and -84. These recommendations asked that the FAA issue an airworthiness directive applicable to

all Boeing 747 airplanes with a flexible conduit protecting the wiring bundle between-the-fuselage and aft cargo door to require an expedited inspection of:

(1) the wiring bundle in the area normally covered by the conduit for the presence of damaged insulation (using either an electrical test method or visual examination); (2) the conduit support bracket and attached standoff pin-on the upper arm of the forward lift actuator mechanism; (3) the flexible conduit for the presence of cracking in the convoluted innercore.

The Board further recommended that wires with damaged insulation be repaired before further service. Damage to the flexible conduit, conduit support bracket, and standoff pin should result in an immediate replacement of the conduit as well as the damaged parts. The inspection should be repeated at an appropriate cyclic interval.

The Safety Board then asked, in Safety Recommendation A-91-84, that the FAA evaluate the design, installation, and operation of the forward cargo door flexible conduits on Boeing 747 airplanes so equipped and issue, if warranted, an airworthiness directive for inspection and repair of the flexible conduit and underlying wiring bundle, similar to the provisions recommended in Safety Recommendation A-91-83.

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shown to be unlikely and, even in the event of such a failure, the door warning switch would warn the flightcrew, of the problem.

Based on these findings, the FAA has decided that the requirements of AD 90-09-06 address the full intent of these recommendations-to preclude an uncommanded opening of the forward and aft cargo doors.

FAA staff has also expressed concern that the recommended inspections could result in damage to the wire bundle insulation during the intrusive inspection. Therefore, based on the level of redundancy that now exists to prevent inadvertent door opening in flight, the Safety Board has classified Safety Recommendations A-91-83 and -84 as "Closed-Reconsidered. The Board will closely monitor incidents related to the uncommanded opening of cargo doors on 747 airplanes to further document this position.

From: John Barry Smith <barry@corazon.com>
Date: September 9, 1998 10:16:11 PM PDT
To: FAAOAI
Subject: Another forwarding favor please.

Dear Mr. Streeter, 9 Sep 98

Sorry to ask another favor, would you please forward this to Mr. Francis? Ms. Hazle of NTSB, who was forwarding material, is now not recognized for some unknown reason.

To: hazles@NTSB.gov
Subject: Please forward to Mr. Francis.

Sent: Wed, 9 Sep 1998 21:30:39 -0400

did not reach the following recipient(s):

hazles@NTSB.gov on Wed, 9 Sep 1998 21:28:49 -0400

The recipient name is not recognized

MSEXCH:IMS:NTSB US Government:NTSB:EXCSV 0
(000C05A6) Unknown Recipient

I don't know what happened. Anyway, Jim Bennett is an old acquaintance from my Navy days who happens to be friends with Mr. Francis. Jim asked that Mr. Francis give a few minutes to my wiring/cargo door explanation so I sent the following email for him.

I would much appreciate it if you could see he gets it.

Cheers,
Barry Smith

Robert Francis II
Vice Chairman
National Transportation Safety Board
490 L'Enfant Plaza East, SW.
Washington, DC 20594

Dear Mr. Francis, 9 Sep 98

Jim Bennett emailed me and said he asked if you could devote a few minutes to my wiring/cargo door explanation for TWA 800. Jim and I

were stationed
together in Albany, Georgia while he was a manufacturer's tech
rep and I
was a fledgling Navy reconnaissance navigator flying North
American built
RA-5C Vigilantes. I'm glad he mentioned my name as that
hopefully takes me
out of the weirdo guy on net with another wacky TWA 800
theory category and
into the 'let's check it out' category.

The urgency is Swissair 111 which is linked to TWA 800 and
UAL 811 by the
aromatic polyimide tape insulation used in all three.

My explanation for TWA 800 is the NTSB explanation for UAL
811, another
PolyX wired high time 747 that had its hull rupture forward of
the wing
after take off.

My explanation for TWA 800 agrees with the NTSB explanation
of center tank
fire/explosion. I just back up the initial time and altitude by about
five
thousand feet and about thirty seconds.

My explanation and the NTSB explanation has PolyX/Kapton as
probable
villain. We agree on so much.

To the point: TWA 800 carcass has a NTSB discovered bare
PolyX wiring

bundle in cargo door area as described below in NTSB exhibit:

Systems Exhibit 9A page 116:

"Some wires found in the section of W480 from forward of station 570 and identified as BMS13-42A had numerous cracks in the insulation. Most of the cracks in this bundle were found to expose the core conductor when examined by microscope. Only within five feet of the aft end of the W480 bundle from station 570-900 were insulation cracks found."

Mr. Francis, that bare wire is real. It's in the TWA 800 cargo door area, not the center tank area which had no real bare wire found. The cargo door area has had bad wiring before in UAL 811. UAL 811 matches TWA 800 in many significant matches. Swissair has Kapton/Poly X wiring.

Please ask FAA to check all cargo door wiring for high time Boeing 747s.

Please locate and examine all the ten latches on the forward door of TWA 800 to support claim it was all latched and all locked at water impact.

Please arrange a meeting between me and a NTSB representative at his convenient place and time for me to present further evidence that I have researched over a nine year period that supports wiring/cargo door

explanation for TWA 800 and others.

Thank you for the few minutes of your time and consideration.

Respectfully,

John Barry Smith

Commercial pilot, instrument rated, former FAA Part 135
certificate holder.

US Navy reconnaissance navigator, RA-5C 650 hours.

US Navy patrol crewman, P2V-5FS 2000 hours.

Owner Mooney M-20C, 1000 hours.

Survivor of sudden night fiery fatal jet plane crash in RA-5C.

Air Intelligence Officer, US Navy

831 659 3552

551 Country Club Drive,
Carmel Valley, CA 93924

X-Sender: sai@cybercenter.cl

Date: Fri, 04 Sep 1998 08:35:08 -0300

To: John Barry Smith <barry@corazon.com>

From: Jim Bennett <sai@cybercenter.cl>

Subject: Re: Kapton

Mime-Version: 1.0

X-MIME-Autoconverted: from quoted-printable to 8bit by
mail.redshift.com id

FAA25295

Hi Barry,

Sorry I haven't gotten back with you. I've been swamped with problems here concerning my visa and my auto importation with customs - not to mention work!

I was very sorry to hear about Swissair 111. It was an MD-11 and I am not sure if Kapton was aboard or one of the hybrid derivatives. It bears consideration and we'll have to wait and see if they can recover the cockpit recorder and/or debris with the components.

I did send my video tape to Bob Francis of the NRL/NATC ballistics tests with KAPTON which was done by Frank Campbell. I also asked him if he would give you a few minutes to talk about your theories on the door. I haven't heard back from him yet but in view of this new crash, I suspect he is going to be busy coordinating with the Canadian Transp. Board.

Thanks,

Jim

At 05:19 PM 9/3/1998 -0700, you wrote:

Dear Jim, if Kapton the villain then wiring/cargo door for TWA 800 must be reexamined.

Cheers,
Barry

Quote from TWA 800 Public Docket 516A, Exhibit 9A Systems Group Chairman's

Factual report of Investigation, Page 47, "A Boeing telefax of June 25,

1997, stated that: The Poly-X wire was used as general purpose wire on the

RA164 (TWA 800) aircraft. Wire insulation known as Poly-X had three

in-service problems:

-Abrasion of the insulation in bundles installed in high vibration areas.

(This problem was corrected by Boeing Service Bulletin No. 747-71-7105,

Dated July 19, 1974)

-Random flaking of the topcoat.

-Insulation radial cracks in tight bend radii.

Radial cracking phenomenon of the Poly-X wire was mainly associated with

mechanical stress. Bend radius is the largest contributor to mechanical

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The Systems Exhibit 9A continues on same page 47, "Evidence of arcing or short circuiting was found in the fuselage of N93119, (TWA 800) in addition

to what was found in the wiring from the raceway below the left cabin floor

and near the forward wing spar.

The Systems Exhibit 9A continues, page 116:

"Some wires found in the section of W480 from forward of station 570 and

identified as BMS13-42A had numerous cracks in the insulation. Most of the cracks in this bundle were found to expose the core conductor when examined by microscope. Only within five feet of the aft end of the W480 bundle from station 570-900 were insulation cracks found."

BMS13-42A is Poly-X wiring. Cargo door location is FS 560-670 and cracked wires discovered are within that zone. Frayed wires in that area have shorted before and caused the forward cargo door to open in flight, NTSB AAR 92/02 UAL 811.

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aged
high flight time
poly x wired
early model Boeing 747
and shortly after takeoff
experienced hull rupture forward of the wing
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bare wire found in cargo door area.

vertical fuselage tear lines forward of the wing and aft of forward cargo door, and destruction initially thought to be have been caused by a bomb. parts initially shed from just forward of the wing. first pieces of structure to leave aircraft in flight from forward cargo bay. forward cargo door frayed hoop stress found in cargo door area door skin shattered outward. midspan latch status undetermined. foddred number three engine fire in number three engine missing blades from number three engine. sudden sound on CVR loud sound on the CVR short duration sound on the CVR abrupt power cut to FDR inadvertent opening of forward cargo door in flight considered and initially thought to be a bomb but later ruled out.

Exhibit 8A, Page 11, paragraph 3, discussing results of engine 3 disassembly, "Of the 46 fan blades in the fan rotor, 21 blades with complete or partial airfoils and 6 root sections were recovered. All of the fan blades had sooting on the convex airfoil surfaces. Most of the full length airfoils were bent rearward and the tips outboard of the outer

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Pictures URLs below of right side of TWA 800 that show red paint markings, outward peeled skin, ruptures at midspan latches, inward crushing from water impact, and general explosive decompression zone that contrasts with smooth opposite port side damage.

<http://www.corazon.com/Forwarddoorblowupphoto.html>

<http://www.corazon.com/TWA800wreckageredpaint.html>

<http://www.corazon.com/TWA800hullrupture.html>

From: "Lyle Streeter" <lyle_streeter@faa.gov>

Date: September 10, 1998 8:02:38 AM PDT

To: <barry@corazon.com>

Subject: Re: Another forwarding favor please.

Done.

Fairly certain Kapton was aboard.

Reply Separator

Subject: Another forwarding favor please.

Author: barry@corazon.com at Internet

Date: 9/10/1998 1:15 AM

Dear Mr. Streeter, 9 Sep 98

Sorry to ask another favor, would you please forward this to Mr. Francis?

Ms. Hazle of NTSB, who was forwarding material, is now not recognized for some unknown reason.

To: hazles@NTSB.gov

Subject: Please forward to Mr. Francis.

Sent: Wed, 9 Sep 1998 21:30:39 -0400

did not reach the following recipient(s):

hazles@NTSB.gov on Wed, 9 Sep 1998 21:28:49 -0400

The recipient name is not recognized

MSEXCH:IMS:NTSB US Government:NTSB:EXCSVN 0
(000C05A6) Unknown Recipient

I don't know what happened. Anyway, Jim Bennett is an old acquaintance from my Navy days who happens to be friends with Mr. Francis. Jim asked that Mr. Francis give a few minutes to my wiring/cargo door explanation so I sent the following email for him.

I would much appreciate it if you could see he gets it.

Cheers,
Barry Smith

Robert Francis II
Vice Chairman
National Transportation Safety Board
490 L'Enfant Plaza East, SW.
Washington, DC 20594

Dear Mr. Francis, 9 Sep 98

Jim Bennett emailed me and said he asked if you could devote a few minutes to my wiring/cargo door explanation for TWA 800. Jim and I were stationed together in Albany, Georgia while he was a manufacturer's tech rep and I was a fledgling Navy reconnaissance navigator flying North American built RA-5C Vigilantes. I'm glad he mentioned my name as that hopefully takes me out of the weirdo guy on net with another wacky TWA 800 theory category and into the 'let's check it out' category.

The urgency is Swissair 111 which is linked to TWA 800 and UAL 811 by the aromatic polyimide tape insulation used in all three.

My explanation for TWA 800 is the NTSB explanation for UAL 811, another PolyX wired high time 747 that had its hull rupture forward of the wing after take off.

My explanation for TWA 800 agrees with the NTSB explanation of center tank fire/explosion. I just back up the initial time and altitude by about five thousand feet and about thirty seconds.

My explanation and the NTSB explanation has PolyX/Kapton as probable villain. We agree on so much.

To the point: TWA 800 carcass has a NTSB discovered bare PolyX wiring bundle in cargo door area as described below in NTSB exhibit:

Systems Exhibit 9A page 116:

"Some wires found in the section of W480 from forward of station 570 and identified as BMS13-42A had numerous cracks in the insulation. Most of the cracks in this bundle were found to expose the core conductor when examined by microscope. Only within five feet of the aft end of the W480 bundle from station 570-900 were insulation cracks found."

Mr. Francis, that bare wire is real. It's in the TWA 800 cargo door

area,
not the center tank area which had no real bare wire found. The
cargo door
area has had bad wiring before in UAL 811. UAL 811 matches
TWA 800 in many
significant matches. Swissair has Kapton/Poly X wiring.

Please ask FAA to check all cargo door wiring for high time
Boeing 747s.

Please locate and examine all the ten latches on the forward door
of TWA
800 to support claim it was all latched and all locked at water
impact.

Please arrange a meeting between me and a NTSB representative
at his
convenient place and time for me to present further evidence that
I have
researched over a nine year period that supports wiring/cargo
door
explanation for TWA 800 and others.

Thank you for the few minutes of your time and consideration.

Respectfully,

John Barry Smith

Commercial pilot, instrument rated, former FAA Part 135
certificate holder.

US Navy reconnaissance navigator, RA-5C 650 hours.

US Navy patrol crewman, P2V-5FS 2000 hours.

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foreign object damage to starboard engines #3

more severe inflight damage on starboard side,

at least nine never recovered bodies,

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post side smooth forward of the wing.

rupture at forward cargo door at aft midspan latch,

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downward bent floor beams in cargo door area,

bare wire found in cargo door area.

vertical fuselage tear lines forward of the wing and aft of forward

cargo

door, and

destruction initially thought to be have been caused by a bomb.

parts initially shed from just forward of the wing.

first pieces of structure to leave aircraft in flight from forward

cargo

bay.

forward cargo door frayed

hoop stress found in cargo door area

door skin shattered outward.

midspan latch status undetermined.

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<http://www.corazon.com/TWA800hullrupture.html>

barry@corazon.com

<http://www.corazon.com/>

From: John Barry Smith <barry@corazon.com>

Date: October 16, 1998 9:12:21 AM PDT

To: FAAOAI

Subject: Please check 747 cargo doors

before it's too late.

Regards,

John Barry Smith

Vibrations force plane to return to Toledo

October 15, 1998 BY TOM HENRY

BLADE STAFF WRITER A U.S. Airways flight that left Toledo Express Airport with 20 passengers on board turned around in midair Tuesday night and went back to the airport for an unscheduled landing after the pilot felt unusual vibrations.

The Federal Aviation Administration said the problem was related to a luggage compartment door being ajar.

Flight 7002, a DC-9 scheduled to go from Toledo to Pittsburgh with a 12-minute stop along the way in Akron, landed safely at 8:27 p.m. at Toledo Express, where it had taken off a half-hour earlier, officials said.

A right front baggage door wasn't properly closed. It popped open when the plane landed, strewing luggage across the runway, David Castelveter, U.S. Airways spokesman, said.

No one was hurt. The FAA is investigating whether the problem was related to human or mechanical error, Don Zochert, agency spokesman, said.

Mr. Castelveter said the pilot made the decision to turn around after determining there was a problem with the cargo door.

The door was in an open, latched position, ``indicating the door was never closed before the aircraft taxied out and took off," according to a report filed by the Toledo-Lucas County Port Authority's airport police and fire unit.

Of 15 bags loaded, only one was believed to be missing. Two others were found on the runway last night, the report said.

The airplane was repaired, and cleared to depart that night. It skipped the Akron stop, and got into Pittsburgh at 11:30 p.m., nearly 2 1/2 hours later than originally scheduled, Mr.

Castelveter said.

Only crew members made that trip. Passengers went on different flights yesterday, he said.

While somewhat rare, baggage doors occasionally are not closed properly or pop open, Mr. Zochert said. ``It seldom happens, given the hundreds of thousands of flights, but it has happened before," he said.

According to FAA records, mechanics reported in September, 1990, a similar problem with the DC-9 that was involved Tuesday. Those records show that the crew, upon takeoff from

the airport in Columbia, S.C., reported a light indicating a problem with the rear cargo door. The plane would not pressurize and the pilots returned safely to the Columbia airport. The crew then found the door was not shut properly.

The DC-9-31 was built in 1969. It is a twin-engine jet aircraft that had 85 seats.

From: "Lyle Streeter"<Lyle.Streeter@faa.gov>

Date: October 19, 1998 12:28:16 PM PDT

To: <barry@corazon.com>

Subject: Re: TWA smooth port/Email picture test

Content-Type: text/plain; charset=US-ASCII

Content-Transfer-Encoding: 7bit

Content-Description: "cc:Mail Note Part"

-----Forwarded-----

Subject: Multipart Message

Content-Type: text/plain; charset=US-ASCII

Content-Transfer-Encoding: 7bit

Content-Description: "cc:Mail Note Part"

The font changes come through just fine. The graphics present only a symbol in the main document, but I was able to view the photo by opening the attached .tif document. It looks as described, but is a very small picture on my program (about 2x3"). I might be able to enlarge it on a different viewing program.

Lyle Streeter _____ Reply
Separator

Subject: TWA smooth port/Email picture test
Author: barry@corazon.com at Internet
Date: 10/19/1998 1:27 PM

Lyle Streeter
FAA AAI
Aircraft Accident Investigator
FAA National Headquarters
800 Independence Avenue, S.W
Building FOB 10A, Room 838,
Washington D.C 20591

Dear Mr. Streeter,

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pictures to you with it. I'm going to insert a graphic here, can you
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starboard side.

I can also change color and size of type, is this large and red?

<<http://www.faa.gov>>Is this link hot? It goes to FAA.

This ability to send and receive pictures is very important and I hope it works. It's so basic for communication.

Regards,

John Barry Smith

831 659 3552

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Owner Mooney M-20C, 1000 hours.

US Navy Air Intelligence Officer

Survivor of sudden night fiery fatal jet plane crash in RA-5C.

barry@corazon.com

<http://www.corazon.com/>

From: "Lyle Streeter" <Lyle.Streeter@faa.gov>

Date: October 20, 1998 6:08:48 AM PDT

To: <barry@corazon.com>

Subject: Re: Another picture test.

Content-Type: text/plain; charset=US-ASCII

Content-Transfer-Encoding: 7bit

Content-Description: "cc:Mail Note Part"

It won't let me view this picture. Same thing happened to another

investigator yesterday trying to view photos of an uncontained engine

failure - it must be some type of filter on our end that prevents us

from receiving the information.

LS

Reply Separator

Subject: Another picture test.

Author: barry@corazon.com at Internet

Date: 10/19/1998 4:01 PM

-----Forwarded-----

Subject: Alternative Body Parts containing the same information

Content-Type: text/plain; charset=US-ASCII

Content-Transfer-Encoding: 7bit

Content-Description: "cc:Mail Note Part"

Lyle Streeter
FAA AAI
Aircraft Accident Investigator
FAA National Headquarters
800 Independence Avenue, S.W
Building FOB 10A, Room 838,
Washington D.C 20591

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Before today, pictures sent as attachments were sent back as too large a file size and the returned message was all ascII garbage. Now maybe high resolution pictures can be sent and received.

In addition there are sound files and movies that might be able to be sent.

All the civilians are doing it, the government should be able to do it too.

I have an AVI movie file of the inside of a 707 that suffers on purpose

explosive decompression in the cabin and the inside pictures show the floor

moving down and side of fuselage bulging out with window cracking at same

place as TWA 800 windows. It's huge file and probably would not get

through, but for now, small color pictures are fine.

<www.altavista.com>Above is starboard side of TWA 800. This caption should be centered, large, blue, and different font and hot link to a URL.

A picture can tell a thousand words.

I've also asked in this email to 'notify recipient when message received'.

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Commercial pilot, instrument rated, former FAA Part 135
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From: John Barry Smith <barry@corazon.com>

Date: September 6, 2009 12:03:21 AM PDT

To: FAAOAI

Bcc: Subject: TWA smooth port/Email picture test

Lyle Streater

FAA AAI

Aircraft Accident Investigator

FAA National Headquarters

800 Independence Avenue, S.W

Building FOB 10A, Room 838,

Washington D.C 20591

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Commercial pilot, instrument rated, former FAA Part 135 certificate holder.

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Date: September 6, 2009 12:03:21 AM PDT

To: FAAOAI

Subject: Picture test/uncontained engine failure

Lyle Streeter

FAA AAI

Aircraft Accident Investigator

FAA National Headquarters

800 Independence Avenue, S.W

Building FOB 10A, Room 838,
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- > investigator yesterday trying to view photos of an uncontained engine
- > failure - it must be some type of filter on our end that prevents us
- > from receiving the information.

Hmmm.....let's try to work around viewing block. Seeing pictures is essential, speaking as a former Navy recon navigator who wishes he had saved some of the thousands of feet of film he had shot.

I'll attach a .jpg small file, <747big400a.JPG>, it's 12K. That Boeing screen shot of new -400 is four inches wide and should be accessible by separate viewing program or your browser or email program from download folder.

I shall now insert a small 16K picture below:

<747bottomvortex.jpg> a NASA photo of 747 from the bottom in flight. (This shows that something coming off number 3 engine would hit the right horizontal stabilizer.) It might be seen below or viewed separately from download folder.

I shall center this text, make it red, make it big, put it in italic, and make it a hot link to a URL

<http://www.corazon.com/crashcontentspagelinks.html> was the URL link above. The red text turned to underlined blue once it was made a URL link.

Regarding uncontained engine failure mentioned above: Is this the one?

NTSB Identification: **DCA99RA001**

Scheduled 14 CFR 129 operation of LINHAS
AEREAS DE MOCAMBIQUE

Accident occurred OCT-05-98 at MOPZAMBIQUE

Aircraft: Boeing 747SP, registration: ZSSPF

Injuries: 3 Uninjured.

This is preliminary information, subject to change, and may contain errors. Any errors in this report will be corrected when the final report has been completed. On October 5, 1998 a LAM B-747SP experienced an uncontained engine failure in the No. 3 engine shortly after takeoff. The No. 4 engine a portions of the wing were damaged by debris from the No. 3 engine.

(It had to be, that pesky number three. What number three did above, it did to AI 182, PA 103, UAL 811, and TWA 800 and El Al 1862, as shown by wreckage analysis. What causes number 3 to fail is the question.)

There has to be a way to send and receive pictures from government to citizen. It's essential. I hope the above two pictures of 747s gets through. Thanks for your patience.

Regards,

John Barry Smith

831 659 3552

551 Country Club Drive,
Carmel Valley, CA 93924

barry@corazon.com

www.corazon.com

Commercial pilot, instrument rated, former FAA Part 135 certificate holder.

US Navy reconnaissance navigator, RA-5C 650 hours.

US Navy patrol crewman, P2V-5FS 2000 hours.

Owner Mooney M-20C, 1000 hours.

US Navy Air Intelligence Officer

Survivor of sudden night fiery fatal jet plane crash in RA-5C.

From: John Barry Smith <barry@corazon.com>

Date: September 6, 2009 12:03:21 AM PDT

To: FAAOAI

Subject: Great stories and lessons

Lyle Streeter

FAA AAI

Aircraft Accident Investigator

FAA National Headquarters

800 Independence Avenue, S.W

Building FOB 10A, Room 838,
Washington D.C 20591

Dear Mr. Streeter,

Found this on the web: (811 probable cause using old report)

Unusual Accidents

Captain allowed his children to manipulate the controls.

03/23/1994 00:57

LOCATION: Near Mezhduretshensk, Russia

CARRIER: Russian International Airways FLIGHT: 593

AIRCRAFT: Airbus A310-304

REGISTRY: F-OGQS S/N: 596

ABOARD: 75 FATAL: 75 GROUND:

DETAILS: The aircraft crashed after the captain allowed his child to

manipulate the controls of the plane. The pilot's 11 year old daughter and 16 year old son were taking turns in the pilot's seat,

flying the plane. While the boy was flying, he put the airliner in a

bank of 90 degrees and the nose dropped sharply. Some one pulled

back on the yoke to obtain level flight but the plane stalled. Amazingly, rather than the co-pilot in the right hand seat taking over the controls, the captain began to coach his son in recovery techniques. After several stalls and rapid pull-ups the plane went into a spiral descent. In the end the co-pilot initiated a 4.8g pull-up and nearly regained a stable flightpath but the aircraft struck the ground killing all aboard.

Captain almost sucked out of plane

06/10/1990 c 08:20

LOCATION: Oxfordshire, England

CARRIER: British Airways FLIGHT: 5309

AIRCRAFT: BAC One-Eleven

REGISTRY: S/N:

ABOARD: 85 FATAL: 0 GROUND:

DETAILS: On a flight from Birmingham, England to Malaga, Spain,

at FL 230, a large section of windshield fell away from the aircraft.

The decompression pulled the captain out from under his seatbelt.

Despite trying to hold onto the yoke, the captain was sucked out into

the opening. A steward in the cockpit was able to grab hold of

his

legs. Another steward was able to strap himself into the vacant seat

and aid in holding onto the captain's legs. The copilot wearing full

restraints made an emergency landing at Southampton. The captain

remained half way out of the aircraft for 15 minutes and suffered

only frostbite and some fractures. Improper bolts used to replace the

windshield two days earlier.

Ran out of fuel while in holding pattern

01/25/1990 21:34

LOCATION: Cove Neck, New York

CARRIER: AVIANCA (Colombia) FLIGHT: 052

AIRCRAFT: Boeing B-707-321B

REGISTRY: HK 2016 S/N: 19276

ABOARD: 158 FATAL: 73 GROUND:

DETAILS: The aircraft was put in a series of extended holding patterns as it approached New York. The crew informed ATC they

were running out of fuel but did not declare an emergency and were

cleared to land. After a missed approach and during a go-around,

the plane ran out of fuel and crashed in a wooded area. The

captain

speaking very little English and communicating through the first

officer at no time declared an emergency. The first officer used the

term "we need priority" several times, rather than declaring an emergency. The ATC did not realize the peril of the aircraft.

Failure

of the crew to properly communicate the emergency situation to the

ATC.

Crew preoccupied with listening to a World Cup Soccer match

09/03/1989 c 20:45

LOCATION: Near Sao Jose do Xingu, Brazil

CARRIER: VARIG (Brazil) FLIGHT: 254

AIRCRAFT: Boeing B-737-241

REGISTRY: PP-VMK S/N: 21006

ABOARD: 54 FATAL: 13 GROUND:

DETAILS: The aircraft ran out of fuel due to a navigation error and

crashed into the jungle. The crew, preoccupied with listening to a

World Cup championship match, flew in the wrong direction.

It is

alleged that the pilot led the survivors two days through the jungle to

rescue and the first words out of his mouth were "who won".

Nine passengers sucked out of plane and lost at sea

02/24/1989 02:09

LOCATION: Honolulu, Hawaii

CARRIER: United Air Lines FLIGHT: 811

AIRCRAFT: Boeing B-747-122

REGISTRY: N4713U S/N:

ABOARD: 356 FATAL: 9 GROUND:

DETAILS: After leaving Honolulu, on a flight from Los Angeles to

Sydney, Australia, the loss of an improperly latched cargo door resulted in explosive decompression and loss of power in the No. 3

and 4 engines. Nine passengers were sucked out of the plane and lost

at sea. The plane landed safely.

Both pilots shot by fired airline employee

12/07/1987 16:16

LOCATION: San Luis Obispo, California

CARRIER: Pacific Southwest Airlines FLIGHT: 1771

AIRCRAFT: British Aerospace BAe-146-200
REGISTRY: N350PS S/N: E-2027
ABOARD: 43 FATAL: 43 GROUND:
DETAILS: A fired USAir employee, David Burke, after leaving a goodbye message to friends, shot both pilots. The aircraft went into a steep dive and crashed.

Plane crashed after pilot ignored Ground Proximity Warning System

02/19/1985 09:27
LOCATION: Mt. Oiz, near Durango, Vizcaya, Spain
CARRIER: Iberia Airlines (Spain) FLIGHT: 610
AIRCRAFT: Boeing B-727-256
REGISTRY: EC-DDU S/N: 21777
ABOARD: 148 FATAL: 148 GROUND:
DETAILS: The aircraft crashed into an antenna on Mt. Oiz. Incorrect interpretation of Ground Proximity Warning System (GPWS). The captain was heard shouting "shut up" at the GPWS as it announced "pull up". Overconfidence in altitude alert system.
Incorrect interpretation of its warnings.

All four engines failed after flying

through volcanic ash

06/24/1982 20:44

LOCATION: Mount Galunggung, Indonesia

CARRIER: British Airways FLIGHT: 009

AIRCRAFT: Boeing B-747

REGISTRY: G-BDXH S/N:

ABOARD: 257 FATAL: 0 GROUND:

DETAILS: The aircraft flew into a plume from a volcanic eruption at

37,000 feet during the night. All engines failed and the windshield

lost transparency because of pitting. The first engine was restarted at

12,000 feet, followed by the other three and the plane landed safely

at Jakarta.

Aircraft crashed after crew struggled with mentally ill pilot

02/09/1982

LOCATION: Tokyo, Japan

CARRIER: Japan Air Lines FLIGHT:

AIRCRAFT: Douglas DC-8-61

REGISTRY: JA-8061 S/N: 45889

ABOARD: 174 FATAL: 24 GROUND:

DETAILS: The aircraft flew into shallow water after a struggle with a mentally ill pilot. It appears the captain, known to have mental problems, put an engine into reverse while the co-pilot and flight engineer battled to restrain him.

Captain experimented with autothrotle system

11/03/1973 c 16:40

LOCATION: Near Albuquerque, New Mexico

CARRIER: National Airlines FLIGHT: 27

AIRCRAFT: Douglas DC-10-10

REGISTRY: N60NA S/N:

ABOARD: 128 FATAL: 1 GROUND:

DETAILS: Overspeeding of the starboard engine caused the engine to disintegrate. Pieces struck the fuselage, breaking a window, causing rapid explosive decompression and a passenger was sucked out of the plane. The plane landed safely. The captain and flight engineer experimenting with the autothrottle system to see its response to various other instrument settings caused overspeeding of the engine.

Twenty-nine survivors rescued after 2 months in the Andes mountains

10/13/1972

LOCATION: Near San Fernando, Chile

CARRIER: TAMU FLIGHT:

AIRCRAFT: Fairchild-Hiller FH-227D/LCD

REGISTRY: T-571 S/N: 572

ABOARD: 45 FATAL: 29 GROUND:

DETAILS: The flight crashed into Andes mountains. The survivors

were not found until 12/22/72. Survivors resorted to cannibalism to

stay alive. The book and movie "Alive" is based on this accident.

Crew member fell 33,000 feet and survived

01/26/1972 c 17:00

LOCATION: Near Hermsdorf, Czechoslovakia

CARRIER: JAT Yugoslav Airlines FLIGHT: 364

AIRCRAFT: Douglas DC-9-32

REGISTRY: YU-AHT S/N: 47482

ABOARD: 28 FATAL: 27 GROUND:

DETAILS: The plane crashed after the detonation of bomb in the forward cargo hold. A stewardess fell 33,000 feet in the tail section and although breaking both legs and being paralyzed from the waist down, survived. The bomb was believed to be placed on the plane by a Croatian extremist group.

Co-pilot accidentally deployed spoilers 60 feet off the ground

07/05/1970 08:09

LOCATION: Toronto, Canada

CARRIER: Air Canada FLIGHT: 621

AIRCRAFT: Douglas DC-8-63

REGISTRY: CF-TIW S/N: 46114

ABOARD: 109 FATAL: 109 GROUND:

DETAILS: While landing and approximately 60 feet above the runway, the spoilers were inadvertently deployed causing the aircraft

to fall and lose the No. 4 engine. The crew then decided to go-around. The aircraft exploded while attempting the go-around.

Inadvertent deployment of spoilers while the aircraft was still in the

air by the first officer. Faulty design by allowing the spoiler handle

to perform two different unrelated tasks.

Captain suffered heart attack

04/22/1966 20:30

LOCATION: Near Ardmore, Oklahoma

CARRIER: American Flyers Airline FLIGHT:

AIRCRAFT: Lockheed 188C Electra

REGISTRY: N183H S/N: 1136

ABOARD: 98 FATAL: 83 GROUND:

DETAILS: The aircraft crashed into foothills during landing attempt at Ardmore Municipal Airport . Incapacitation of captain with a heart attack during final stages of approach.

Pilot decided to give passengers a view of the mountain

03/05/1966 c 14:15

LOCATION: Near Gotemba City, Mt. Fuji, Japan

CARRIER: British Overseas Airways FLIGHT: 911

AIRCRAFT: Boeing B-707-436

REGISTRY: G-APFE S/N: 17706

ABOARD: 124 FATAL: 124 GROUND:

DETAILS: The aircraft crashed into Mt. Fuji after encountering

severe turbulence when the pilot decided to give the passengers a view of the mountain. The aircraft encountered severe clear air turbulence and started to come apart in the air before crashing.

Aircraft crashes after collision with a whistling swan

11/23/1962

LOCATION: Ellicot, Maryland

CARRIER: United Air Lines FLIGHT:

AIRCRAFT: Vickers Viscount 745D

REGISTRY: N7430 S/N: 128

ABOARD: 18 FATAL: 18 GROUND:

DETAILS: The aircraft struck a flock of Whistling Swans at night, at

6,000 ft. One, estimated to be 13 pounds, struck the leading edge of

the tail stabilizer, weakening the structure and causing it to detach.

The aircraft lost control and crashed.

Son placed bomb aboard aircraft to collect insurance on his mother

11/01/1955 c 19:00

LOCATION: Longmont, Colorado

CARRIER: United Air Lines FLIGHT: 629

AIRCRAFT: Douglas DC-6B

REGISTRY: N37559 S/N: 43538

ABOARD: 44 FATAL: 44 GROUND:

DETAILS: The aircraft crashed 11 minutes after taking off from

Denver on a flight to Seattle. Detonation of a bomb in the No. 4

cargo hold, placed by John Graham in his mother's luggage in order

to collect \$37,500 in insurance. A delayed flight caused the bomb to detonate over flat land rather than the mountains as planned.

He was executed for the crime.

Husband placed a bomb aboard aircraft to collect insurance on his wife

09/09/1949 10:45

LOCATION: Sault-aux-Cochons, PQ, Canada

CARRIER: Canadian Pacific Airlines FLIGHT:

AIRCRAFT: Douglas DC-3

REGISTRY: CF-CUA S/N: 4518

ABOARD: 23 FATAL: 23 GROUND:

DETAILS: The aircraft disintegrated in flight 40 miles outside of Quebec. Detonation of a dynamite bomb in the forward baggage compartment. Planted by Albert Guay, a jeweler, in a plot to kill his wife, a passenger on the plane. Guay, who assembled the bomb, had his mistress Marguerite Pitre air express the bomb on the aircraft. Ms. Pitre brother, a clockmaker, helped make the timing mechanism. The insurance policy was for 10,000 dollars. All three were hanged for the crime.

Falulty design caused aviation fuel to be sucked into heating vent

10/24/1947

LOCATION: Bryce Canyon, Utah

CARRIER: United Air Lines FLIGHT:

AIRCRAFT: Douglas DC-6

REGISTRY: NC37510 S/N: 42875

ABOARD: 52 FATAL: 52 GROUND:

DETAILS: Fire was reported on board the aircraft before it crashed.

An almost identical accident with the same cause occurred on 11/11/47.

The flight crew transferred fuel either intentionally or

inadvertently

from the No. 4 alternate tanks to the No. 3 alternate tanks and failed

to stop the transfer process in time to avoid overflowing the No. 3

alternate tank. Gasoline flowed through the No. 3 alternate vent line,

out the vent, and was carried back by the slip stream, entering the cabin

heater combustion air intake scoop. When the cabin heater came on, an

explosion and fire occurred. Design flaw in the aircraft.

Captain intentionally engaged the gust lock in flight

10/08/1947

LOCATION: El Paso, Texas

CARRIER: American Airlines FLIGHT: 311

AIRCRAFT: Douglas DC-4

REGISTRY: NC90432 S/N:

ABOARD: 56 FATAL: 0 GROUND:

DETAILS: The aircraft went into steep dive and pulled out 350 feet

from the ground. As an experiment, a captain riding in the jump

seat engaged the gust lock in flight. The command pilot rolled the

elevator with no response as the jump seat captain disengaged

the

gust lock causing the aircraft to go into a steep dive, execute part of

an outside roll and become inverted. Neither the command nor jump

seat captain had seat belts on and accidentally feathered No. 1, 2 and 4

engines. The co-pilot managed to unfeather the props and pull out of

the dive.

U.S. Army Air Corps plane crashed into Empire State Building

07/28/1945 9:49

LOCATION: New York, New York

CARRIER: Military FLIGHT:

AIRCRAFT: USAAC B-25 Bomber

REGISTRY: 0577 S/N:

ABOARD: 3 FATAL: 3 GROUND: 11

DETAILS: A U.S. Army Air Force plane crashed into the 79th floor

of the Empire State Building in heavy fog. Lt. Col. William Franklin Smith Jr., the pilot, became disoriented while trying to land

at Newark Airport. Lt. Smith was told he had a 3 hour wait to land

at Newark. Impatient to get his plane on the ground, he falsely declared he had official business at La Guardia Airport with

the

intention of diverting to Newark as soon as he was cleared.

The 12

ton plane smashed a 20 ft. hole in the building. Fuel from the ruptured gas tanks poured out and set two floors ablaze killing

10

people. One engine exited the south side of the building and plunged

into a penthouse below.

Regards,

Barry

John Barry Smith

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Commercial pilot, instrument rated, former FAA Part 135 certificate holder.

US Navy reconnaissance navigator, RA-5C 650 hours.

US Navy patrol crewman, P2V-5FS 2000 hours.

Owner Mooney M-20C, 1000 hours.

US Navy Air Intelligence Officer

Survivor of sudden night fiery fatal jet plane crash in RA-5C.

From: John Barry Smith <barry@corazon.com>
Date: May 29, 1998 12:12:20 PM PDT
To: Neil_Schalekamp@admin.tc.faa.gov
Subject: **Wiring/cargo door evidence from US government documents**

Sam Farr
Member of Congress
17th District, California
House of Representatives
Congress of the United States
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Washington, DC 20515-2861

John McCain III
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Dear elected, appointed, and employed US government officials
involved with TWA 800 investigation, 29 May 1998

Gentleman, I respectfully address all as if this were a cyberspace meeting and it is my turn to speak. Most of us have exchanged letters, emails, conversations in person or telephone calls in the past. The case for wiring/cargo door opening in flight as an explanation for the TWA accident grows stronger every day with evidence such as this:

Quote from TWA 800 Public Docket 516A, Exhibit 9A Systems Group Chairman's Factual report of Investigation, Page 47, "A Boeing telefax of June 25, 1997, stated that: The Poly-X wire was used as general purpose wire on the RA164 (TWA 800) aircraft. Wire insulation known as Poly-X had three in-service problems:

-Abrasion of the insulation in bundles installed in high vibration areas.

(This problem was corrected by Boeing Service Bulletin No.

747-71-7105, Dated July 19, 1974)

-Random flaking of the topcoat.

-Insulation radial cracks in tight bend radii.

Radial cracking phenomenon of the Poly-X wire was mainly associated with mechanical stress. Bend radius is the largest contributor to mechanical stress in installed wire or cable.

Presence of moisture in conjunction with mechanical stress is also a contributor."

The Systems Exhibit 9A continues on same page 47, "Evidence of arcing or short circuiting was found in the fuselage of N93119, (TWA 800) in addition to what was found in the wiring from the raceway below the left cabin floor and near the forward wing spar.

The Systems Exhibit 9A continues, page 116:

"Some wires found in the section of W480 from forward of station 570 and identified as BMS13-42A had numerous cracks in the insulation. Most of the cracks in this bundle were found to expose the core conductor when examined by microscope. Only within five feet of the aft end of the W480 bundle from station 570-900 were insulation cracks found."

(Please note that BMS13-42A is Poly-X wiring. Cargo door location is FS 560-670 and cracked wires discovered are within that zone. Frayed wires in that area have shorted before and caused the forward cargo door to open in flight, NTSB AAR 92/02 UAL 811. Water has been seen pouring out of a forward cargo bay of a Boeing airliner. Water and leaking electricity make a powerful conductor. Both are known to exist in Boeing airliners.)

NTSB Exhibit 9C, Attachments to the Systems Group Factual

Report, page 44:

"Response: There was one reported wire insulation abrasion on the 747 in 1996. There operator reported that a burning smell was noted during cargo loading in the forward cargo compartment. Cargo loading system wiring was found damaged and shorted to ground below the cargo floor at station 650, below the aft right corner of a large ball mat. A wiring loom "p" clip was found broken enabling the wire to chafe against structure. A hole was found burned through the bottom angle of the cargo floor cross member, where the wiring clip attached, and charring was evident in the surrounding insulation blanket. Repairs were made."

Page 44: "Response: There were seven reported wiring fires on the 747 in 1996."

Page 45: "f. 747-200 reported on October 12, 1996
Wire bundle arcing and resultant fire at aft bulkhead of forward lower lobe cargo hold on a747-200 freighter. This occurred with the airplane on the ground, during post C-check functional test. Note: Portions of the damaged wire bundles were forwarded to Boeing for evaluation in determining the cause of the damage. The results of the analysis indicated the primary conductor(s) sustained mechanical or thermal damage prior to the application of electrical power."

Page 46, "g. 747-400 reported on November 1, 1997, (see response to question 1)

There was one reported wire insulation abrasion on the 747 in 1996. There operator reported that a burning smell was noted during cargo loading in the forward cargo compartment. Cargo loading system wiring was found damaged and shorted to ground below the cargo floor at station 650, below the aft right corner of

a large ball mat. A wiring loom "p" clip was found broken enabling the wire to chafe against structure. A hole was found burned through the bottom angle of the cargo floor cross member, where the wiring clip attached, and charring was evident in the surrounding insulation blanket. Repairs were made."

Page 57, Letter from Commander Naval Air Systems Command to National Electrical Manufacturers Association, 1 Oct 82, "As you know, the problems with poly-x wire are well known to headquarters and its use had been curtailed."

FAA Aircraft Certification Service Mission Statement:

<http://www.faa.gov/avr/air/hq/mission.htm>

"Aviation Safety Begins With Safe Aircraft

The Aircraft Certification Service is responsible for the safety of civil aircraft. The inherent safety of an aircraft is a function of its design integrity and its manufacturing quality. It is the mission of the Aircraft Certification Service to promote safety by:

Prescribing safety standards governing the design, production quality, and airworthiness of civil aeronautical products;

Administering design, production quality, and finished product certification programs in compliance with the prescribed safety standards;

Monitoring safety performance, and acting to provide continued operational safety of aircraft;

Working in partnership with aviation safety authorities of other countries to continuously improve the safety of the international air transportation system and achieve international harmonization of aircraft certification standards and practices.

Our program priorities are:

ÊÊÊÊÊFIRST: Continued operational safety including surveillance.

ÊÊÊÊSECOND: Safety standards, policies, and procedures.
ÊÊÊÊTHIRD: Type, production, and airworthiness
certification."

Text of 1 May 98 letter from Congressman Farr:

"Dear Mr. Smith:

Thank you for contacting me recently regarding your ongoing interest in the forward cargo door of TWA flight 800. I appreciated hearing from you.

I am, of course, glad to help, and am therefore in touch with the appropriate government agency on your behalf. I will write to you again as soon as a response is available, but please let me know if there is anything further that I can do for you in the interim.

Sincerely,

Sam Farr
Member of Congress

Text of 12/19/86 email Senator McCain:

Dear Mr. Smith,

Thank you again for contacting me with your concerns regarding the potential hazards involving Boeing 747s.

As you know, I have passed the information you sent to Chris Paul and he has informed me of your findings. I have since forwarded the material you sent to the Commerce, Science and Transportation Committee for their review.

Again, thank you for contacting me. I am always glad to have the opportunity to be of assistance.

Sincerely,
John McCain
U.S. Senator
JM/jes

Excerpt of 4 Mar 98 letter from Senator John McCain to me: "I have received your letter regarding the forward cargo door of TWA Flight 800, and your interest in meeting with someone at the National Transportation Safety Board (NTSB) relating your concerns.

I have contacted the NTSB on your behalf, about your concerns. I have asked for a prompt response to be sent directly to you."

FAA and NTSB and manufacturers are taking efforts to inspect fuel tank wiring on all airliners. Cargo door wiring on Boeing 747s should also be inspected. A wiring caused inadvertent opening of the forward cargo door of TWA 800 in flight should also be investigated.

It's prudent.

1. Check known faulty Poly X wiring in cargo door areas of early 747s for chafed to bare wires.
2. Figure out explanation of red paint smears, outward peeled skin, and petal bulge at aft midspan latch of forward cargo door of TWA 800.
3. Attempt to locate missing eighty percent of forward cargo door by either finding it in Orange Zone, Calverton hangar, or from the bottom of the ocean.

4. Meet face to face with a citizen, as the suggestion of Senator McCain, to discuss and consider real evidence as discovered in research of NTSB and FAA documents regarding wiring/cargo door explanation for TWA 800.

Following the example of Congressman Farr of open discussion of TWA 800 and the inclusion of relevant correspondence in letters, I have put all your correspondence to me on my web site www.corazon.com. All emails and scanned letters are seen at [<http://www.corazon.com/correspondence.html>](http://www.corazon.com/correspondence.html)

Democracy and the internet in action.

Regards,

John Barry Smith
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408 659 3552
barry@corazon.com

From: John Barry Smith <barry@corazon.com>
Date: June 5, 1998 9:40:48 AM PDT
To: Neil_Schalekamp@admin.tc.faa.gov
Subject: **Inspect cargo door wiring too.**

Sam Farr
Member of Congress
17th District, California
House of Representatives

Congress of the United States
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John McCain III
Member of Congress
Chairman, Committee on Commerce, Science, and
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Dear Mr. Schalekamp and Official Persons who feel
responsibility in explaining TWA 800,
June 1998

5

There are cracked wires to the bare conductors in the cargo door area of TWA 800 as described by NTSB Systems Exhibit 9A, page 116:

"Some wires found in the section of W480 from forward of station 570 and identified as BMS13-42A had numerous cracks in the insulation. Most of the cracks in this bundle were found to expose the core conductor when examined by microscope. Only within five feet of the aft end of the W480 bundle from station 570-900 were insulation cracks found." Page 47 also states, "Evidence of arcing or short circuiting was found in the fuselage of N93119, (TWA 800) in addition to what was found in the wiring from the raceway below the left cabin floor and near the forward wing spar.

That's a fact and NTSB told me so. To be prudent, determine if the forward cargo door unlatch motor power on wire is among those cracked to the bare wires located by NTSB in TWA 800. NTSB did it before with UAL 811 in AAR 92/02 where a bare chafed wire turned on the forward cargo door unlatch motor. There is a precedent of bare wires in that area causing a fatal accident in a high time Boeing 747. It would be prudent to rule out that event happening again by checking the bare wires discovered by NTSB in TWA 800 wreckage in cargo door area to see if it is the door unlatch motor wire.

True power always wants to know if it may be wrong and immediately take steps to confirm or rebut. True power knows error is weakness and will immediately correct the error to become strong again. Fake power ignores any evidence of error. It is weak and will fail. NTSB discovers the cause and makes recommendations to FAA. FAA orders the manufacturer to fix the problem. The problem is old cracked wiring. I come to elected officials, NTSB, and FAA officials because only you have to power to persuade the manufacturer to replace defective, old, and chafed wiring if necessary and it is necessary.

Very many, very red, and very large red paint smears exist on TWA 800 above the forward cargo door area on top of normal white paint in between the passenger windows. That's a fact and NTSB showed it to me by presenting the TWA 800 reconstruction photograph in which the many, large, red paint smears are clearly evident. <<http://www.corazon.com/TWA800hullrupture.html>> A precedent has been set of paint transfer marks in that area by UAL 811 as described in NTSB AAR 90/01 and AAR 92/02. <<http://www.corazon.com/811page42paintondoor.html>>

It would be prudent to confirm or rule out the red paint smears indicating an open cargo door in flight or not. One way would be to examine the cargo door hinge for overtravel impression damage, another precedent set by UAL 811 in NTSB in AAR 92/02. <<http://www.corazon.com/811reportcontentpage.html>>

There is outward peeled skin high up on the right side of TWA 800, also more outward shattered skin on the belly, and most of all, there is outward peeled skin forward of the wing on the right side, centered around the outward petal shaped bulge at the aft midspan latch of the forward cargo door. That's a fact and I know

that because NTSB presented the photograph of TWA 800 wreckage reconstruction and described the outward peeled skin in NTSB exhibits.

Main deck floor beams above the forward cargo hold were broken downward in UAL 811 during the explosive decompression. That also happened in TWA 800. An explanation was offered by Mr. James Wildey of NTSB: Docket No. SA-516, Exhibit No. 18A, Sequencing Study, page 20, "The initial opening of the fuselage lower lobe (e.g. LF6A) would have the expected result of rapid depressurization accompanied by collapse of the main deck floor for some distance forward of STA 1000. The red area recovery of interior components as far forward as STA 600 would not be inconsistent with this floor collapse and associated structural breakup."

The red paint smears and the outward peeled skin strongly indicate the forward cargo door opened in flight, an opinion shortly held by Mr. Fred Schalekamp of FAA:

30 Jan 1998 letter from Neil Schalekamp, FAA, to JBS: "The paint markings and structural deformation that you cite, do indicate an outward explosion, generally accepted to be caused by the explosion of the CWT."

That's a fact and NTSB and FAA told me so in a letter and shown in sooting diagrams in exhibits. To not see the very red, very many, and very large unusual paint smears, and to not see the outward, not inward, peeled skin is to defy reality. The red smears, downward floor beams, and the outward skin are there and strongly indicate cargo door opened in flight based on physics and precedent.

The forward cargo door did open in flight, but not by the overpressure of a center tank explosion because the cargo door pieces were unsooted, just like the forward pieces of the center fuel tank.

What else could cause the forward cargo door to open inflight? There is a precedent, UAL 811, as described in NTSB AAR 90/01 and AAR 92/02 in which a high time Boeing 747 suffered a hull rupture in flight forward of the wing which left a sudden loud sound on the CVR and an abrupt power cut to the FDR, paint transfer marks in cargo door area, and outward peeled skin, all caused by chafed to bare wire conductor in the cargo door area. <<http://www.corazon.com/811reportcontentpage.html>>

TWA 800 had a hull rupture forward of the wing which left a sudden loud sound on the CVR and an abrupt power cut to the FDR, paint transfer marks in cargo door area, outward peeled skin, and chafed to bare wire conductor discovered in cargo door area.

That is enough of a match to justify inspection of cargo door wiring in early Boeing 747s irrespective of other corroborative evidence of faulty Poly-X wiring discovered in Boeing airliners under NTSB and FAA orders.

Bare shorted wires have also caused fires in forward cargo holds of Boeing 747s before.

NTSB Exhibit 9C, Attachments to the Systems Group Factual Report page 44, 45, 46. "1996, burning smell in forward cargo compartment, found damaged wiring shorted to ground, charring found.

B. Oct 12, 1996, Wire bundle arcing and resultant fire at aft

bulkhead of forward lower lobe cargo hold on 747-200 freighter."

It would be prudent to inspect cargo door wiring in the forward cargo hold of early 747s since that wiring has been shown to be faulty in general, early Boeing airliner wiring has been shown to be faulty in particular, UAL 811, and faulty cargo door area wiring has shown up in the same area on a new fatal accident, TWA 800.

A solution to the mystery of the ignition source of the fireball and center tank fire may well be a foddred and on fire engine number 3 igniting disintegrating wing fuel tanks thousands of feet lower and seconds later than the initial event.

TWA 800 engine number three shows foreign object damage, fire, and uncontainment in the NTSB powerplant report and the structures report.

Exhibit 8A, page 11, paragraph 3, discussing results of engine 3 disassembly, "Of the 46 fan blades in the fan rotor, 21 blades with complete or partial airfoils and 6 root sections were recovered. All of the fan blades had sooting on the convex airfoil surfaces. Most of the full length airfoils were bent rearward and the tips outboard of the outer midspan shroud were bent forward slightly. About half of the fan blades had impact damage to the leading and trailing edges. Almost all of the impact damage to the airfoils could be matched to contact with the midspan shroud on an adjacent blade. One full length blade had four soft body impacts along the leading edge and a partial airfoil had a soft body impact, which had some streaking extending rearward."

Exhibit No. 7A, Structures Group Report, page 33: "5.1

Horizontal Stabilizer, "Some of the items found in the horizontal stabilizer are sections of seat track, a stator blade from turbine section, and glitter." On 5.1.1 Right Horizontal Stabilizer, page 34, "An engine stator blade from turbine section penetrated the upper honeycomb surface near the outboard trailing edge.

A prudent action would be to rule in or rule out the precedent of UAL 811 applied to TWA 800. A risky action is to ignore many large red paint smears, downward broken floor beams, and much outward peeled skin and their clear implication of cargo door open in flight. The red paint smears will not fade away; they will always be many, large, and red in the photographs on the NTSB CD-ROM. The floorbeams will always be broken in Exhibit 18A. The outward peeled skin will always be shattered outward on the belly, the upper fuselage, and around the aft midspan latch of the forward cargo door in the photographs of TWA 800 on the NTSB CD-ROM. Engine number three will always be sooted, blades missing, and have soft body impacts as shown by NTSB Exhibit 8A.

A more prudent action is to ground all Boeing 747s with Poly-X wiring for total inspections and replacement of that wiring. A total wiring inspection casts the net wider to catch faulty wiring. By inspecting all the wiring to include the fuel tank wiring, the yaw damper wiring, and the known previously faulty cargo door power wiring, all wiring can all be cleared as intact and pose no danger of shorting on, as has happened before fatally.

I understand the difficulty and turmoil the grounding would cause. Boeing would have much work to rewire the planes if necessary. If not feasible, new airliners would have to be built and the grounded ones used for parts, similar to what the Navy has done with their Poly-X F-14 Tomcats.

Am I a traitor? Does my belief of a wiring cargo door fault for TWA 800 and other early 747s hurt my country? Specifically, the Northwest quadrant which has an economy derived from the design, manufacture, and selling of 747s.

Here's my answer to myself on that one. No, I am not a traitor, I am a patriot. Here's why.

Seattle is successful and must remain so. Seattle is successful because nearby is built successful airplanes. Successful airplanes are the best selling ones. The best selling ones are the most made ones. The most made ones are the ones that make the most money. The ones that make the most money are the ones that fly the most. The ones that fly the most are the safest ones. The safest airplane is the most successful airplane. Period.

So, to present an explanation for an unsafe event, the crash of TWA 800, an early Boeing 747, is a good thing to do, even if proven wrong later. The goal is to make safe airplanes which will fly the the most and be sold the most and be made the most, thereby keeping our country's economy thriving.

My personal goal is to prevent death by preventing airplane crashes by preventing hull ruptures in flight on early 747s by preventing cracked bare wires shorting on the door unlatch motor thereby allowing the aft midspan latch to rupture and allow the middle of the forward cargo door to burst open causing a large explosive decompression which allows the 300 knot slipstream to tear nose off. This inner goal was determined by the selfless action of my pilot who saved my life in a sudden night fiery fatal jet plane crash years ago and which I have never forgotten.

It is the duty of aviation professionals to strive to explain TWA 800. And yet, this loyal citizen is rebuffed when presenting to NTSB NTSB derived evidence of a supplemental explanation to TWA 800. Why is that?

If I can't have a real conversation with NTSB or FAA officials regarding TWA 800, here is an imaginary one that sums up the past two years.

JBS: "Hello, NTSB, I'm answering your plea for public assistance regarding the cause of TWA 800."

NTSB: "What do you want?"

"I believe the initial event is moisture meeting chafed to bare wire and shorting on cargo door motor to unlatch position causing rupture at aft midspan latch of forward cargo door in flight leading to thirty by forty foot hole of explosive decompression which allows 300 knot slipstream to tear nose off which leads to disintegrating aft fuselage, wings, and tail which ignite into fireball when fiery fodded engine number three meets vaporizing fuel thousands of feet lower and seconds later."

"No."

"There are many similarities to an event that happened before, UAL 811, and TWA 800."

"You're crazy. Who are you?"

"Commercial licensed pilot, instrument rated, 1000 PIC hours, Navy jet navigator, aircraft owner, FAA Part 135 certificate holder, avionics technician, and survivor of sudden night fiery

fatal jet airplane crash talking about a sudden night fiery fatal jet airplane crash."

"Go away."

"The evidence of red paint smears, outward peeled skin, and petal bulge at aft midspan latch support conclusion forward cargo door opened in flight, just like UAL 811."

"I'm ignoring you and will not respond to further comments."

"You are safety aviation officials who say you turn over every stone, who check out every explanation, who really want to know what happened to TWA 800, regardless of cause. Listen to me; talk to me."

"You are a wacky guy on the internet, you are bothering the real investigators and getting in the way, you have been told over and over again in great detail that you are wrong and we are right, you don't have your basic facts straight about the door, you should check with us before you say your nonsense to others, and you are a flake and we don't like you."

"Maybe, but so what? The messenger's style is independent of the truth of his content. Moisture and shorted wiring caused the crash of TWA 800. Why do you not ask questions to me, as real investigators do, as I ask you?"

"We don't ask questions of citizens that we don't already know the answers to, we just make statements such as this: No, you're wrong, you're crazy, go away, we will not respond, goodbye, and thank you your for your interest in aviation safety."

Below is real:

10 March 1998 letter of John B. Drake of NTSB to JBS :

"We consider our correspondence on this subject to be complete. Should you continue to reiterate your position on this issue in future correspondence, you should expect no further response from the Safety Board."

30 Jan 1998 letter of Neil Schalekamp of FAA to JBS :

"Please note that this office will no longer be responding to your further inquiries about these same concerns, including your February 6 and February 9 letters that I just received."

17 March 1998 letter of Jim Hall of NTSB to JBS :

"We do not believe a meeting is necessary to further discuss this issue."

Summarized conversation between me and ordinary citizens who visit my web site:

Visitor: "What does NTSB and FAA say when you tell them about wiring/cargo door explanation for TWA 800?"

JBS: "They write that all cargo doors were all latched, all locked, and all intact at water impact, they have told me that over and over again and they will not respond to any further inquiries from me."

"What do they say about the red paint smears?"

"They pretend they don't exist except one FAA official who did but changed his mind and now pretends they don't exist."

"What do they say about the outward peeled skin?"

"They say it was caused by inward water impact."

"What do they say about the petal outward bulge at aft midspan latch of forward cargo door?"

"They pretend it does not exist except one FAA official who did but changed his mind and now pretends it doesn't exist."

"What do they say about the missing manual locking handle, the two overpressure relief doors, the viewing ports, the torque tubes, the two pull-in hooks, the midspan latches, and the other eighty percent of forward cargo door skin?"

"They say they are unimportant."

"What do they say about the Orange Zone pieces, the possible mixup in cargo door sills, the unsooted pieces of center fuel tank, the thirty by forty foot shattered skin zone forward of the wing on the right side, the chafed to bare wire discovery in cargo door area, and the many significant matches to UAL 811?"

"Nothing. They say nothing. Well, actually they told me to go away, and stay away."

"Have you gone to your congressman?"

"Yes, Sam Farr, and he has asked many time to NTSB and FAA for information."

"What happened?"

"They wrote to him that the door was all latched, all locked, all

intact at water impact, they have told me that many times, and thanked him for his interest in aviation safety."

"Did you contact any other elected politician?"

"Yes, Senator John McCain, jet plane crash survivor and Chairman of the Committee that oversees NTSB."

"What happened?"

"He reviewed my data and submitted it to his committee for review. He asked me to wait until the hearings. He asked the NTSB to meet with me to related my concerns about the forward cargo door of TWA 800."

"What happened?"

"The Committee on Commerce, Science and Transportation still has the matter under review, I waited until the hearings, I went to the hearings. The suggested meeting by Senator McCain between NTSB officials and me was refused by Chairman Hall of NTSB saying there was sufficient evidence to rule out the cargo door opening in flight, he has told me that many times in great detail and a meeting was not necessary."

"Have you tried the press?"

"Yes, I've had several radio and TV interviews. Some get airplay and some don't."

"Have you tried Boeing?"

"Yes, Boeing and McDonnell Douglas both contacted before the

merger. The two safety officers were polite and referred me to NTSB. Boeing engineers referred me to the Public Relations office of Boeing. The Boeing Public Relations office referred me to the NTSB. NTSB told me to go away."

"Have you tried the internet?"

Yes, I have a 1200 page, 100 meg website which has been online since July, 1996 and visited about 70000 times, according to page counters."

"What are you doing now?"

"I'm continuing to write to appropriate officials presenting the evidence and trusting it will speak for itself. It's not going to go away."

"Have you tried calling them?"

"No, my wife and daughter were approached in my home by two armed federal agents within twenty four hours of me posting an email to Senator McCain about Air Force One crashing. Calling on the telephone out of the blue would be much too aggressive. Prior to the Secret Service interrogation, phone calls usually ended up with the official shouting and hanging up. So now I continue to write non-threatening, polite, full of facts letters and emails."

"Are you saying government public safety aviation officials in writing refuse to adequately respond to your request for a meeting to discuss facts, evidence, documents, photos, which clearly indicate a forward cargo door opening in flight on TWA 800?"

"Yes."

"They will not call you, write to you, or respond to polite letters with sources listed?"

"Nope."

"Are these the same guys that say safety is priority number one, they will turn over every stone, never give up to get a full explanation, and respond to every public inquiry?"

"Yup."

"Who are you? A wacky guy on the 'net?"

"Maybe, although I use government AARs for sources, and I'm also a survivor of a sudden night fiery fatal jet airplane crash, a commercial licensed pilot, instrument rated, FAA Part 135 certificate holder, light aircraft owner, jet carrier navigator, avionics technician including radar operator, and a retired military officer in a converted garage with a computer and a phone line."

"And you've tried for almost two years to meet face to face with the public officials involved with TWA 800?"

"Yes."

What happened?

"Nothing yet. But I'm still trying. It's only been two years for TWA 800. The investigation is open and active. The evidence is

not changing or going away."

And I am still trying:

Real facts presented by NTSB about TWA 800 in exhibits, photographs, text, drawings, and testimony:

1. right horizontal stab has red paint smear
2. stator blade in right horizontal stab behind engine number 3
3. inward crush top of cargo door
4. top of cargo door attached to hinge
5. petal shape of rupture area around aft midspan latch
6. missing pieces of forward cargo door include locking handle, latching pins, overpressure relief doors, midspan latches
7. rectangle visible of explosive decompression zone of outward peeled skin on right side forward of the wing on right side
8. downward movement of floor beams near cargo door
9. hoop stresses found
10. CVR sudden loud sound
11. FDR abrupt power cut
12. missing turbine blades in engine number 3.
13. soft body impacts on blades in engine number 3.
14. outward peeled skin near top of nose, under belly, and in cargo door area.
15. red paint smears above cargo door on white paint
16. soot on most blades of engine 3.
17. starboard side more damaged than port side
18. intact R2 door near shattered cargo door.
19. poly x is known to be susceptible to chafing and present
20. section 41 is known to be weak
21. history of cargo door openings in past in various airliners
22. EPR problems on aircraft before or during fatal flight.
23. fires in forward cargo hold in the past on Boeing 747s.

24. vertical tears in fuselage skin forward of the wing on the right side
25. single marks on right side of fuselage show burnt skin, then abruptly at tear line there are no single marks
26. red paint rubbed off revealing white paint underneath on skin above cargo door area
27. first pieces off plane came from forward cargo hold just forward of the wing
28. at least nine missing never recovered bodies, just fragments
29. initially thought to be a bomb
30. wreckage debris shows cargo door shattered in many pieces
31. aft portion of forward door which includes aft midspan latch and locking handle missing from recovery effort
32. no soot on maintenance hatch
33. no soot on front spar of center wing tank
34. no burned bodies forward of the wing and very few burned at all
35. aft cargo door sill, latches, and locks recovered
36. forward cargo door sill, latches, and locks not recorded in data base
37. no orange zone pieces recorded in database
38. no orange zone discussion in public record other than identification
39. chafed to bare wires found in cargo door area
40. wiring defects found on Boeing airliners
41. water observed pouring out of forward cargo hold of a Boeing airliner, cargo holds have bilges.
42. no soot on keel beam forward of the wing
43. compression fractures right side forward of the wing
44. tension fractures left side forward of the wing
45. seats in the rows in the explosive shatter zone above cargo door are in red zone and not sooted
46. aft cargo door sill is sooted

47. many witnesses said they saw downward streak that was red-orange
48. NTSB official said possibility of forward door popping open was intriguing.
49. FAA official said, then recanted, that paint smears and structural deformation indicated outward explosion.
50. initial event time was 20:31:12 at 13700 on 17 July 1996 eight miles off coast of Long Island.

Reasonable conclusions derived from facts above:

1. water in forward cargo bay.
2. chafed bare wire touched by water.
3. electrical short occurs.
4. forward door motor turns on to unlatch position.
5. aft midspan latch of forward cargo door partially unlatches.
6. pressurized hull ruptures at aft midspan latch.
7. cargo door tears into pieces, some pieces stay with nose, some don't.
8. shiny metal pieces spin away reflecting evening sunlight and perceived as red-orange streak to observers far away.
9. explosive decompression occurs shattering cargo door area forward of the wing on right side exposing twenty foot by forty foot hole in nose producing sudden loud sound on CVR.
10. 300 knots slipstream tears weakened nose off.
11. ejected debris is ingested by starboard engines which catch fire.
12. wing and wing fuel tanks; engines, tail, and fuselage fall and disintegrate on way down.
13. fiery starboard engine ignites fuel vapor clouds from disintegrating tanks, including center tank.
14. fireball observed on the ground.
15. water impact of wreckage, cargo bay material first to hit water.

I may not be alone: "NTSB investigators have suggested unofficially that the streaks the pilots saw could have been light reflections from the skin of the aircraft, tongues of flame from the airliner or the forward door of the aircraft popping open, a possibility that still intrigues investigators, the second official said." AW&ST 3/10/97

Regarding the Aviation Week and Space Technology article quoted above, the following is supplied: <<http://www.corazon.com/800avweekintrigue.html>>

Monica Warnock
Washington Bureau
Aviation Week & Space Technology

Dear Ms. Monica Warnock,

21 May 1998

You wrote to me:> You must remove these
articles and any other Aviation Week copyrighted material from
your
website immediately, or we will consider legal action.

I replied>Consider it done. And not because you threatened me,
but because you may be right."

Ms. Warnock, I now believe you to be wrong.

I'm putting the 10 March 97 Aviation Week and Space
Technology article in dispute back up on my web site at
www.corazon.com at one minute after midnight on 1 June 1998.

Here's why: The content is everything and the content of the

article is very, very important. I agree with the content. AvWeek agrees with content. The public officials quoted in your article agree with the content. The content quotes a public NTSB official who says that the cause of TWA 800 may have been forward door popping open. It also said the streak seen before TWA 800 crash may have been reflection off the skin of aircraft. I agree with that. It is very important. Let us call it the door pop streak article.

Ms. Warnock, you have done your job well by searching the web for Avweek articles. You found one. You then followed orders and directed it be removed. It was removed. The problem is now above your level of authority. So I direct my comments to your boss: Mary Francis Koerner, the Manager of Bureaus.

Will you please see that this letter goes to her?

Dear Ms. Koerner, I am told several things:

1. Get the door pop streak article off my web site.
2. I should ask permission to put AvWeek articles on web site.
3. Permission will be denied.

I asked permission. It was denied. You were right.

You have done all you can do. The problem is now above your level of authority. I assume you would refer me to 'The Lawyers.' I direct my statements to the lawyers.

Will you please see that this letter goes to them?

Dear AvWeek lawyers:

Ah, copyright, don't you love it?

My name is John Barry Smith. I have a 1200 page, 100 meg website at www.corazon.com mainly devoted to high time Boeing 747 accidents in which the hull ruptures in flight forward of the wing. It contains mostly government scanned in aviation accident reports, AARs, and occasionally copyrighted material from media, such as yours.

Please note, let us stipulate:

1. My site is non profit. I have not made a penny on anything related to that website. In fact, much of my money has gone out, nothing has come in, a problem as my wife will attest.
2. It is research oriented with airplane crash related comments, investigations, reports, pictures, and text.
3. I give full and clear credit to the sources I quote. AvWeek was clearly stated as the author of the door pop streak 10 Mar 97 article in question. In fact, that is very important, that's why I quote clearly and give credit to Aviation Week by scanning in the entire article instead of paraphrasing, which would be quicker to download but not have the authority of the best aviation magazine on the planet, Aviation Week and Space Technology. And I omitted the advertising on the pages, too.

Now for argument:

1. I stole nothing from you.
2. It's fair use.
3. I can publish that article without your permission if certain conditions are met, and are: Non profit, small parts used, and credit given.

"Fair use and implied licenses.

Fair use is a legal license to use others' work, whether they approve or not. It constitutes one of the most important, and least clear cut, limits to copyright. The basic problem is that words like "fair" or "reasonable" cannot be defined with the precision non-lawyers (or many law students) would like. Until 20 years ago, fair use did not appear in U.S. legislation, but it now occupies about half of the copyright statute. In the U.S., partial or limited reproduction of another's work may be permitted under this doctrine.

On the one hand, fair use offers an especially liberal defense to uses that advance public interests such as education or scholarship. On the other hand, it is unlikely to be available if one fails to credit the original artist or author. It is not apt to be available to those who profit or interfere with original artists' or authors' ability to derive income from their works."

" 1998 Franklin Pierce Law Center. All rights reserved." (I hope I have fair use to quote the above.)

I believe I advance the public interest in aviation safety, I credit the original speaker, the reporter, and the magazine, and I do not profit from it. I have fair use.

Conclusion: It will take a Judge to order me to remove the 10 March 97 AvWeek article from my website after it is put back up on 1 June 1998 or to permit me to continue to post it.

So, Lawyers, the problem is above your level of authority. I turn my attention to the Managing Editor:

Will you please see that this letter goes to him?

Dear Managing Editor,

What's the beef? You and your reporter, David Fulghum, have done a fine piece of work. You have pinpointed the cause of a mystery crash now under current investigation, TWA 800. It was the door popping open in flight. The NTSB official you quoted was correct. The streak was the skin spinning away reflecting evening red orange sunlight to observers below. The official was correct and he was quoted correctly by your aviation reporter. The implications of the truth you printed are profound. The cause now leads to chafed wiring shorting on cargo door unlatch motor and allowing rupture at aft midspan latch of forward cargo door which opened in flight. Exactly as has happened before with UAL 811 as described in NTSB AAR 92/02. The 300 knot slipstream tore the nose off TWA 800 because the explosive decompression shatter zone was much bigger on TWA 800 than on UAL 811, as shown by NTSB reconstruction photo of TWA 800 wreckage.

I encourage you to do a follow up story on the wiring/cargo door explanation as described on the website in question, www.corazon.com. Mr. Fulghum and Mr. McKenna are familiar with the details of TWA 800 and wiring cargo door explanation.

Attached:

1. Correspondence between AvWeek Ms. Warnock and me.
2. Three .jpgs of the images published on website of 10 March door pop streak article.
3. Recent email to Government officials regarding this matter. Please note accurate numbers and sources given.

So, I must publish your copyrighted material, the 10 March 97 article on my website at URL <http://www.corazon.com/800avweekintrigue.html> on June 1, 1998.

I'm at email barry@corazon.com or 408 659 3552 or 551 Country Club Drive, Carmel Valley, CA 93924.

I encourage discussion regarding this matter. It's a hot story even though almost two years old. Wiring is the main culprit, not the door, not the center tank. NSTB is in the right church but the wrong pew. Wiring is the problem and it's in places other than the fuel tank tubes. It's in the cargo door unlatching motor circuits.

Cheers,
John Barry Smith

From: monica_warnock@mcgraw-hill.com
Date: Thu, 14 May 98 10:24:37 -0500
To: <barry@corazon.com>
Subject: Aviation Week
Mime-Version: 1.0

To: barry@corazon.com

Dear Sir,

Your website "<http://www.corazon.com/800avweekintrigue.html>" contains several scanned-in pictures of the Aviation Week & Space Technology article "ANG Pilot: TWA Hit By Object," March 10, 1997. Our records

do not show that you requested permission to use these articles on your website.

Aviation Week & Space Technology is covered by copyright law which

states that permission must be granted before our material is used.

Your website is in violation of this law. You must remove these

articles and any other Aviation Week copyrighted material from your

website immediately, or we will consider legal action.

Sincerely,

Monica Warnock

Washington Bureau

Aviation Week & Space Technology

monica_warnock@mcgraw-hill.com

(202)383-2314

To: monica_warnock@mcgraw-hill.com

From: John Barry Smith <barry@corazon.com>

Subject: Request permission to present article on website.

Cc:

Bcc:

X-Attachments:

To: barry@corazon.com

Dear Sir,

Your website "<http://www.corazon.com/>

800avweekintrigue.html" contains
several scanned-in pictures of the Aviation Week & Space
Technology
article "ANG Pilot: TWA Hit By Object," March 10, 1997.
Our records
do not show that you requested permission to use these articles
on
your website.

Dear Madam, 14 May 1998

A thousand pardons. I immediately request permission to reprint
Aviation Week & Space Technology article "ANG Pilot: TWA
Hit By Object," March 10, 1997 on my website,
www.corazon.com. (Corazon is my wife's name.)

The reason I scanned in exact image instead of paraphrasing text
was to be precise and show source, very important for a research
paper.

Should my request be denied, I shall of course, immediately
comply with your request and remove the article from my web
site.

AWST is a fine magazine and one which I have read diligently
for over thirty years. I have watched AWST's web site mature as
time goes on. <http://awgnet.com/awgnews.htm> is on my
bookmarks list and I check it first thing every morning. I'm in
your database of subscribers. Keep up the good work!

Regarding this life and death matter of a sudden night fiery fatal
jet plane crash about which I have published a 1200 page website
presenting my shorted wiring opening forward cargo door in

flight explanation to the general public in a non profit effort:

1. You surely understand I can not alter my website just on an unsolicited email out of the blue from:

Monica Warnock
Washington Bureau
Aviation Week & Space Technology
monica_warnock@mcgraw-hill.com
(202)383-2314

The absence of title indicates your request may be personal in nature and not official. Please confirm your official title which corresponds to your request that I delete an article from AWST from my site. You may be spoofing me and my asking for credentials is prudent and an established protocol.

2. Your response indicates an interest in the subject of TWA 800. Could you refer a reporter to me so I can present my wiring/cargo door explanation to him/her? I would appreciate the opinion of an aviation professional regarding my nine years of amateur research into hull ruptures of hour high time Boeing 747s. Your reporter, David Fuhlgum, in the referenced article, was able to elicit important material from NTSB officials regarding TWA 800; the forward door may have popped open in flight, and the streak may have been pieces of the aircraft reflecting evening sun. I am able to amplify those observations by an anonymous NTSB 'second official' using NTSB documents and photographs. It's a good story and one worthy of AWST's interest. FAA, NSTB, and Boeing are all saying wiring in older Boeing airliners is fraying and shorting causing problems, and so am I, long before the officials came to the realization.

3. >or we will consider legal action.

Why, O why did you threaten me? Your first contact, out of the blue, and it contains a threat of 'legal action'. What does that mean? I don't think it means a good thing. It just sets a wrong tone. Is politeness gone from even presentations about a plane crash?

4. >Your website is in violation of this law.

Whoa! You are calling me a criminal? Just like that? I'm breaking the law? I'm a lawbreaker? This is very disturbing. Maybe that's the way AWST works with the big boys who only respond to threats, not to polite requests with explanation attached. I'm not a big boy. I'm a retired military officer working out of a converted garage in California. I don't like anybody telling me I'm breaking the law unless it's a policeman, judge, or jury. And I still don't like it, but I obey. I really can't tell my friends that I changed my cherished web site because of a strange unauthenticated email from some babe named Monica at McGraw-Hill, now can I? I mean, am I a man or a mouse?

See, a threat always turns a pleasant conversation into stressful one. Squeek, squeek.

To review:

1. I respectfully request permission to display scanned in images of Aviation Week & Space Technology article "ANG Pilot: TWA Hit By Object," March 10, 1997 on my personal website, www.corazon.com.

2. Please to show credentials, madam.
4. Refer reporter to me regarding a subject that you feel strongly enough to want to affect with correspondence, TWA 800.
5. Keep up the good work covering aviation subjects around the world.

Cheers,

John Barry Smith
551 Country Club Drive,
Carmel Valley, CA 93924
408 659 3552
barry@corazon.com
www.corazon.com

From: monica_warnock@mcgraw-hill.com
Date: Thu, 14 May 98 13:48:41 -0500
To: <barry@corazon.com>
Subject: Re: Request permission to present article on website.
Mime-Version: 1.0

Dear Mr. Barry,

I am an editorial assistant in the Washington Bureau of Aviation Week & Space Technology. I work for Mary Francis Koerner. She is the Manager of Bureaus and she is the official contact for Reprints & Permission. We will periodically search the web for Aviation Week on

outside websites and that is what brought me to your site.

Unfortunately, at present, Aviation Week & Space Technology does not

allow its material to be reprinted on any websites other than our own.

We appreciate your interest in Aviation Week & Space Technology;

however, we must ask that you remove the article from your website, as

you have indicated you are willing to do.

My interest in this regard is not related to TWA800 but protecting the

magazine in general. Many people are not aware of the rules regarding

copyright on the internet. You may reference the section "Photocopy

and Rights & Permission" on the Contact Us page of Aviation Week if

you have any future requests for permission.

James McKenna would be the best editor to send your correspondence to

regarding TWA 800. He is located in the Washington bureau: 1200 G

Street, NW Suite 922, Washington, DC 20005. (202) 383-2332.

I will mail you a hard copy of this letter on Aviation Week & Space

Technology letterhead to satisfy any concerns you might have about my

identity. Thank you for your understanding.

Monica Warnock
Editorial Assistant, Washington Bureau
Aviation Week & Space Technology

To: monica_warnock@mcgraw-hill.com
From: John Barry Smith <barry@corazon.com>
Subject: Re: Request permission to present article on website.
Cc:
Bcc:
X-Attachments:

Dear Mr. Barry,

I am an editorial assistant in the Washington Bureau of
Aviation Week
& Space Technology. I work for Mary Francis Koerner. She is
the
Manager of Bureaus and she is the official contact for Reprints
&
Permission. We will periodically search the web for Aviation
Week on
outside websites and that is what brought me to your site.

Dear Ms. Monica,

Thank you for your prompt reply. I am saddened by the denial to
present the AWST article on my web site. I shall search through
it and delete it. Do I need permission to post your email in its
place to explain why the article was deleted? I should explain
why the article was removed to squelch any conspiracy coverup
nonsense that pervades this TWA 800 investigation.

Unfortunately, at present, Aviation Week & Space Technology does not allow its material to be reprinted on any websites other than our own.

So sad.

We appreciate your interest in Aviation Week & Space Technology; however, we must ask that you remove the article from your website, as you have indicated you are willing to do.

As soon as I am finished with this upcoming TV interview about wiring/cargo door explanation, I will. The TV station is KOMO-TV, Channel 4, ABC, in Seattle Washington and the arrive within the hour. I'm preparing for it so am unable now to find page, delete, change links, upload it to server right now. But how long to I have? Is 48 hours OK?

My interest in this regard is not related to TWA800 but protecting the magazine in general. Many people are not aware of the rules regarding copyright on the internet. You may reference the section "Photocopy and Rights & Permission" on the Contact Us page of Aviation Week if you have any future requests for permission.

Protecting the magazine? Well, OK, if you say so. I feel that quoting AWST in a non profit website about aviation safety helps

AWST, but what do I know.

James McKenna would be the best editor to send your correspondence to regarding TWA 800. He is located in the Washington bureau: 1200 G Street, NW Suite 922, Washington, DC 20005. (202) 383-2332.

Thank you very much, ma'm, and I shall. I shall say you referred me, is that OK?

I will mail you a hard copy of this letter on Aviation Week & Space Technology letterhead to satisfy any concerns you might have about my identity. Thank you for your understanding.

Fine, can I put that on my website?

Let me get back to you on this. I will delete offending article and then send you URL of the new page so you can confirm I have cleansed the dirty deed.

Cheers,
John Barry Smith

Monica Warnock
Editorial Assistant, Washington Bureau
Aviation Week & Space Technology

From: monica_warnock@mcgraw-hill.com
Date: Thu, 14 May 98 14:47:54 -0500

To: <barry@corazon.com>

Subject: Re[2]: Request permission to present article on website.

Mime-Version: 1.0

Mr. Smith,

I will mail your letter today. When it arrives, you are welcome to

place it on your website. We understand that you are busy right now-

as long you are able to delete the pages by next Friday, that's fine

with us. The complete URL is

<<http://www.corazon.com/800avweekintrigue.html>>

If you do contact Mr. McKenna, you may tell him I referred you. Again,

thank you for your interest in Aviation Week.

Monica Warnock

Editorial Assistant, Washington Bureau

Aviation Week & Space Technology

To: monica_warnock@mcgraw-hill.com

From: John Barry Smith <barry@corazon.com>

Subject: Done

Cc:

Bcc:

X-Attachments:

Dear Ms. Warnock,

You must remove these

articles and any other Aviation Week copyrighted material from

your

website immediately, or we will consider legal action.

Consider it done. And not because you threatened me, but because you may be right.

<http://www.corazon.com/800avweekintrigue.html>

is the URL which now has deleted article. Completed 6:57PM 14 May 97, nine hours after your request. The TV interview went swimmingly. In fact, the interviewer from KOMO TV ABC Seattle, asked that I send him an email of the article in question. He was interested to hear about your request.

I just want you to know that you have made an old man very very sad. I shall have to research the web, as is my wont, to find out for sure if the copyright laws exist to keep non profit websites from fairly using one article of a magazine to support an aviation safety hypothesis. I make no money from this site, on the contrary, it costs me money to keep it up. The site is 1200 pages deep with on one page assigned to article. The goal of the website is aviation safety, a common goal with Aviation Week. The officials quoted on the article are public officials whose comments are public.

It seems to me that permission should not be necessary for me to put your article on my website as long as I give credit to the author and make no money from it.

It seems to me that when permission was requested to put the article on my website, permission should have been granted.

You said 'protect your magazine,' as motive for requesting I

delete the article. Protection from whom? Me? Aviation Week needs protection from me? I am a retired guy working out of a converted garage with a computer and a modem. You have nothing to fear from me, we are on the same side, aviation safety.

Regardless, the excellent article by David Fulghum in the March 10, 1997 issue has been deleted at your request. Should it become apparent that I do have the fair right to use your article under conditions which I fulfill, then, pop! up it goes again. I shall let you know in advance so you may attempt to dissuade me if you wish. It just seems that a guy ought to be able to pull out old magazine articles to quote from when he's trying to persuade visitors of an aviation safety point. In case I'm wrong, and I'm never wrong, I have erred on the side of safety and complied with your request.

Cheers,
John Barry Smith

Mr. Smith,

I will mail your letter today. When it arrives, you are welcome to place it on your website. We understand that you are busy right now- as long you are able to delete the pages by next Friday, that's fine with us. The complete URL is <<http://www.corazon.com/800avweekintrigue.html>> If you do contact Mr. McKenna, you may tell him I referred you. Again, thank you for your interest in Aviation Week.

Monica Warnock
Editorial Assistant, Washington Bureau
Aviation Week & Space Technology

DAVID A. FULGHUM/WASHINGTON

Two New York Air National Guard pilots, with the best view of the crash of TWA Flight 800 last July, are disagreeing about what they saw immediately before destruction of the Boeing 747-131 jetliner.

One believes the airliner was struck by a fast-moving object coming from the east, while the other saw only a fiery trail from the west.

However, both believe a violent explosion ripped the aircraft apart, propelling some of its passengers high enough that they did not hit the water's surface until 3-4 min. after the initial explosion.

Maj. Frederick C. Meyer, pilot of an HH-60 helicopter from the ANG's 106th Rescue Wing, has just been freed from an FBI gag order preventing him from giving interviews about the 1996 disaster off Long Island, N.Y. The copilot, Capt. Christian Baur, remains under FBI restrictions not to speak about the accident. But two officials familiar with his testimony told Aviation Week & Space Technology in detail what he told investigators.

In the days immediately after the accident, before being ordered not to speak, Meyer discussed his initial impressions with news media (AW&ST July 29, 1996, p. 32). Last week, he chose Aviation Week as the first news organization to hear a detailed account of his recollections and his testimony to federal investigators.

Meyer and Baur were in one of the wing's two aircraft operating north of the crash site. The helicopter was operating over Long Island about 12 mi. north of the TWA crash site. Baur, the copilot, was at the controls practicing instrument approaches. The crew was awaiting darkness so they could begin training with night vision goggles.

The key point on which the two pilots disagree is whether a streak of light appeared from the opposite direction of the flight of TWA 800 (which was flying from west to east after takeoff from Kennedy Airport), a possible indication of an intercepting missile or some other object.

Meyer's attention was first called to the area of the sky where the accident occurred "by a streak of light moving from my right (west) to my left

(east)," the same direction as the TWA flight, he said.

Baur's account differs on this point. According to the two officials who have heard both pilots' accounts, Baur, on the left side of the cockpit, saw a streak moving from left to right toward the approaching TWA aircraft before the initial explosion.

"Almost due south [of the helicopter], there was a hard white light, like burning pyrotechnics, in level flight," Baur told investigators from the National Transportation Safety Board, FBI and a Federal anti-terrorist task force. "I was trying to figure out what it was. It was the wrong color for flares. It struck an object coming from the right and made it explode."

Baur's first impression was that there had been a midair collision, possibly between two light aircraft that tow banners along the beach.

"They had witnessed these aircraft come very close to each other at that time of day, and that's what they assumed," the second official said.

NTSB investigators have suggested unofficially that the streaks the pilots saw could have been light reflections from the skin of the aircraft, tongues

of flame from the airliner or the forward door of the aircraft popping open, a possibility that still intrigues investigators, the second official said.

Meyer could not actually see the aircraft, but only the streak, and he admits that Baur, a younger man, has better eyesight. Moreover, Meyer adds, "Whatever Chris saw on the left side I didn't see because he blocked my view." Baur disputes this, saying that the explosions and crash were virtually dead ahead of the aircraft.

The helicopter was executing a missed approach and was about halfway down Runway 24 at the Francis S. Gabreski International Airport at Westhampton Beach, N.Y. It had started a climbing left turn to the south when the accident occurred. The Sun had not yet set and the sky was still bright.

According to Meyer, the streak was about 15-20 deg. above his line of sight and perhaps 15 deg. left of the aircraft's centerline.

"I don't know if it was a missile that struck the airliner," Meyer said.

"Nothing at that moment said 'missile' to me. I spent a number of years in Vietnam and had seen missiles fired, some of them at me. But,

that was
25-year-old missile technology, which left smoke trails. I
understand today
that they are made with smokeless rocket fuel and don't leave
trails. What I
saw was a streak of light, not a smoke trail."

The streak of light that Meyer saw made a very shallow,
gradually descending
arc. He points out that he never saw the actual airframe of the
TWA 747
within the streak or subsequent explosions or smoke trails. It was
virtually
identical to the trajectory of a meteor, with only a slight curve.
But unlike
a meteor, the streak was red-orange in color, he said.

Meyer observed the descending streak for 3-5 sec. Then there
was what Meyer
describes as a hard, very sudden, yellowish-white explosion that
looked
identical to the detonation of an antiaircraft shell. He did not
suggest an
antiaircraft weapon was fired at TWA Flight 800, however.

"It left a cloud of smoke just like a flak explosion does," Meyer
said. "One
to two seconds later, there was a second, hard explosion almost
pure white in
color. The position of that explosion appeared to be slightly
below and
behind where one would have anticipated the streak of light to
have gone. The

trajectory at that point appeared to be slightly bent down and slowed."

A new detail in Meyer's story was that almost immediately there was a third explosion and fireball. Meyer doesn't remember if there was an explosion and fireball or if the third explosion turned into the fireball.

"That was a soft explosion unlike the first two," Meyer said. "It began as a tiny point and it grew very rapidly into a huge fireball four times the diameter of the Sun. I was dumbstruck."

Baur also saw three explosions. But he contends that they started from left (east) and went to right (west). He said the explosions created a "huge waterfall of flame that cascaded down," the first official said. "The column of flame was being whipped around violently. First it was tumbling, and then it refined itself into a spiral. The explosions were all before the cascade of flame began."

In the helicopter, Baur spoke first, asking if it was pyrotechnics. ANG operations that night were to have included flares dropped by a HC-130 transport aircraft. The crew then called the Gabreski tower.

"We said we'd observed a fireball south of the field and we would like clearance to the beach to investigate," Meyer said. Baur actually made the call and reported a possible midair collision, the second official involved in the investigation said.

The crash time has been variously reported as being from 8:31 to 8:45 p.m., Meyer said. He believes the earlier time is more likely to be correct although he can't be sure.

Baur continued to fly the helicopter during the search while Meyer functioned as copilot and primary communicator. As they approached the crash site, after about 4 min. of flight, debris was still falling so they slowed to avoid being hit.

"As they got closer, within two or three miles, Baur could see the aircraft body, not tumbling, but in a vortex almost like inside a tornado," the second official said.

Meyer made another revelation that was the result of long reflection after the accident.

"I was looking ahead . . . as we approached the crash site,"

Meyer said. "I saw some debris at 1,200-1,300 ft. falling at terminal velocity and fuselage fragments tumbling at 40-50 mi. per hour. The things falling at high speed were bodies still strapped in their seats. That is logically inconsistent if they came from the same explosion at the same time. On reflection, I have concluded that the bodies must have been blown upward before they came down. That indicates a violent explosion."

On this point, the two pilots' accounts agree, the officials said.

"Debris was falling like snow," according to Baur's testimony. "Among the particulate there was metal and paper, some of it glowing. Through all of that, things would come racing through -- two or three high-speed objects like sacks of potatoes. I believed them to be bodies that had been blown upward."

The pilots' opinion differ from the conclusion of inspectors that all the passengers were in the fuselage when it ripped apart from aerodynamic forces.

In an attempt to debunk the most egregious coverup and conspiracy theories, Meyer and other ANG officials remain adamant that their unit was not part of

any larger, undisclosed, multiservice operation. Operations the night of the crash were standard training flights to maintain currency with night vision goggles, rescue operations and in-air refueling.

The HH-60 flight was to be of about two hours' duration and would not extend more than 2 mi. off the Long Island southern coast. The HC-130 would drop flares, rafts and a para-rescueman and later refuel the helicopter in a communications-out, lights-out operation.

"No other people of other services were on the base at the time," Meyer said.

Nor were there indications of the operations of drone aircraft, another theory that has surfaced as the possible cause of the crash. "No, there would have been some kind of notice."

AW&ST 3/10/97

Until the streak is adequately explained, the missile explanation will always be possible. I say missile explanation will always be could be, but wasn't. The evidence refutes every missile explanation suggested event. Likewise for meteor and bomb explanations, they will always be could have been, but weren't.

The center tank did catch fire and there was a fireball, so center tank explanation will always be could have been and was, the only issue is when.

The wiring/ cargo door explanation explains the streak, refutes the bomb and meteor, and supplements the center tank explanation.

The wiring/cargo door explanation for TWA 800 is the more correct, more complete explanation.

I urge that Boeing 747s with Poly-X wiring be grounded until wiring is checked in cargo door areas known to have been faulty in the past.

I again request to meet with NTSB officials to present my wiring/ cargo door explanation.

Sincerely,

John Barry Smith
551 Country Club Drive
Carmel Valley, CA 93924
408 659 3552
barry@corazon.com
www.corazon.com
Citizen: USA
Major: US Army Retired
Pilot: Commercial, instrument rated, FAA Part 135 certificate.
Navigator: RA5C Vigilante
Owner: Mooney M20C
Survivor: Sudden night fiery fatal jet plane crash.

From: John Barry Smith <barry@corazon.com>
Date: June 5, 1998 8:39:04 PM PDT
To: Neil.Schalekamp@faa.dot.gov
Subject: **Inspect cargo door wiring too**

Sam Farr
Member of Congress
17th District, California
House of Representatives
Congress of the United States
1117 Longworth Bldg
Washington, DC 20515-2861

John McCain III
Member of Congress
Chairman, Committee on Commerce, Science, and
Transportation
United States Senate
241 Russell Senate Office Bldg
Washington, DC 20510-0303

James Hall
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National Transportation Safety Board
490 L'Enfant Plaza East, SW.
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Neil Schalekamp
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Bob Breneman,
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1601 Lind Ave. S.W.
Renton, WA 98055-4056

Dear Mr. Schalekamp and Official Persons who feel
responsibility in
explaining TWA 800,

5 June 1998

There are cracked wires to the bare conductors in the cargo door area of TWA 800 as described by NTSB Systems Exhibit 9A, page 116: "Some wires found in the section of W480 from forward of station 570 and identified as BMS13-42A had numerous cracks in the insulation. Most of the cracks in this bundle were found to expose the core conductor when examined by microscope. Only within five feet of the aft end of the W480 bundle from station 570-900 were insulation cracks found." Page 47 also states, "Evidence of arcing or short circuiting was found in the fuselage of N93119, (TWA 800) in addition to what was found in the wiring

from the
raceway below the left cabin floor and near the forward wing
spar.

That's a fact and NTSB told me so. To be prudent, determine if
the forward
cargo door unlatch motor power on wire is among those cracked
to the bare
wires located by NTSB in TWA 800. NTSB did it before with
UAL 811 in AAR
92/02 where a bare chafed wire turned on the forward cargo door
unlatch
motor. There is a precedent of bare wires in that area causing a
fatal
accident in a high time Boeing 747. It would be prudent to rule
out that
event happening again by checking the bare wires discovered by
NTSB in TWA
800 wreckage in cargo door area to see if it is the door unlatch
motor wire.

True power always wants to know if it may be wrong and
immediately take
steps to confirm or rebut. True power knows error is weakness
and will
immediately correct the error to become strong again. Fake
power ignores
any evidence of error. It is weak and will fail. NTSB discovers
the cause
and makes recommendations to FAA. FAA orders the
manufacturer to fix the
problem. The problem is old cracked wiring. I come to elected
officials,

NTSB, and FAA officials because only you have to power to persuade the manufacturer to replace defective, old, and chafed wiring if necessary and it is necessary.

Very many, very red, and very large red paint smears exist on TWA 800 above the forward cargo door area on top of normal white paint in between the passenger windows. That's a fact and NTSB showed it to me by presenting the TWA 800 reconstruction photograph in which the many, large, red paint smears are clearly evident. <<http://www.corazon.com/TWA800hullrupture.html>>

A precedent has been set of paint transfer marks in that area by UAL 811 as described in NTSB AAR 90/01 and AAR 92/02. <<http://www.corazon.com/811page42paintondoor.html>>

It would be prudent to confirm or rule out the red paint smears indicating an open cargo door in flight or not. One way would be to examine the cargo door hinge for overtravel impression damage, another precedent set by UAL 811 in NTSB in AAR 92/02. <<http://www.corazon.com/811reportcontentpage.html>>

There is outward peeled skin high up on the right side of TWA 800, also more outward shattered skin on the belly, and most of all, there is

outward
peeled skin forward of the wing on the right side, centered
around the
outward petal shaped bulge at the aft midspan latch of the
forward cargo
door. That's a fact and I know that because NTSB presented the
photograph
of TWA 800 wreckage reconstruction and described the outward
peeled skin in
NTSB exhibits.

Main deck floor beams above the forward cargo hold were
broken downward in
UAL 811 during the explosive decompression. That also
happened in TWA 800.
An explanation was offered by Mr. James Wildey of NTSB:
Docket No. SA-516,
Exhibit No. 18A, Sequencing Study, page 20, "The initial
opening of the
fuselage lower lobe (e.g. LF6A) would have the expected result
of rapid
depressurization accompanied by collapse of the main deck floor
for some
distance forward of STA 1000. The red area recovery of interior
components
as far forward as STA 600 would not be inconsistent with this
floor
collapse and associated structural breakup."

The red paint smears and the outward peeled skin strongly
indicate the
forward cargo door opened in flight, an opinion shortly held by
Mr. Fred

Schalekamp of FAA:

30 Jan 1998 letter from Neil Schalekamp, FAA, to JBS: "The paint markings and structural deformation that you cite, do indicate an outward explosion, generally accepted to be caused by the explosion of the CWT."

That's a fact and NTSB and FAA told me so in a letter and shown in sooting diagrams in exhibits. To not see the very red, very many, and very large unusual paint smears, and to not see the outward, not inward, peeled skin is to defy reality. The red smears, downward floor beams, and the outward skin are there and strongly indicate cargo door opened in flight based on physics and precedent.

The forward cargo door did open in flight, but not by the overpressure of a center tank explosion because the cargo door pieces were unsooted, just like the forward pieces of the center fuel tank.

What else could cause the forward cargo door to open in flight? There is a precedent, UAL 811, as described in NTSB AAR 90/01 and AAR 92/02 in which a high time Boeing 747 suffered a hull rupture in flight forward of the wing which left a sudden loud sound on the CVR and an abrupt power

cut to the
FDR, paint transfer marks in cargo door area, and outward
peeled skin, all
caused by chafed to bare wire conductor in the cargo door area.
<<http://www.corazon.com/811reportcontentpage.html>>

TWA 800 had a hull rupture forward of the wing which left a
sudden loud
sound on the CVR and an abrupt power cut to the FDR, paint
transfer marks
in cargo door area, outward peeled skin, and chafed to bare wire
conductor
discovered in cargo door area.

That is enough of a match to justify inspection of cargo door
wiring in
early Boeing 747s irrespective of other corroborative evidence of
faulty
Poly-X wiring discovered in Boeing airliners under NTSB and
FAA orders.

Bare shorted wires have also caused fires in forward cargo holds
of Boeing
747s before.

NTSB Exhibit 9C, Attachments to the Systems Group Factual
Report page 44,
45, 46. "1996, burning smell in forward cargo compartment,
found damaged
wiring shorted to ground, charring found.
B. Oct 12, 1996, Wire bundle arcing and resultant fire at aft
bulkhead of
forward lower lobe cargo hold on 747-200 freighter."

It would be prudent to inspect cargo door wiring in the forward cargo hold of early 747s since that wiring has been shown to be faulty in general, early Boeing airliner wiring has been shown to be faulty in particular, UAL 811, and faulty cargo door area wiring has shown up in the same area on a new fatal accident, TWA 800.

A solution to the mystery of the ignition source of the fireball and center tank fire may well be a foddred and on fire engine number 3 igniting disintegrating wing fuel tanks thousands of feet lower and seconds later than the initial event.

TWA 800 engine number three shows foreign object damage, fire, and uncontainment in the NTSB powerplant report and the structures report.

Exhibit 8A, page 11, paragraph 3, discussing results of engine 3 disassembly, "Of the 46 fan blades in the fan rotor, 21 blades with complete or partial airfoils and 6 root sections were recovered. All of the fan blades had sooting on the convex airfoil surfaces. Most of the full length airfoils were bent rearward and the tips outboard of the outer

midspan shroud were bent forward slightly. About half of the fan blades had impact damage to the leading and trailing edges. Almost all of the impact damage to the airfoils could be matched to contact with the midspan shroud on an adjacent blade. One full length blade had four soft body impacts along the leading edge and a partial airfoil had a soft body impact, which had some streaking extending rearward."

Exhibit No. 7A, Structures Group Report, page 33: "5.1

Horizontal

Stabilizer, "Some of the items found in the horizontal stabilizer are

sections of seat track, a stator blade from turbine section, and glitter."

On 5.1.1 Right Horizontal Stabilizer, page 34, "An engine stator blade from

turbine section penetrated the upper honeycomb surface near the outboard trailing edge.

A prudent action would be to rule in or rule out the precedent of UAL 811

applied to TWA 800. A risky action is to ignore many large red paint

smears, downward broken floor beams, and much outward peeled skin and their

clear implication of cargo door open in flight. The red paint smears will

not fade away; they will always be many, large, and red in the

photographs
on the NTSB CD-ROM. The floorbeams will always be broken
in Exhibit 18A.
The outward peeled skin will always be shattered outward on the
belly, the
upper fuselage, and around the aft midspan latch of the forward
cargo door
in the photographs of TWA 800 on the NTSB CD-ROM. Engine
number three will
always be sooted, blades missing, and have soft body impacts as
shown by
NTSB Exhibit 8A.

A more prudent action is to ground all Boeing 747s with Poly-X
wiring for
total inspections and replacement of that wiring. A total wiring
inspection
casts the net wider to catch faulty wiring. By inspecting all the
wiring to
include the fuel tank wiring, the yaw damper wiring, and the
known
previously faulty cargo door power wiring, all wiring can all be
cleared as
intact and pose no danger of shorting on, as has happened before
fatally.

I understand the difficulty and turmoil the grounding would
cause. Boeing
would have much work to rewire the planes if necessary. If not
feasible,
new airliners would have to be built and the grounded ones used
for parts,
similar to what the Navy has done with their Poly-X F-14

Tomcats.

Am I a traitor? Does my belief of a wiring cargo door fault for TWA 800 and other early 747s hurt my country? Specifically, the Northwest quadrant which has an economy derived from the design, manufacture, and selling of 747s.

Here's my answer to myself on that one. No, I am not a traitor, I am a patriot. Here's why.

Seattle is successful and must remain so. Seattle is successful because nearby is built successful airplanes. Successful airplanes are the best selling ones. The best selling ones are the most made ones. The most made ones are the ones that make the most money. The ones that make the most money are the ones that fly the most. The ones that fly the most are the safest ones. The safest airplane is the most successful airplane. Period.

So, to present an explanation for an unsafe event, the crash of TWA 800, an early Boeing 747, is a good thing to do, even if proven wrong later. The goal is to make safe airplanes which will fly the the most and be sold the

most and be made the most, thereby keeping our country's economy thriving.

My personal goal is to prevent death by preventing airplane crashes by preventing hull ruptures in flight on early 747s by preventing cracked bare wires shorting on the door unlatch motor thereby allowing the aft midspan latch to rupture and allow the middle of the forward cargo door to burst open causing a large explosive decompression which allows the 300 knot slipstream to tear nose off. This inner goal was determined by the selfless action of my pilot who saved my life in a sudden night fiery fatal jet plane crash years ago and which I have never forgotten.

It is the duty of aviation professionals to strive to explain TWA 800. And yet, this loyal citizen is rebuffed when presenting to NTSB NTSB derived evidence of a supplemental explanation to TWA 800. Why is that?

If I can't have a real conversation with NTSB or FAA officials regarding TWA 800, here is an imaginary one that sums up the past two years.

JBS: "Hello, NTSB, I'm answering your plea for public assistance regarding

the cause of TWA 800."

NTSB: "What do you want?"

"I believe the initial event is moisture meeting chafed to bare wire and shorting on cargo door motor to unlatch position causing rupture at aft midspan latch of forward cargo door in flight leading to thirty by forty foot hole of explosive decompression which allows 300 knot slipstream to tear nose off which leads to disintegrating aft fuselage, wings, and tail which ignite into fireball when fiery foddred engine number three meets vaporizing fuel thousands of feet lower and seconds later."

"No."

"There are many similarities to an event that happened before, UAL 811, and TWA 800."

"You're crazy. Who are you?"

"Commercial licensed pilot, instrument rated, 1000 PIC hours, Navy jet navigator, aircraft owner, FAA Part 135 certificate holder, avionics technician, and survivor of sudden night fiery fatal jet airplane crash talking about a sudden night fiery fatal jet airplane crash."

"Go away."

"The evidence of red paint smears, outward peeled skin, and
petal bulge at
aft midspan latch support conclusion forward cargo door opened
in flight,
just like UAL 811."

"I'm ignoring you and will not respond to further comments."

"You are safety aviation officials who say you turn over every
stone, who
check out every explanation, who really want to know what
happened to TWA
800, regardless of cause. Listen to me; talk to me."

"You are a wacky guy on the internet, you are bothering the real
investigators and getting in the way, you have been told over and
over
again in great detail that you are wrong and we are right, you
don't have
your basic facts straight about the door, you should check with us
before
you say your nonsense to others, and you are a flake and we don't
like you."

"Maybe, but so what? The messenger's style is independent of
the truth of
his content. Moisture and shorted wiring caused the crash of
TWA 800. Why
do you not ask questions to me, as real investigators do, as I ask
you?"

"We don't ask questions of citizens that we don't already know the answers to, we just make statements such as this: No, your're wrong, you're crazy, go away, we will not respond, goodbye, and thank you your for your interest in aviation safety."

Below is real:

10 March 1998 letter of John B. Drake of NTSB to JBS :

"We consider our correspondence on this subject to be complete. Should you continue to reiterate your position on this issue in future correspondence, you should expect no further response from the Safety Board."

30 Jan 1998 letter of Neil Schalekamp of FAA to JBS :

"Please note that this office will no longer be responding to your further inquiries about these same concerns, including your February 6 and February 9 letters that I just received."

17 March 1998 letter of Jim Hall of NTSB to JBS :

"We do not believe a meeting is necessary to further discuss this issue."

Summarized conversation between me and ordinary citizens who visit my web site:

Visitor: "What does NTSB and FAA say when you tell them about wiring/cargo

door explanation for TWA 800?"

JBS: "They write that all cargo doors were all latched, all locked, and all intact at water impact, they have told me that over and over again and they will not respond to any further inquiries from me."

"What do they say about the red paint smears?"

"They pretend they don't exist except one FAA official who did but changed his mind and now pretends they don't exist."

"What do they say about the outward peeled skin?"

"They say it was caused by inward water impact."

"What do they say about the petal outward bulge at aft midspan latch of forward cargo door?"

"They pretend it does not exist except one FAA official who did but changed his mind and now pretends it doesn't exist."

"What do they say about the missing manual locking handle, the two overpressure relief doors, the viewing ports, the torque tubes, the two pull-in hooks, the midspan latches, and the other eighty percent of forward cargo door skin?"

"They say they are unimportant."

"What do they say about the Orange Zone pieces, the possible mixup in cargo door sills, the unsooted pieces of center fuel tank, the thirty by forty foot shattered skin zone forward of the wing on the right side, the chafed to bare wire discovery in cargo door area, and the many significant matches to UAL 811?"

"Nothing. They say nothing. Well, actually they told me to go away, and stay away."

"Have you gone to your congressman?"

"Yes, Sam Farr, and he has asked many time to NTSB and FAA for information."

"What happened?"

"They wrote to him that the door was all latched, all locked, all intact at water impact, they have told me that many times, and thanked him for his interest in aviation safety."

"Did you contact any other elected politician?"

"Yes, Senator John McCain, jet plane crash survivor and

Chairman of the
Committed that oversees NTSB."

"What happened?"

"He reviewed my data and submitted it to his committee for review. He asked me to wait until the hearings. He asked the NTSB to meet with me to related my concerns about the forward cargo door of TWA 800."

"What happened?"

"The Committee on Commerce, Science and Transportation still has the matter under review, I waited until the hearings, I went to the hearings. The suggested meeting by Senator McCain between NTSB officials and me was refused by Chairman Hall of NTSB saying there was sufficient evidence to rule out the cargo door opening in flight, he has told me that many times in great detail and a meeting was not necessary."

"Have you tried the press?"

"Yes, I've had several radio and TV interviews. Some get airplay and some don't."

"Have you tried Boeing?"

"Yes, Boeing and McDonnell Douglas both contacted before the merger. The two safety officers were polite and referred me to NTSB. Boeing engineers referred me to the Public Relations office of Boeing. The Boeing Public Relations office referred me to the NTSB. NTSB told me to go away."

"Have you tried the internet?"

Yes, I have a 1200 page, 100 meg website which has been online since July, 1996 and visited about 70000 times, according to page counters."

"What are you doing now?"

"I'm continuing to write to appropriate officials presenting the evidence and trusting it will speak for itself. It's not going to go away."

"Have you tried calling them?"

"No, my wife and daughter were approached in my home by two armed federal agents within twenty four hours of me posting an email to Senator McCain about Air Force One crashing. Calling on the telephone out of the blue would be much too aggressive. Prior to the Secret Service interrogation, phone calls usually ended up with the official shouting and hanging up. So

now I continue to write non-threatening, polite, full of facts letters and emails."

"Are you saying government public safety aviation officials in writing refuse to adequately respond to your request for a meeting to discuss facts, evidence, documents, photos, which clearly indicate a forward cargo door opening in flight on TWA 800?"

"Yes."

"They will not call you, write to you, or respond to polite letters with sources listed?"

"Nope."

"Are these the same guys that say safety is priority number one, they will turn over every stone, never give up to get a full explanation, and respond to every public inquiry?"

"Yup."

"Who are you? A wacky guy on the 'net?"

"Maybe, although I use government AARs for sources, and I'm also a survivor of a sudden night fiery fatal jet airplane crash, a commercial

licensed
pilot, instrument rated, FAA Part 135 certificate holder, light
aircraft
owner, jet carrier navigator, avionics technician including radar
operator,
and a retired military officer in a converted garage with a
computer and a
phone line."

"And you've tried for almost two years to meet face to face with
the public
officials involved with TWA 800?"

"Yes."

What happened?

"Nothing yet. But I'm still trying. It's only been two years for
TWA 800.

The investigation is open and active. The evidence is not
changing or going
away."

And I am still trying:

Real facts presented by NTSB about TWA 800 in exhibits,
photographs, text,
drawings, and testimony:

1. right horizontal stab has red paint smear
2. stator blade in right horizontal stab behind engine number 3
3. inward crush top of cargo door
4. top of cargo door attached to hinge

5. petal shape of rupture area around aft midspan latch
6. missing pieces of forward cargo door include locking handle, latching pins, overpressure relief doors, midspan latches
7. rectangle visible of explosive decompression zone of outward peeled skin on right side forward of the wing on right side
8. downward movement of floor beams near cargo door
9. hoop stresses found
10. CVR sudden loud sound
11. FDR abrupt power cut
12. missing turbine blades in engine number 3.
13. soft body impacts on blades in engine number 3.
14. outward peeled skin near top of nose, under belly, and in cargo door area.
15. red paint smears above cargo door on white paint
16. soot on most blades of engine 3.
17. starboard side more damaged than port side
18. intact R2 door near shattered cargo door.
19. poly x is known to be susceptible to chafing and present
20. section 41 is known to be weak
21. history of cargo door openings in past in various airliners
22. EPR problems on aircraft before or during fatal flight.
23. fires in forward cargo hold in the past on Boeing 747s.
24. vertical tears in fuselage skin forward of the wing on the right side
25. singe marks on right side of fuselage show burnt skin, then abruptly at tear line there are no singe marks
26. red paint rubbed off revealing white paint underneath on skin above cargo door area
27. first pieces off plane came from forward cargo hold just

forward of the

wing

28. at least nine missing never recovered bodies, just fragments

29. initially thought to be a bomb

30. wreckage debris shows cargo door shattered in many pieces

31. aft portion of forward door which includes aft midspan latch and

locking handle missing from recovery effort

32. no soot on maintenance hatch

33. no soot on front spar of center wing tank

34. no burned bodies forward of the wing and very few burned at all

35. aft cargo door sill, latches, and locks recovered

36. forward cargo door sill, latches, and locks not recorded in data base

37. no orange zone pieces recorded in database

38. no orange zone discussion in public record other than identification

39. chafed to bare wires found in cargo door area

40. wiring defects found on Boeing airliners

41. water observed pouring out of forward cargo hold of a Boeing airliner, cargo holds have bilges.

42. no soot on keel beam forward of the wing

43. compression fractures right side forward of the wing

44. tension fractures left side forward of the wing

45. seats in the rows in the explosive shatter zone above cargo door are in

red zone and not sooted

46. aft cargo door sill is sooted

47. many witnesses said they saw downward streak that was red-orange

48. NTSB official said possibility of forward door popping open

was intriguing.

49. FAA official said, then recanted, that paint smears and structural

deformation indicated outward explosion.

50. initial event time was 20:31:12 at 13700 on 17 July 1996

eight miles

off coast of Long Island.

Reasonable conclusions derived from facts above:

1. water in forward cargo bay.

2. chafed bare wire touched by water.

3. electrical short occurs.

4. forward door motor turns on to unlatch position.

5. aft midspan latch of forward cargo door partially unlatches.

6. pressurized hull ruptures at aft midspan latch.

7. cargo door tears into pieces, some pieces stay with nose, some don't.

8. shiny metal pieces spin away reflecting evening sunlight and perceived

as red-orange streak to observers far away.

9. explosive decompression occurs shattering cargo door area forward of the

wing on right side exposing twenty foot by forty foot hole in nose

producing sudden loud sound on CVR.

10. 300 knots slipstream tears weakened nose off.

11. ejected debris is ingested by starboard engines which catch fire.

12. wing and wing fuel tanks; engines, tail, and fuselage fall and disintegrate on way down.

13. fiery starboard engine ignites fuel vapor clouds from disintegrating

tanks, including center tank.

14. fireball observed on the ground.

15. water impact of wreckage, cargo bay material first to hit water.

I may not be alone: "NTSB investigators have suggested unofficially that the streaks the pilots saw could have been light reflections from the skin of the aircraft, tongues of flame from the airliner or the forward door of the aircraft popping open, a possibility that still intrigues investigators, the second official said." AW&ST 3/10/97

Regarding the Aviation Week and Space Technology article quoted above, the following is supplied: <<http://www.corazon.com/800avweekintrigue.html>>

Monica Warnock
Washington Bureau
Aviation Week & Space Technology

Dear Ms. Monica Warnock,

21 May 1998

You wrote to me:> You must remove these articles and any other Aviation Week copyrighted material from your website immediately, or we will consider legal action.

I replied>Consider it done. And not because you threatened me, but because you may be right."

Ms. Warnock, I now believe you to be wrong.

I'm putting the 10 March 97 Aviation Week and Space Technology article in dispute back up on my web site at www.corazon.com at one minute after midnight on 1 June 1998.

Here's why: The content is everything and the content of the article is very, very important. I agree with the content. AvWeek agrees with content. The public officials quoted in your article agree with the content. The content quotes a public NTSB official who says that the cause of TWA 800 may have been forward door popping open. It also said the streak seen before TWA 800 crash may have been reflection off the skin of aircraft. I agree with that. It is very important. Let us call it the door pop streak article.

Ms. Warnock, you have done your job well by searching the web for Avweek articles. You found one. You then followed orders and directed it be removed. It was removed. The problem is now above your level of authority. So I direct my comments to your boss: Mary Francis Koerner, the Manager of Bureaus.

Will you please see that this letter goes to her?

Dear Ms. Koerner, I am told several things:

1. Get the door pop streak article off my web site.
2. I should ask permission to put AvWeek articles on web site.
3. Permission will be denied.

I asked permission. It was denied. You were right.

You have done all you can do. The problem is now above your level of authority. I assume you would refer me to 'The Lawyers.' I direct my statements to the lawyers.

Will you please see that this letter goes to them?

Dear AvWeek lawyers:

Ah, copyright, don't you love it?

My name is John Barry Smith. I have a 1200 page, 100 meg website at www.corazon.com mainly devoted to high time Boeing 747 accidents in which the hull ruptures in flight forward of the wing. It contains mostly government scanned in aviation accident reports, AARs, and occasionally copyrighted material from media, such as yours.

Please note, let us stipulate:

1. My site is non profit. I have not made a penny on anything

related to
that website. In fact, much of my money has gone out, nothing
has come in,
a problem as my wife will attest.

2. It is research oriented with airplane crash related comments,
investigations, reports, pictures, and text.

3. I give full and clear credit to the sources I quote. AvWeek was
clearly
stated as the author of the door pop streak 10 Mar 97 article in
question.

In fact, that is very important, that's why I quote clearly and give
credit

to Aviation Week by scanning in the entire article instead of
paraphrasing,

which would be quicker to download but not have the authority
of the best

aviation magazine on the planet, Aviation Week and Space
Technology. And I

omitted the advertising on the pages, too.

Now for argument:

1. I stole nothing from you.

2. It's fair use.

3. I can publish that article without your permission if certain
conditions

are met, and are: Non profit, small parts used, and credit given.

"Fair use and implied licenses.

Fair use is a legal license to use others' work, whether they
approve or

not. It constitutes one of the most important, and least clear cut, limits to copyright. The basic problem is that words like "fair" or "reasonable" cannot be defined with the precision non-lawyers (or many law students) would like. Until 20 years ago, fair use did not appear in U.S. legislation, but it now occupies about half of the copyright statute. In the U.S., partial or limited reproduction of another's work may be permitted under this doctrine. On the one hand, fair use offers an especially liberal defense to uses that advance public interests such as education or scholarship. On the other hand, it is unlikely to be available if one fails to credit the original artist or author. It is not apt to be available to those who profit or interfere with original artists' or authors' ability to derive income from their works."

" 1998 Franklin Pierce Law Center. All rights reserved." (I hope I have fair use to quote the above.)

I believe I advance the public interest in aviation safety, I credit the original speaker, the reporter, and the magazine, and I do not profit from it. I have fair use.

Conclusion: It will take a Judge to order me to remove the 10
March 97

AvWeek article from my website after it is put back up on 1 June 1998 or to permit me to continue to post it.

So, Lawyers, the problem is above your level of authority. I turn my attention to the Managing Editor:

Will you please see that this letter goes to him?

Dear Managing Editor,

What's the beef? You and your reporter, David Fulghum, have done a fine piece of work. You have pinpointed the cause of a mystery crash now under current investigation, TWA 800. It was the door popping open in flight. The NTSB official you quoted was correct. The streak was the skin spinning away reflecting evening red orange sunlight to observers below. The official was correct and he was quoted correctly by your aviation reporter. The implications of the truth you printed are profound. The cause now leads to chafed wiring shorting on cargo door unlatch motor and allowing rupture at aft midspan latch of forward cargo door which opened in flight. Exactly as has happened before with UAL 811 as described in NTSB AAR 92/02. The 300 knot slipstream tore the nose off TWA 800 because the explosive

decompression shatter zone was much bigger on TWA 800 than on UAL 811, as shown by NTSB reconstruction photo of TWA 800 wreckage.

I encourage you to do a follow up story on the wiring/cargo door explanation as described on the website in question, www.corazon.com. Mr.

Fulghum and Mr. McKenna are familiar with the details of TWA 800 and wiring cargo door explanation.

Attached:

1. Correspondence between AvWeek Ms. Warnock and me.
2. Three .jpgs of the images published on website of 10 March door pop streak article.
3. Recent email to Government officials regarding this matter. Please note accurate numbers and sources given.

So, I must publish your copyrighted material, the 10 March 97 article on my website at URL <http://www.corazon.com/800avweekintrigue.html> on June 1, 1998.

I'm at email barry@corazon.com or 408 659 3552 or 551 Country Club Drive, Carmel Valley, CA 93924.

I encourage discussion regarding this matter. It's a hot story even though almost two years old. Wiring is the main culprit, not the door, not the center tank. NSTB is in the right church but the wrong pew. Wiring is the problem and it's in places other than the fuel tank tubes. It's in the cargo door unlatching motor circuits.

Cheers,
John Barry Smith

From: monica_warnock@mcgraw-hill.com
Date: Thu, 14 May 98 10:24:37 -0500
To: <barry@corazon.com>
Subject: Aviation Week
Mime-Version: 1.0

To: barry@corazon.com

Dear Sir,

Your website "<http://www.corazon.com/800avweekintrigue.html>" contains several scanned-in pictures of the Aviation Week & Space Technology article "ANG Pilot: TWA Hit By Object," March 10, 1997. Our records do not show that you requested permission to use these articles on your website.

Aviation Week & Space Technology is covered by copyright

law which

states that permission must be granted before our material is used.

Your website is in violation of this law. You must remove these

articles and any other Aviation Week copyrighted material from your

website immediately, or we will consider legal action.

Sincerely,

Monica Warnock

Washington Bureau

Aviation Week & Space Technology

monica_warnock@mcgraw-hill.com

(202)383-2314

To: monica_warnock@mcgraw-hill.com

From: John Barry Smith <barry@corazon.com>

Subject: Request permission to present article on website.

Cc:

Bcc:

X-Attachments:

To: barry@corazon.com

Dear Sir,

Your website "<http://www.corazon.com/800avweekintrigue.html>" contains

several scanned-in pictures of the Aviation Week & Space Technology

article "ANG Pilot: TWA Hit By Object," March 10, 1997.

Our records

do not show that you requested permission to use these articles
on
your website.

Dear Madam, 14 May 1998

A thousand pardons. I immediately request permission to reprint
Aviation
Week & Space Technology article "ANG Pilot: TWA Hit By
Object," March 10,
1997 on my website, www.corazon.com. (Corazon is my wife's
name.)

The reason I scanned in exact image instead of paraphrasing text
was to be
precise and show source, very important for a research paper.

Should my request be denied, I shall of course, immediately
comply with
your request and remove the article from my web site.

AWST is a fine magazine and one which I have read diligently
for over
thirty years. I have watched AWST's web site mature as time
goes on.
<http://awgnet.com/awgnews.htm> is on my bookmarks list and I
check it first
thing every morning. I'm in your database of subscribers. Keep
up the good
work!

Regarding this life and death matter of a sudden night fiery fatal
jet

plane crash about which I have published a 1200 page website presenting my shorted wiring opening forward cargo door in flight explanation to the general public in a non profit effort:

1. You surely understand I can not alter my website just on an unsolicited email out of the blue from:

Monica Warnock
Washington Bureau
Aviation Week & Space Technology
monica_warnock@mcgraw-hill.com
(202)383-2314

The absence of title indicates your request may be personal in nature and not official. Please confirm your official title which corresponds to your request that I delete an article from AWST from my site. You may be spoofing me and my asking for credentials is prudent and an established protocol.

2. Your response indicates an interest in the subject of TWA 800. Could you refer a reporter to me so I can present my wiring/cargo door explanation to him/her? I would appreciate the opinion of an aviation professional regarding my nine years of amateur research into hull ruptures of

hour high
time Boeing 747s. Your reporter, David Fuhlgum, in the
referenced article,
was able to elicit important material from NTSB officials
regarding TWA
800; the forward door may have popped open in flight, and the
streak may
have been pieces of the aircraft reflecting evening sun. I am able
to
amplify those observations by an anonymous NTSB 'second
official' using
NTSB documents and photographs. It's a good story and one
worthy of AWST's
interest. FAA, NSTB, and Boeing are all saying wiring in older
Boeing
airliners is fraying and shorting causing problems, and so am I,
long
before the officials came to the realization.

3. >or we will consider legal action.

Why, O why did you threaten me? Your first contact, out of the
blue, and it
contains a threat of 'legal action'. What does that mean? I don't
think it
means a good thing. It just sets a wrong tone. Is politeness gone
from even
presentations about a plane crash?

4. >Your website is in violation of this law.

Whoa! You are calling me a criminal? Just like that? I'm breaking
the law?

I'm a lawbreaker? This is very disturbing. Maybe that's the way
AWST works
with the big boys who only respond to threats, not to polite
requests with
explanation attached. I'm not a big boy. I'm a retired military
officer
working out of a converted garage in California. I don't like
anybody
telling me I'm breaking the law unless it's a policeman, judge, or
jury.
And I still don't like it, but I obey. I really can't tell my friends
that
I changed my cherished web site because of a strange
unauthenticated email
from some babe named Monica at McGraw-Hill, now can I? I
mean, am I a man
or a mouse?

See, a threat always turns a pleasant conversation into stressful
one.
Squeek, squeek.

To review:

1. I respectfully request permission to display scanned in
images of
Aviation Week & Space Technology article "ANG Pilot: TWA
Hit By Object,"
March 10, 1997 on my personal website, www.corazon.com.
2. Please to show credentials, madam.
4. Refer reporter to me regarding a subject that you feel strongly

enough

to want to affect with correspondence, TWA 800.

5. Keep up the good work covering aviation subjects around the world.

Cheers,

John Barry Smith
551 Country Club Drive,
Carmel Valley, CA 93924
408 659 3552
barry@corazon.com
www.corazon.com

From: monica_warnock@mcgraw-hill.com
Date: Thu, 14 May 98 13:48:41 -0500
To: <barry@corazon.com>
Subject: Re: Request permission to present article on website.
Mime-Version: 1.0

Dear Mr. Barry,

I am an editorial assistant in the Washington Bureau of Aviation Week & Space Technology. I work for Mary Francis Koerner. She is the Manager of Bureaus and she is the official contact for Reprints & Permission. We will periodically search the web for Aviation Week on outside websites and that is what brought me to your site.

Unfortunately, at present, Aviation Week & Space Technology does not allow its material to be reprinted on any websites other than our own.

We appreciate your interest in Aviation Week & Space Technology;

however, we must ask that you remove the article from your website, as

you have indicated you are willing to do.

My interest in this regard is not related to TWA800 but protecting the

magazine in general. Many people are not aware of the rules regarding

copyright on the internet. You may reference the section "Photocopy

and Rights & Permission" on the Contact Us page of Aviation Week if

you have any future requests for permission.

James McKenna would be the best editor to send your correspondence to

regarding TWA 800. He is located in the Washington bureau: 1200 G

Street, NW Suite 922, Washington, DC 20005. (202) 383-2332.

I will mail you a hard copy of this letter on Aviation Week & Space

Technology letterhead to satisfy any concerns you might have about my

identity. Thank you for your understanding.

Monica Warnock
Editorial Assistant, Washington Bureau
Aviation Week & Space Technology

To: monica_warnock@mcgraw-hill.com
From: John Barry Smith <barry@corazon.com>
Subject: Re: Request permission to present article on website.
Cc:
Bcc:
X-Attachments:

Dear Mr. Barry,

I am an editorial assistant in the Washington Bureau of
Aviation Week
& Space Technology. I work for Mary Francis Koerner. She is
the
Manager of Bureaus and she is the official contact for Reprints
&
Permission. We will periodically search the web for Aviation
Week on
outside websites and that is what brought me to your site.

Dear Ms. Monica,

Thank you for your prompt reply. I am saddened by the denial to
present the
AWST article on my web site. I shall search through it and delete
it. Do I
need permission to post your email in its place to explain why
the article
was deleted? I should explain why the article was removed to
squelch any

conspiracy coverup nonsense that pervades this TWA 800 investigation.

Unfortunately, at present, Aviation Week & Space Technology does not allow its material to be reprinted on any websites other than our own.

So sad.

We appreciate your interest in Aviation Week & Space Technology; however, we must ask that you remove the article from your website, as you have indicated you are willing to do.

As soon as I am finished with this upcoming TV interview about wiring/cargo door explanation, I will. The TV station is KOMO-TV, Channel 4, ABC, in Seattle Washington and the arrive within the hour. I'm preparing for it so am unable now to find page, delete, change links, upload it to server right now. But how long to I have? Is 48 hours OK?

My interest in this regard is not related to TWA800 but protecting the magazine in general. Many people are not aware of the rules regarding copyright on the internet. You may reference the section "Photocopy and Rights & Permission" on the Contact Us page of Aviation

Week if

you have any future requests for permission.

Protecting the magazine? Well, OK, if you say so. I feel that quoting AWST in a non profit website about aviation safety helps AWST, but what do I know.

James McKenna would be the best editor to send your correspondence to regarding TWA 800. He is located in the Washington bureau: 1200 G Street, NW Suite 922, Washington, DC 20005. (202) 383-2332.

Thank you very much, ma'm, and I shall. I shall say you referred me, is that OK?

I will mail you a hard copy of this letter on Aviation Week & Space Technology letterhead to satisfy any concerns you might have about my identity. Thank you for your understanding.

Fine, can I put that on my website?

Let me get back to you on this. I will delete offending article and then send you URL of the new page so you can confirm I have cleansed the dirty deed.

Cheers,
John Barry Smith

Monica Warnock
Editorial Assistant, Washington Bureau
Aviation Week & Space Technology

From: monica_warnock@mcgraw-hill.com
Date: Thu, 14 May 98 14:47:54 -0500
To: <barry@corazon.com>
Subject: Re[2]: Request permission to present article on website.
Mime-Version: 1.0

Mr. Smith,

I will mail your letter today. When it arrives, you are welcome to

place it on your website. We understand that you are busy right now-

as long as you are able to delete the pages by next Friday, that's fine

with us. The complete URL is

<<http://www.corazon.com/800avweekintrigue.html>>

If you do contact Mr. McKenna, you may tell him I referred you. Again,

thank you for your interest in Aviation Week.

Monica Warnock
Editorial Assistant, Washington Bureau
Aviation Week & Space Technology

To: monica_warnock@mcgraw-hill.com

From: John Barry Smith <barry@corazon.com>
Subject: Done
Cc:
Bcc:
X-Attachments:

Dear Ms. Warnock,

You must remove these
articles and any other Aviation Week copyrighted material from
your
website immediately, or we will consider legal action.

Consider it done. And not because you threatened me, but
because you may be
right.

<http://www.corazon.com/800avweekintrigue.html>

is the URL which now has deleted article. Completed 6:57PM 14
May 97, nine
hours after your request. The TV interview went swimmingly. In
fact, the
interviewer from KOMO TV ABC Seattle, asked that I send him
an email of the
article in question. He was interested to hear about your request.

I just want you to know that you have made an old man very
very sad. I
shall have to research the web, as is my wont, to find out for sure
if the
copyright laws exist to keep non profit websites from fairly using
one

article of a magazine to support an aviation safety hypothesis. I make no money from this site, on the contrary, it costs me money to keep it up. The site is 1200 pages deep with on one page assigned to article. The goal of the website is aviation safety, a common goal with Aviation Week. The officials quoted on the article are public officials whose comments are public.

It seems to me that permission should not be necessary for me to put your article on my website as long as I give credit to the author and make no money from it.

It seems to me that when permission was requested to put the article on my website, permission should have been granted.

You said 'protect your magazine,' as motive for requesting I delete the article. Protection from whom? Me? Aviation Week needs protection from me? I am a retired guy working out of a converted garage with a computer and a modem. You have nothing to fear from me, we are on the same side, aviation safety.

Regardless, the excellent article by David Fulghum in the March

10, 1997

issue has been deleted at your request. Should it become apparent that I do have the fair right to use your article under conditions which I fulfill, then, pop! up it goes again. I shall let you know in advance so you may attempt to dissuade me if you wish. It just seems that a guy ought to be able to pull out old magazine articles to quote from when he's trying to persuade visitors of an aviation safety point. In case I'm wrong, and I'm never wrong, I have erred on the side of safety and complied with your request.

Cheers,
John Barry Smith

Mr. Smith,

I will mail your letter today. When it arrives, you are welcome to place it on your website. We understand that you are busy right now- as long you are able to delete the pages by next Friday, that's fine with us. The complete URL is <<http://www.corazon.com/800avweekintrigue.html>> If you do contact Mr. McKenna, you may tell him I referred you. Again, thank you for your interest in Aviation Week.

Monica Warnock
Editorial Assistant, Washington Bureau
Aviation Week & Space Technology

DAVID A. FULGHUM/WASHINGTON

Two New York Air National Guard pilots, with the best view of the crash of TWA Flight 800 last July, are disagreeing about what they saw immediately before destruction of the Boeing 747-131 jetliner.

One believes the airliner was struck by a fast-moving object coming from the east, while the other saw only a fiery trail from the west.

However, both believe a violent explosion ripped the aircraft apart, propelling some of its passengers high enough that they did not hit the water's surface until 3-4 min. after the initial explosion.

Maj. Frederick C. Meyer, pilot of an HH-60 helicopter from the ANG's 106th Rescue Wing, has just been freed from an FBI gag order preventing him from giving interviews about the 1996 disaster off Long Island, N.Y. The copilot, Capt. Christian Baur, remains under FBI restrictions not to speak about the accident. But two officials familiar with his testimony told Aviation Week &

Space Technology in detail what he told investigators.

In the days immediately after the accident, before being ordered not to speak, Meyer discussed his initial impressions with news media (AW&ST July 29, 1996, p. 32). Last week, he chose Aviation Week as the first news organization to hear a detailed account of his recollections and his testimony to federal investigators.

Meyer and Baur were in one of the wing's two aircraft operating north of the crash site. The helicopter was operating over Long Island about 12 mi. north of the TWA crash site. Baur, the copilot, was at the controls practicing instrument approaches. The crew was awaiting darkness so they could begin training with night vision goggles.

The key point on which the two pilots disagree is whether a streak of light appeared from the opposite direction of the flight of TWA 800 (which was flying from west to east after takeoff from Kennedy Airport), a possible indication of an intercepting missile or some other object.

Meyer's attention was first called to the area of the sky where the accident occurred "by a streak of light moving from my right (west) to my

left

(east)," the same direction as the TWA flight, he said.

Baur's account differs on this point. According to the two officials who have heard both pilots' accounts, Baur, on the left side of the cockpit, saw a streak moving from left to right toward the approaching TWA aircraft before the initial explosion.

"Almost due south [of the helicopter], there was a hard white light, like burning pyrotechnics, in level flight," Baur told investigators from the National Transportation Safety Board, FBI and a Federal anti-terrorist task force. "I was trying to figure out what it was. It was the wrong color for flares. It struck an object coming from the right and made it explode."

Baur's first impression was that there had been a midair collision, possibly between two light aircraft that tow banners along the beach.

"They had witnessed these aircraft come very close to each other at that time of day, and that's what they assumed," the second official said.

NTSB investigators have suggested unofficially that the streaks the pilots saw could have been light reflections from the skin of the

aircraft, tongues
of flame from the airliner or the forward door of the aircraft
popping open,
a possibility that still intrigues investigators, the second official
said.

Meyer could not actually see the aircraft, but only the streak, and
he admits
that Baur, a younger man, has better eyesight. Moreover, Meyer
adds,
"Whatever Chris saw on the left side I didn't see because he
blocked my
view." Baur disputes this, saying that the explosions and crash
were
virtually dead ahead of the aircraft.

The helicopter was executing a missed approach and was about
halfway down
Runway 24 at the Francis S. Gabreski International Airport at
Westhampton
Beach, N.Y. It had started a climbing left turn to the south when
the
accident occurred. The Sun had not yet set and the sky was still
bright.

According to Meyer, the streak was about 15-20 deg. above his
line of sight
and perhaps 15 deg. left of the aircraft's centerline.

"I don't know if it was a missile that struck the airliner," Meyer
said.

"Nothing at that moment said 'missile' to me. I spent a number of
years in

Vietnam and had seen missiles fired, some of them at me. But, that was 25-year-old missile technology, which left smoke trails. I understand today that they are made with smokeless rocket fuel and don't leave trails. What I saw was a streak of light, not a smoke trail."

The streak of light that Meyer saw made a very shallow, gradually descending arc. He points out that he never saw the actual airframe of the TWA 747 within the streak or subsequent explosions or smoke trails. It was virtually identical to the trajectory of a meteor, with only a slight curve. But unlike a meteor, the streak was red-orange in color, he said.

Meyer observed the descending streak for 3-5 sec. Then there was what Meyer describes as a hard, very sudden, yellowish-white explosion that looked identical to the detonation of an antiaircraft shell. He did not suggest an antiaircraft weapon was fired at TWA Flight 800, however.

"It left a cloud of smoke just like a flak explosion does," Meyer said. "One to two seconds later, there was a second, hard explosion almost pure white in color. The position of that explosion appeared to be slightly below and behind where one would have anticipated the streak of light to

have gone. The trajectory at that point appeared to be slightly bent down and slowed."

A new detail in Meyer's story was that almost immediately there was a third explosion and fireball. Meyer doesn't remember if there was an explosion and fireball or if the third explosion turned into the fireball.

"That was a soft explosion unlike the first two," Meyer said. "It began as a tiny point and it grew very rapidly into a huge fireball four times the diameter of the Sun. I was dumbstruck."

Baur also saw three explosions. But he contends that they started from left (east) and went to right (west). He said the explosions created a "huge waterfall of flame that cascaded down," the first official said. "The column of flame was being whipped around violently. First it was tumbling, and then it refined itself into a spiral. The explosions were all before the cascade of flame began."

In the helicopter, Baur spoke first, asking if it was pyrotechnics. ANG operations that night were to have included flares dropped by a HC-130 transport aircraft. The crew then called the Gabreski tower.

"We said we'd observed a fireball south of the field and we would like clearance to the beach to investigate," Meyer said. Baur actually made the call and reported a possible midair collision, the second official involved in the investigation said.

The crash time has been variously reported as being from 8:31 to 8:45 p.m., Meyer said. He believes the earlier time is more likely to be correct although he can't be sure.

Baur continued to fly the helicopter during the search while Meyer functioned as copilot and primary communicator. As they approached the crash site, after about 4 min. of flight, debris was still falling so they slowed to avoid being hit.

"As they got closer, within two or three miles, Baur could see the aircraft body, not tumbling, but in a vortex almost like inside a tornado," the second official said.

Meyer made another revelation that was the result of long reflection after the accident.

"I was looking ahead . . . as we approached the crash site," Meyer said. "I saw some debris at 1,200-1,300 ft. falling at terminal velocity and fuselage fragments tumbling at 40-50 mi. per hour. The things falling at high speed were bodies still strapped in their seats. That is logically inconsistent if they came from the same explosion at the same time. On reflection, I have concluded that the bodies must have been blown upward before they came down. That indicates a violent explosion."

On this point, the two pilots' accounts agree, the officials said.

"Debris was falling like snow," according to Baur's testimony. "Among the particulate there was metal and paper, some of it glowing. Through all of that, things would come racing through -- two or three high-speed objects like sacks of potatoes. I believed them to be bodies that had been blown upward."

The pilots' opinion differ from the conclusion of inspectors that all the passengers were in the fuselage when it ripped apart from aerodynamic forces.

In an attempt to debunk the most egregious coverup and conspiracy theories, Meyer and other ANG officials remain adamant that their unit

was not part of
any larger, undisclosed, multiservice operation. Operations the
night of the
crash were standard training flights to maintain currency with
night vision
goggles, rescue operations and in-air refueling.

The HH-60 flight was to be of about two hours' duration and
would not extend
more than 2 mi. off the Long Island southern coast. The HC-130
would drop
flares, rafts and a para-rescueman and later refuel the helicopter
in a
communications-out, lights-out operation.

"No other people of other services were on the base at the time,"
Meyer said.
Nor were there indications of the operations of drone aircraft,
another
theory that has surfaced as the possible cause of the crash. "No,
there would
have been some kind of notice."

AW&ST 3/10/97

Until the streak is adequately explained, the missile explanation
will
always be possible. I say missile explanation will always be
could be, but
wasn't. The evidence refutes every missile explanation suggested
event.
Likewise for meteor and bomb explanations, they will always be
could have

been, but weren't.

The center tank did catch fire and there was a fireball, so center tank explanation will always be could have been and was, the only issue is when.

The wiring/ cargo door explanation explains the streak, refutes the bomb and meteor, and supplements the center tank explanation.

The wiring/cargo door explanation for TWA 800 is the more correct, more complete explanation.

I urge that Boeing 747s with Poly-X wiring be grounded until wiring is checked in cargo door areas known to have been faulty in the past.

I again request to meet with NTSB officials to present my wiring/ cargo door explanation.

Sincerely,

John Barry Smith
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Carmel Valley, CA 93924
408 659 3552
barry@corazon.com

www.corazon.com

Citizen: USA

Major: US Army Retired

Pilot: Commercial, instrument rated, FAA Part 135 certificate.

Navigator: RA5C Vigilante

Owner: Mooney M20C

Survivor: Sudden night fiery fatal jet plane crash.

From: John Barry Smith <barry@corazon.com>

Date: June 12, 1998 2:37:55 PM PDT

To: Neil.Schalekamp@faa.dot.gov

Subject: Red Paint Transfer Marks TWA 800 Cargo Door Area

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Dear Mr. Schalekamp and Official Persons who feel
responsibility in explaining TWA 800,

Docket No. SA-516, Exhibit No. 7A, Structures Group Report,
page 34, A section of the structure outboard of H7 exhibited
evidence of red paint transfer marks on the upper skin (H8); only
the remnants of the shattered logo light window remain in the
window frame.

The above details a red paint transfer mark on the right
horizontal tail surface of TWA 800 directly aft of the red painted

trim in cargo door area. This area shows missing red paint clearly in NTSB photo displayed at URL <<http://www.corazon.com/redpaintsmearssoloprint.html>>

The NTSB photographs are clear in color and detail. The TWA 800 reconstruction photograph shows abnormal green, white and red paint on the right side forward of the wing.

Normal TWA red trim paint scheme is seen at <<http://www.corazon.com/twapaintpixweb.html>> Only above the forward cargo door of the reconstructed fuselage of TWA 800 is seen the abnormal red paint smears.

The sequence is thus: bare aluminum skin is cleaned, primed, base coat of white applied, then red trim on top of white, then decals. This sequence is basic painting for Boeing 747s and confirmed by aviation professionals.

It is not red paint trim on primer with overspray, mask off, then paint white base coat around the trim.

The red trim is always on top of white base coat and means that the many, red, and large red paint smears between the passenger windows are red paint transfer marks. The red paint marks are not red paint exposed when white above is worn away, it is always red on top of white, not underneath.

This is further proven by skin which has red paint missing and thus exposing white undercoat. This is seen at URL <<http://www.corazon.com/TWA800hullrupture.html>> The white is always underneath the red. The green is always underneath the white.

Additionally, the added red paint between the windows is next to the missing red paint in the trim above the cargo door. Red paint went from one area to another.

The many red and large red paint transfer marks above the forward cargo door of TWA 800 indicate the cargo door opened in flight. The precedent of cargo door paint transfer marks was set by UAL 811 as described in NTSB AAR 92/02, page 41.

The red paint transfer marks indicate the red door below ruptured/opened in flight and slammed into the white paint above, removing the red trim paint and transferring it on top of the white paint. This is clearly seen between the passenger windows.

The red paint evidence coupled with the outward peeled skin on the side, and in the door area, and in the belly proves an explosive event occurred inflight in the cargo door area.

The downward crushed main floor beams confirm the explosive event. Docket No. SA-516, Exhibit No. 18A, Sequencing Study, page 20, "Downward separation directions were noted at STA 900, 880, 840, 820, 800, and 780..." and ""The initial opening of the fuselage lower lobe (e.g. LF6A) would have the expected result of rapid depressurization accompanied by collapse of the main deck floor for some distance forward of STA 1000. The red area recovery of interior components as far forward as STA 600 would not be inconsistent with this floor collapse and associated structural breakup."

The petal shaped outward bulge at the aft midspan latch of the forward cargo door pinpoints the location of the initial rupture of the hull of TWA 800 as seen at URL <<http://www.corazon.com/>

petalbulge.html> The aft latch is missing, the door frame is curved outward, and surrounding skin is shaped circular.

The analysis of red paint markings and structural deformation indicating an outward explosion was briefly held by FAA Branch Manager Neil Schalekamp of Northwest Region in a letter to me on 30 Jan 1998. "The paint markings and structural deformation that you cite, do indicate an outward explosion, generally accepted to be caused by the explosion of the CWT."

The cause of the outward cargo door explosion being the center tank is refuted by the lack of soot on the few recovered forward cargo door pieces and other right side fuselage pieces. Exhibit 20A page 129. Fire and Explosion Group Factual Report.

"RF2 C-004 No sooting No sooting
RF3A-H These pieces are part of the forward main cargo door.

Some have grimy corrosion inhibiting compound (CIC), but there is no apparent sooting.

These pieces are part of the forward main cargo door.

Some have grimy corrosion inhibiting compound (CIC), but there is no apparent sooting.

RF4 B-103 No sooting No sooting
RF5 A-071 No sooting No sooting
RF6A B-2004 No sooting No sooting
RF6B B-240 No sooting No sooting
RF6C B-318 No sooting No sooting
RF7 A-033 No sooting No sooting
RF8A No sooting No sooting
RF8B B-256 No sooting No sooting

RF8C B-263 No sooting No sooting
RF8D B-068 No sooting No sooting
RF8E B-268 No sooting No sooting
RF8F B-248 No sooting No sooting
RF9A C-117 No sooting No sooting
RF9B C-117 No sooting No sooting
RF9C C-259 No sooting No sooting"

NTSB investigators also are intrigued by the aircraft forward door popping open in flight, an explanation supported by red paint smears, outward peeled skin, downward floor beams, and petal shaped bulge at aft midspan latch. "NTSB investigators have suggested unofficially that the streaks the pilots saw could have been light reflections from the skin of the aircraft, tongues of flame from the airliner or the forward door of the aircraft popping open, a possibility that still intrigues investigators, the second official said." AW&ST 3/10/97

Basic NTSB generated evidence for TWA 800 in photos, text, sooting diagrams, tables, and drawings, a NTSB produced report AAR 92/02, and your visual interpretations of NTSB photograph at <http://www.corazon.com/redpaintsmearssoloprint.html> and on NTSB CD-ROM proves that the forward cargo door of TWA 800 opened in flight.

The evidence above proves the the cargo door was not all latched, all locked, and all intact at water impact, as previously believed based upon examination of only eight of the ten cargo door latches. Docket Number SA-516, Exhibit No. 15C, Report Number 97-82, Section 41/42 Joint, Forward Cargo Door, "Examination of the lower lobe forward cargo door showed that all eight of the door latching cams remain attached (along with

pieces of the door itself) to the pins along the lower door sill."

The cause of the door opening in flight is probably the same as UAL 811, as described in AAR 92/02; chafed wiring shorting on door unlatch motor based upon NTSB evidence for TWA 800 in Docket Exhibit 9A page 116: "Some wires found in the section of W480 from forward of station 570 and identified as BMS13-42A had numerous cracks in the insulation. Most of the cracks in this bundle were found to expose the core conductor when examined by microscope. Only within five feet of the aft end of the W480 bundle from station 570-900 were insulation cracks found."

NTSB agrees that a new explanation for the destruction sequence is possible based on new interpretations of the evidence such as shown by the red paint smears. Docket No. SA-516, Exhibit No. 18A, Sequencing Report, page 30: "It is therefore possible that new scenarios (sequences) may emerge as new information is acquired whether it be from newly identified parts, or simply a new interpretation of current information."

The wiring/cargo door explanation for TWA 800 must be thoroughly investigated to rule in or rule out the reasonable conclusions reached by the careful analysis of red paint smears, outward peeled skin, downward floor beams, petal shaped bulge at aft midspan latch, and cracked to bare conductor wires discovered in TWA 800 by NTSB.

The wreckage of TWA 800 is the victim at autopsy. It is the victim saying look at me, I exploded in flight, right there at the aft midspan latch. Just like I did before in 1989 with UAL 811 and left paint smears, outward peeled skin, aft midspan latch

rupture, sudden loud sound on the CVR and power cut to the FDR. Don't ignore me; don't deny me; do something about me.

Sincerely,

John Barry Smith
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www.corazon.com
Citizen: USA
Major: US Army Retired
Pilot: Commercial, instrument rated, FAA Part 135 certificate.
Navigator: RA5C Vigilante
Owner: Mooney M20C
Survivor: Sudden night fiery fatal jet plane crash.

Facts presented by NTSB about TWA 800 in exhibits, photographs, text, drawings, and testimony:

1. right horizontal stab has red paint smear
2. stator blade in right horizontal stab behind engine number 3
3. inward crush top of cargo door
4. top of cargo door attached to hinge
5. petal shape of rupture area around aft midspan latch
6. missing pieces of forward cargo door include locking handle, latching pins, overpressure relief doors, midspan latches
7. rectangle visible of explosive decompression zone of outward peeled skin on right side forward of the wing on right side
8. downward movement of floor beams near cargo door

9. hoop stresses found
10. CVR sudden loud sound
11. FDR abrupt power cut
12. missing turbine blades in engine number 3.
13. soft body impacts on blades in engine number 3.
14. outward peeled skin near top of nose, under belly, and in cargo door area.
15. red paint smears above cargo door on white paint
16. soot on most blades of engine 3.
17. starboard side more damaged than port side
18. intact R2 door near shattered cargo door.
19. poly x is known to be susceptible to chafing and present
20. section 41 is known to be weak
21. history of cargo door openings in past in various airliners
22. EPR problems on aircraft before or during fatal flight.
23. fires in forward cargo hold in the past on Boeing 747s.
24. vertical tears in fuselage skin forward of the wing on the right side
25. singe marks on right side of fuselage show burnt skin, then abruptly at tear line there are no singe marks
26. red paint rubbed off revealing white paint underneath on skin above cargo door area
27. first pieces off plane came from forward cargo hold just forward of the wing
28. at least nine missing never recovered bodies, just fragments
29. initially thought to be a bomb
30. wreckage debris shows cargo door shattered in many pieces
31. aft portion of forward door which includes aft midspan latch and locking handle missing from recovery effort
32. no soot on maintenance hatch
33. no soot on front spar of center wing tank
34. no burned bodies forward of the wing and very few burned at all

35. aft cargo door sill, latches, and locks recovered
36. forward cargo door sill, latches, and locks not recorded in data base
37. no orange zone pieces recorded in database
38. no orange zone discussion in public record other than identification
39. chafed to bare wires found in cargo door area
40. wiring defects found on Boeing airliners
41. water observed pouring out of forward cargo hold of a Boeing airliner, cargo holds have bilges.
42. no soot on keel beam forward of the wing
43. compression fractures right side forward of the wing
44. tension fractures left side forward of the wing
45. seats in the rows in the explosive shatter zone above cargo door are in red zone and not sooted
46. aft cargo door sill is sooted
47. many witnesses said they saw downward streak that was red-orange
48. NTSB official said possibility of forward door popping open was intriguing.
49. FAA official said, then recanted, that paint smears and structural deformation indicated outward explosion.
50. initial event time was 20:31:12 at 13700 on 17 July 1996 eight miles off coast of Long Island.

Reasonable conclusions derived from facts above:

1. water in forward cargo bay.
2. chafed bare wire touched by water.
3. electrical short occurs.
4. forward door motor turns on to unlatch position.
5. aft midspan latch of forward cargo door partially unlatches.
6. pressurized hull ruptures at aft midspan latch.
7. cargo door tears into pieces, some pieces stay with nose, some

don't.

8. shiny metal pieces spin away reflecting evening sunlight and perceived as red-orange streak to observers far away.

9. explosive decompression occurs shattering cargo door area forward of the wing on right side exposing twenty foot by forty foot hole in nose producing sudden loud sound on CVR.

10. 300 knots slipstream tears weakened nose off.

11. ejected debris is ingested by starboard engines which catch fire.

12. wing and wing fuel tanks; engines, tail, and fuselage fall and disintegrate on way down.

13. fiery starboard engine ignites fuel vapor clouds from disintegrating tanks, including center tank.

14. fireball observed on the ground.

15. water impact of wreckage, cargo bay material first to hit water.

From: John Barry Smith <barry@corazon.com>

Date: June 23, 1998 4:45:34 PM PDT

To: Neil.Schalekamp@faa.dot.gov

Subject: My errors corrected

Sam Farr

Member of Congress

17th District, California

House of Representatives

Congress of the United States

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John McCain III

Member of Congress
Chairman, Committee on Commerce, Science, and
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Dear Mr. Schalekamp, June 23, 1998

NTSB just sent me a two page letter. It was indirectly from Dr. Bernard Loeb. The first page was a form letter from NTSB reporting that I had used the wrong zip code on my hand addressed letter to Dr. Bernard Loeb. The second page was a copy of the misaddressed letter which was my 13 March 1998 letter to everyone addressed above.

This recent letter from NTSB tells me much. It tells me Dr. Bernard Loeb received the letter all right because the correction came from NTSB which means NTSB received it all right and everyone in NTSB knows Dr. Bernard Loeb as the Director of Aviation Safety and point man for TWA 800. I assume that Director Loeb gives close scrutiny to my letters to catch a one digit zip code error from incorrect 20591 to correct 20594. I assume this is a way for Director Loeb to point out errors in my correspondence.

And he's right. It was an error. It may be trivial in this case but potentially catastrophic when flying. As a navigator I recognize a serious error and the lack of attention to detail in a wrong number. It is a mistake I shall remember always. Dr. Bernard Loeb has shown me the need to check my numbers. Accuracy is everything in aviation and one digit being wrong is enough to kill. It happened with a Korean flightcrewmember avoiding the digit '4' and putting in a different number into his inertial navigation computer which then led him, his plane and his passengers over enemy territory which led to a shootdown, KAL 007. It happened to me when hand addressing envelopes of hard copy letters to back up the electronic emails. I checked out the error and traced it to a mixup of zip codes between NTSB and FAA. NTSB is 20594 and FAA is 20591 and I mixed them up.

There is an additional error on my address to Dr. Bernard Loeb. I put "490 L'Enfant Plaza East SW" instead of the correct "490 L'Enfant Plaza SW."

The principle is the same: Errors kill and accuracy counts.

I shall follow the example of NTSB and recognize the error and correct it.

I may have made another error recently in regard to TWA 800: I said that the many large red paint marks between the passenger windows above the forward cargo door of TWA 800 wreckage were 'transfer marks'. I stated they were red marks from the red fuselage skin below coming up and smashing into the white and leaving the red paint on top, similar to UAL 811.

There is now serious dissent that states the many large red paint marks are red paint from overspray of the trim below. The red marks are revealed white paint between the passenger windows is peeled back, revealing the red underneath. Several painters of airliners give conflicting opinion. The conclusive evidence is on the wreckage of TWA 800.

I ask NTSB and Director Loeb, can you confirm the paint sequence for the many large red paint marks between the passenger windows as seen in URL <http://www.corazon.com/redpaintsmearssoloprint.html> and <http://www.corazon.com/TWA800hullrupture.html>? Are they red on top of white paint, or are they red underneath white paint? Is the red underneath or on top?

It's vitally important. If red is underneath white, then I have made another error and wish to correct it. If red on top of white

then it appears that the red could have come from skin below opening up and slamming together causing paint transfer marks, thus confirming cargo door opened in flight.

There is no expense involved, only a short time for a metallurgist to climb up on a stepladder with a magnifying glass and look at the TWA 800 red paint marks.

As NTSB pointed out to me, numbers are to be accurate. I believe NTSB also respects numbers.

That's why eight is not ten. And never will be. That's why all ten of the forward cargo door latches must be recovered and examined and determined to have been operating normally before the cargo door is ruled out as culprit. That conclusive examination of all ten has not been done and that's why the forward cargo door can not be ruled out.

As NTSB told me to use the right numbers in my zip code, I ask NTSB to use the right numbers on the forward cargo door. There are ten identical latching pins and cams on that door and examining only eight is not good, not trivial, and wrong for NTSB.

For me to write NTSB zip code accurately is right for me. To check all ten latches is right for NTSB.

The two missing midspan latches that NTSB have not examined have been shown to carry loads as reported in AAR 92/02 where the aft midspan latch pin showed heat damage from hard contact. All ten latches are vital for proper operation of that door.

Only checking eight of ten is as bad as putting 20591 instead of

20594.

So, I acknowledge an error pointed out to me by NTSB and I remark on another error nearby, and corrected both.

I ask that NTSB do the same for themselves.

There is additional NTSB evidence which is perplexing if the center tank explosion as initial event is to be confirmed:

Docket No. SA-516, Exhibit No. 7A, Structures Group Report, page 33: "5.1 Horizontal Stabilizer, "Some of the items found in the horizontal stabilizer are sections of seat track, a stator blade from turbine section, and glitter." On 5.1.1 Right Horizontal Stabilizer, page 34, "An engine stator blade from turbine section penetrated the upper honeycomb surface near the outboard trailing edge." And same page: "A section of the structure outboard of H7 exhibited evidence of red paint transfer marks on the upper skin (H8); only the remnants of the shattered logo light window remain in the window frame."

Seat track, glitter, stator blade and red paint all had to come from up front because that's where they were. All of these items must have become embedded in the horizontal stabilizer in flight, because it's the only way they could have gotten there based upon the separation of nose and tail long before water impact. The only way for the stuff in front to get to the back in flight is for it to come out of the forward baggage hold. One very good way, a reasonable way, a way that's happened before, is for the forward cargo door to come open inflight and allow glitter contents of cargo bins, a seat track, and red painted door top to be blown aft. It also allows a fodded engine three to cause stator blade to be thrown out and back into right horizontal stabilizer.

A way to rule a repeat door opening event out is to examine the door and determine if it was functioning normally. That can not be done yet because only eight of ten latches have been recovered as well as on 20% of the door structure. Until door totally recovered it can not be totally ruled out. Until cargo door totally ruled out, TWA 800 investigation is not totally complete.

Examining many large red paint markings can assist in that determination. Are the red paint marks on top of the white paint or underneath the white paint between the passenger windows above the forward cargo door?

Sincerely,

John Barry Smith
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408 659 3552
barry@corazon.com
www.corazon.com
Citizen: USA
Major: US Army Retired
Pilot: Commercial, instrument rated, FAA Part 135 certificate.
Navigator: RA5C Vigilante
Owner: Mooney M20C
Survivor: Sudden night fiery fatal jet plane crash

From: John Barry Smith <barry@corazon.com>
Date: July 2, 1998 9:34:00 PM PDT

To: Neil.Schalekamp@faa.dot.gov

Subject: Response to Chairman Hall's letter to Congressman Farr.

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Dear Mr. Schalekamp,
1998

July 2,

Congressman Sam Farr sent me a letter on June 16th enclosing a letter to him from Chairman Jim Hall on June 8th discussing TWA 800 and cargo door cause. The letter from Chairman Hall to Congressman Hall contains various inaccuracies which require clarification:

Chairman Hall, "...Mr. Smith expressed his belief that the failure or cargo door led to the accident."

Chairman Hall has misstated my 'belief.' My belief is a wiring short led to the accident. As NTSB states a wiring short led to center tank explosion led to the accident, I say a wiring short led to cargo door rupturing in flight leading to the accident. Cargo door did not 'fail'; it did what it was told to do, unlatch.

Chairman Hall, "...numerous letters..."

Yes, that's correct. Three hundred and thirty eight to NTSB officials since July 20, 1996, three days after TWA 800, all with same consistent explanation; hull rupture forward of the wing on the right side at cargo door area. After researching hull ruptures on high time 747s for seven years, it was readily apparent that TWA 800 matched the previous accidents, one of which was confirmed as wiring/cargo door caused, UAL 811.

Chairman Hall, "Examination of the wreckage has not revealed any evidence..."

This is the Chairman of NTSB's opinion about a probable cause and is same as the Chairman of NTSB's opinion in 1990 about the forward cargo door for UAL 811 in AAR 90/01 which was in error and corrected with AAR 92/02. The forward cargo door has opened and fooled before.

Chairman Hall, "The cargo doors were found with their respective fuselage sections..."

Not accurate. Only 60% in pieces of the aft cargo door and only 20% in pieces of the forward cargo door were found, recovered and examined. Twenty percent of a door is not 'a door.'

Chairman Hall, "...the examination of the cargo door latches found that they were closed at the time of impact."

Not true. There are ten latches on each door and only eight of the forward door were examined because only eight were recovered. Above quote also implies some latches opened but not in flight. What is the status of the forward midspan latches? Found? Open or closed? Damaged? They are not in the wreckage database, they are not hung on wreckage reconstruction, and they are not

discussed in the forward cargo door Exhibit 15C.

Chairman Hall, "Safety Board metallurgists and structures engineers have carefully examined the cargo door..."

Not true because it's impossible. Only 60% in pieces of the aft cargo door and only 20% in pieces of the forward cargo door were found so it was impossible to carefully examine the cargo doors. Missing from the forward cargo door recovery are two midspan latches, manual locking handle, eight viewing ports, two overpressure relief doors, and 80% of the door skin. Most of the forward cargo door is not in wreckage recovery database nor hung on wreckage reconstruction. Who is the 'metallurgist'? Mr. Wildey? Who is the 'structures engineer'? Mr. Breneman?

Asking someone who said something once to say it again is not an impartial confirmation of a questioned evaluation.

Chairman Hall, "...carefully examined...the latching mechanisms..."

Not true. Only eight of the ten latching mechanisms were recovered to be examined. Two latches have not been examined at all.

Chairman Hall, "...carefully examined...the surrounding structure..."

Not accurate. Most of the surrounding structure is missing. Many nearby large red unusual paint markings were not evaluated.

Chairman Hall, "...found no evidence of pre-impact failure..."

Not supported opinion. There is much clear visual evidence of

pre-impact failure with petal shaped rupture at aft midspan latch, outward peeled skin on side and belly, unilateral shattered fuselage in cargo door area, downward floor beams, and several large red paint markings between passenger windows only above cargo door.

Chairman Hall, ".no evidence...that the door had opened in flight."

Not true. A FAA structures engineer at one time agreed that paint markings and structural deformation indicated an outward explosion in cargo door area. There is much hard, real, and documented evidence below that forward cargo door ruptured/ opened in flight.

1. right horizontal stab has red paint smear
2. stator blade in right horizontal stab behind engine number 3
3. inward crush top of cargo door
4. top of cargo door attached to hinge
5. petal shape of rupture area around aft midspan latch
6. missing pieces of forward cargo door include locking handle, latching pins, overpressure relief doors, midspan latches
7. rectangle visible of explosive decompression zone of outward peeled skin on right side forward of the wing on right side
8. downward movement of floor beams near cargo door
9. hoop stresses found
10. CVR sudden loud sound
11. FDR abrupt power cut
12. missing turbine blades in engine number 3.
13. soft body impacts on blades in engine number 3.
14. outward peeled skin near top of nose, under belly, and in cargo door area.
15. red paint smears above cargo door on white paint

16. soot on most blades of engine 3.
17. starboard side more damaged than port side
18. intact R2 door near shattered cargo door.
19. poly x is known to be susceptible to chafing and present 20.
section 41 is known to be weak
21. history of cargo door openings in past in various airliners
22. EPR problems on aircraft before or during fatal flight.
23. fires in forward cargo hold in the past on Boeing 747s.
24. vertical tears in fuselage skin forward of the wing on the right
side
25. singe marks on right side of fuselage show burnt skin, then
abruptly at tear line there are no singe marks
26. red paint rubbed off revealing white paint underneath on skin
above cargo door area
27. first pieces off plane came from forward cargo hold just
forward of the wing
28. at least nine missing never recovered bodies, just fragments
29. initially thought to be a bomb
30. wreckage debris shows cargo door shattered in many pieces
31. TWA 800 matched to AI 182, PA 103, and UAL 811.
32. no soot on maintenance hatch
33. no soot on front spar of center wing tank
34. no burned bodies forward of the wing and very few burned at
all
35. aft cargo door sill, latches, and locks recovered
36. forward cargo door sill, latches, and locks not recorded in
data base
37. no orange zone pieces recorded in database
38. no orange zone discussion in public record other than
identification
39. chafed to bare wires found in cargo door area
40. wiring defects found on Boeing airliners
41. water observed pouring out of forward cargo hold of a

Boeing airliner, cargo holds have bilges.

42. no soot on keel beam forward of the wing

43. compression fractures right side forward of the wing

44. tension fractures left side forward of the wing

45. seats in the rows in the explosive shatter zone above cargo door are in red zone and not sooted

46. aft cargo door sill sooted

47. many witnesses said they saw downward streak that was red-orange

48. NTSB official said possibility of forward door popping open was intriguing.

49. FAA official said, then recanted, that paint smears and structural deformation indicated outward explosion.

I again ask for a meeting with an NTSB representative to present my nine years of research for an impartial evaluation of the evidence derived from official governmental aviation agencies.

Sincerely,

John Barry Smith

From: John Barry Smith <barry@corazon.com>
Date: May 29, 1998 12:11:52 PM PDT
To: Tom_McSweeny@admin.tc.faa.gov
Subject: **Wiring/cargo door evidence from US government documents**

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Dear elected, appointed, and employed US government officials
involved with TWA 800 investigation, 29 May 1998

Gentleman, I respectfully address all as if this were a cyberspace meeting and it is my turn to speak. Most of us have exchanged letters, emails, conversations in person or telephone calls in the past. The case for wiring/cargo door opening in flight as an explanation for the TWA accident grows stronger every day with evidence such as this:

Quote from TWA 800 Public Docket 516A, Exhibit 9A Systems Group Chairman's Factual report of Investigation, Page 47, "A Boeing telefax of June 25, 1997, stated that: The Poly-X wire was used as general purpose wire on the RA164 (TWA 800) aircraft. Wire insulation known as Poly-X had three in-service problems:

-Abrasion of the insulation in bundles installed in high vibration areas.

(This problem was corrected by Boeing Service Bulletin No.

747-71-7105, Dated July 19, 1974)

-Random flaking of the topcoat.

-Insulation radial cracks in tight bend radii.

Radial cracking phenomenon of the Poly-X wire was mainly associated with mechanical stress. Bend radius is the largest contributor to mechanical stress in installed wire or cable.

Presence of moisture in conjunction with mechanical stress is also a contributor."

The Systems Exhibit 9A continues on same page 47, "Evidence of arcing or short circuiting was found in the fuselage of N93119, (TWA 800) in addition to what was found in the wiring from the raceway below the left cabin floor and near the forward wing spar.

The Systems Exhibit 9A continues, page 116:

"Some wires found in the section of W480 from forward of station 570 and identified as BMS13-42A had numerous cracks in the insulation. Most of the cracks in this bundle were found to expose the core conductor when examined by microscope. Only within five feet of the aft end of the W480 bundle from station 570-900 were insulation cracks found."

(Please note that BMS13-42A is Poly-X wiring. Cargo door location is FS 560-670 and cracked wires discovered are within that zone. Frayed wires in that area have shorted before and caused the forward cargo door to open in flight, NTSB AAR 92/02 UAL 811. Water has been seen pouring out of a forward cargo bay of a Boeing airliner. Water and leaking electricity make a powerful conductor. Both are known to exist in Boeing airliners.)

NTSB Exhibit 9C, Attachments to the Systems Group Factual

Report, page 44:

"Response: There was one reported wire insulation abrasion on the 747 in 1996. There operator reported that a burning smell was noted during cargo loading in the forward cargo compartment. Cargo loading system wiring was found damaged and shorted to ground below the cargo floor at station 650, below the aft right corner of a large ball mat. A wiring loom "p" clip was found broken enabling the wire to chafe against structure. A hole was found burned through the bottom angle of the cargo floor cross member, where the wiring clip attached, and charring was evident in the surrounding insulation blanket. Repairs were made."

Page 44: "Response: There were seven reported wiring fires on the 747 in 1996."

Page 45: "f. 747-200 reported on October 12, 1996
Wire bundle arcing and resultant fire at aft bulkhead of forward lower lobe cargo hold on a747-200 freighter. This occurred with the airplane on the ground, during post C-check functional test. Note: Portions of the damaged wire bundles were forwarded to Boeing for evaluation in determining the cause of the damage. The results of the analysis indicated the primary conductor(s) sustained mechanical or thermal damage prior to the application of electrical power."

Page 46, "g. 747-400 reported on November 1, 1997, (see response to question 1)

There was one reported wire insulation abrasion on the 747 in 1996. There operator reported that a burning smell was noted during cargo loading in the forward cargo compartment. Cargo loading system wiring was found damaged and shorted to ground below the cargo floor at station 650, below the aft right corner of

a large ball mat. A wiring loom "p" clip was found broken enabling the wire to chafe against structure. A hole was found burned through the bottom angle of the cargo floor cross member, where the wiring clip attached, and charring was evident in the surrounding insulation blanket. Repairs were made."

Page 57, Letter from Commander Naval Air Systems Command to National Electrical Manufacturers Association, 1 Oct 82, "As you know, the problems with poly-x wire are well known to headquarters and its use had been curtailed."

FAA Aircraft Certification Service Mission Statement:

<http://www.faa.gov/avr/air/hq/mission.htm>

"Aviation Safety Begins With Safe Aircraft

The Aircraft Certification Service is responsible for the safety of civil aircraft. The inherent safety of an aircraft is a function of its design integrity and its manufacturing quality. It is the mission of the Aircraft Certification Service to promote safety by:

Prescribing safety standards governing the design, production quality, and airworthiness of civil aeronautical products;

Administering design, production quality, and finished product certification programs in compliance with the prescribed safety standards;

Monitoring safety performance, and acting to provide continued operational safety of aircraft;

Working in partnership with aviation safety authorities of other countries to continuously improve the safety of the international air transportation system and achieve international harmonization of aircraft certification standards and practices.

Our program priorities are:

ÊÊÊÊÊFIRST: Continued operational safety including surveillance.

ÊÊÊÊSECOND: Safety standards, policies, and procedures.
ÊÊÊÊTHIRD: Type, production, and airworthiness
certification."

Text of 1 May 98 letter from Congressman Farr:

"Dear Mr. Smith:

Thank you for contacting me recently regarding your ongoing interest in the forward cargo door of TWA flight 800. I appreciated hearing from you.

I am, of course, glad to help, and am therefore in touch with the appropriate government agency on your behalf. I will write to you again as soon as a response is available, but please let me know if there is anything further that I can do for you in the interim.

Sincerely,

Sam Farr
Member of Congress

Text of 12/19/86 email Senator McCain:

Dear Mr. Smith,

Thank you again for contacting me with your concerns regarding the potential hazards involving Boeing 747s.

As you know, I have passed the information you sent to Chris Paul and he has informed me of your findings. I have since forwarded the material you sent to the Commerce, Science and Transportation Committee for their review.

Again, thank you for contacting me. I am always glad to have the opportunity to be of assistance.

Sincerely,
John McCain
U.S. Senator
JM/jes

Excerpt of 4 Mar 98 letter from Senator John McCain to me: "I have received your letter regarding the forward cargo door of TWA Flight 800, and your interest in meeting with someone at the National Transportation Safety Board (NTSB) relating your concerns.

I have contacted the NTSB on your behalf, about your concerns. I have asked for a prompt response to be sent directly to you."

FAA and NTSB and manufacturers are taking efforts to inspect fuel tank wiring on all airliners. Cargo door wiring on Boeing 747s should also be inspected. A wiring caused inadvertent opening of the forward cargo door of TWA 800 in flight should also be investigated.

It's prudent.

1. Check known faulty Poly X wiring in cargo door areas of early 747s for chafed to bare wires.
2. Figure out explanation of red paint smears, outward peeled skin, and petal bulge at aft midspan latch of forward cargo door of TWA 800.
3. Attempt to locate missing eighty percent of forward cargo door by either finding it in Orange Zone, Calverton hangar, or from the bottom of the ocean.

4. Meet face to face with a citizen, as the suggestion of Senator McCain, to discuss and consider real evidence as discovered in research of NTSB and FAA documents regarding wiring/cargo door explanation for TWA 800.

Following the example of Congressman Farr of open discussion of TWA 800 and the inclusion of relevant correspondence in letters, I have put all your correspondence to me on my web site www.corazon.com. All emails and scanned letters are seen at [<http://www.corazon.com/correspondence.html>](http://www.corazon.com/correspondence.html)

Democracy and the internet in action.

Regards,

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From: John Barry Smith <barry@corazon.com>
Date: June 5, 1998 9:41:40 AM PDT
To: Tom_McSweeny@admin.tc.faa.gov
Subject: **Inspect cargo door wiring too.**

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Dear Mr. McSweeney and Official Persons who feel responsibility
in explaining TWA 800, 5 June 1998

There are cracked wires to the bare conductors in the cargo door area of TWA 800 as described by NTSB Systems Exhibit 9A, page 116:

"Some wires found in the section of W480 from forward of station 570 and identified as BMS13-42A had numerous cracks in the insulation. Most of the cracks in this bundle were found to expose the core conductor when examined by microscope. Only within five feet of the aft end of the W480 bundle from station 570-900 were insulation cracks found." Page 47 also states, "Evidence of arcing or short circuiting was found in the fuselage of N93119, (TWA 800) in addition to what was found in the wiring from the raceway below the left cabin floor and near the forward wing spar.

That's a fact and NTSB told me so. To be prudent, determine if the forward cargo door unlatch motor power on wire is among those cracked to the bare wires located by NTSB in TWA 800. NTSB did it before with UAL 811 in AAR 92/02 where a bare chafed wire turned on the forward cargo door unlatch motor. There is a precedent of bare wires in that area causing a fatal accident in a high time Boeing 747. It would be prudent to rule out that event happening again by checking the bare wires discovered by NTSB in TWA 800 wreckage in cargo door area to see if it is the door unlatch motor wire.

True power always wants to know if it may be wrong and

immediately take steps to confirm or rebut. True power knows error is weakness and will immediately correct the error to become strong again. Fake power ignores any evidence of error. It is weak and will fail. NTSB discovers the cause and makes recommendations to FAA. FAA orders the manufacturer to fix the problem. The problem is old cracked wiring. I come to elected officials, NTSB, and FAA officials because only you have to power to persuade the manufacturer to replace defective, old, and chafed wiring if necessary and it is necessary.

Very many, very red, and very large red paint smears exist on TWA 800 above the forward cargo door area on top of normal white paint in between the passenger windows. That's a fact and NTSB showed it to me by presenting the TWA 800 reconstruction photograph in which the many, large, red paint smears are clearly evident. <<http://www.corazon.com/TWA800hullrupture.html>> A precedent has been set of paint transfer marks in that area by UAL 811 as described in NTSB AAR 90/01 and AAR 92/02. <<http://www.corazon.com/811page42paintondoor.html>>

It would be prudent to confirm or rule out the red paint smears indicating an open cargo door in flight or not. One way would be to examine the cargo door hinge for overtravel impression damage, another precedent set by UAL 811 in NTSB in AAR 92/02. <<http://www.corazon.com/811reportcontentpage.html>>

There is outward peeled skin high up on the right side of TWA 800, also more outward shattered skin on the belly, and most of all, there is outward peeled skin forward of the wing on the right side, centered around the outward petal shaped bulge at the aft midspan latch of the forward cargo door. That's a fact and I know that because NTSB presented the photograph of TWA 800

wreckage reconstruction and described the outward peeled skin in NTSB exhibits.

Main deck floor beams above the forward cargo hold were broken downward in UAL 811 during the explosive decompression. That also happened in TWA 800. An explanation was offered by Mr. James Wildey of NTSB: Docket No. SA-516, Exhibit No. 18A, Sequencing Study, page 20, "The initial opening of the fuselage lower lobe (e.g. LF6A) would have the expected result of rapid depressurization accompanied by collapse of the main deck floor for some distance forward of STA 1000. The red area recovery of interior components as far forward as STA 600 would not be inconsistent with this floor collapse and associated structural breakup."

The red paint smears and the outward peeled skin strongly indicate the forward cargo door opened in flight, an opinion shortly held by Mr. Fred Schalekamp of FAA:

30 Jan 1998 letter from Neil Schalekamp, FAA, to JBS: "The paint markings and structural deformation that you cite, do indicate an outward explosion, generally accepted to be caused by the explosion of the CWT."

That's a fact and NTSB and FAA told me so in a letter and shown in sooting diagrams in exhibits. To not see the very red, very many, and very large unusual paint smears, and to not see the outward, not inward, peeled skin is to defy reality. The red smears, downward floor beams, and the outward skin are there and strongly indicate cargo door opened in flight based on physics and precedent.

The forward cargo door did open in flight, but not by the

overpressure of a center tank explosion because the cargo door pieces were unsooted, just like the forward pieces of the center fuel tank.

What else could cause the forward cargo door to open inflight? There is a precedent, UAL 811, as described in NTSB AAR 90/01 and AAR 92/02 in which a high time Boeing 747 suffered a hull rupture in flight forward of the wing which left a sudden loud sound on the CVR and an abrupt power cut to the FDR, paint transfer marks in cargo door area, and outward peeled skin, all caused by chafed to bare wire conductor in the cargo door area. <<http://www.corazon.com/811reportcontentpage.html>>

TWA 800 had a hull rupture forward of the wing which left a sudden loud sound on the CVR and an abrupt power cut to the FDR, paint transfer marks in cargo door area, outward peeled skin, and chafed to bare wire conductor discovered in cargo door area.

That is enough of a match to justify inspection of cargo door wiring in early Boeing 747s irrespective of other corroborative evidence of faulty Poly-X wiring discovered in Boeing airliners under NTSB and FAA orders.

Bare shorted wires have also caused fires in forward cargo holds of Boeing 747s before.

NTSB Exhibit 9C, Attachments to the Systems Group Factual Report page 44, 45, 46. "1996, burning smell in forward cargo compartment, found damaged wiring shorted to ground, charring found.

B. Oct 12, 1996, Wire bundle arcing and resultant fire at aft bulkhead of forward lower lobe cargo hold on 747-200

freighter."

It would be prudent to inspect cargo door wiring in the forward cargo hold of early 747s since that wiring has been shown to be faulty in general, early Boeing airliner wiring has been shown to be faulty in particular, UAL 811, and faulty cargo door area wiring has shown up in the same area on a new fatal accident, TWA 800.

A solution to the mystery of the ignition source of the fireball and center tank fire may well be a fodded and on fire engine number 3 igniting disintegrating wing fuel tanks thousands of feet lower and seconds later than the initial event.

TWA 800 engine number three shows foreign object damage, fire, and uncontainment in the NTSB powerplant report and the structures report.

Exhibit 8A, page 11, paragraph 3, discussing results of engine 3 disassembly, "Of the 46 fan blades in the fan rotor, 21 blades with complete or partial airfoils and 6 root sections were recovered. All of the fan blades had sooting on the convex airfoil surfaces. Most of the full length airfoils were bent rearward and the tips outboard of the outer midspan shroud were bent forward slightly. About half of the fan blades had impact damage to the leading and trailing edges. Almost all of the impact damage to the airfoils could be matched to contact with the midspan shroud on an adjacent blade. One full length blade had four soft body impacts along the leading edge and a partial airfoil had a soft body impact, which had some streaking extending rearward."

Exhibit No. 7A, Structures Group Report, page 33: "5.1 Horizontal Stabilizer, "Some of the items found in the horizontal

stabilizer are sections of seat track, a stator blade from turbine section, and glitter." On 5.1.1 Right Horizontal Stabilizer, page 34, "An engine stator blade from turbine section penetrated the upper honeycomb surface near the outboard trailing edge.

A prudent action would be to rule in or rule out the precedent of UAL 811 applied to TWA 800. A risky action is to ignore many large red paint smears, downward broken floor beams, and much outward peeled skin and their clear implication of cargo door open in flight. The red paint smears will not fade away; they will always be many, large, and red in the photographs on the NTSB CD-ROM. The floorbeams will always be broken in Exhibit 18A. The outward peeled skin will always be shattered outward on the belly, the upper fuselage, and around the aft midspan latch of the forward cargo door in the photographs of TWA 800 on the NTSB CD-ROM. Engine number three will always be sooted, blades missing, and have soft body impacts as shown by NTSB Exhibit 8A.

A more prudent action is to ground all Boeing 747s with Poly-X wiring for total inspections and replacement of that wiring. A total wiring inspection casts the net wider to catch faulty wiring. By inspecting all the wiring to include the fuel tank wiring, the yaw damper wiring, and the known previously faulty cargo door power wiring, all wiring can all be cleared as intact and pose no danger of shorting on, as has happened before fatally.

I understand the difficulty and turmoil the grounding would cause. Boeing would have much work to rewire the planes if necessary. If not feasible, new airliners would have to be built and the grounded ones used for parts, similar to what the Navy has done with their Poly-X F-14 Tomcats.

Am I a traitor? Does my belief of a wiring cargo door fault for TWA 800 and other early 747s hurt my country? Specifically, the Northwest quadrant which has an economy derived from the design, manufacture, and selling of 747s.

Here's my answer to myself on that one. No, I am not a traitor, I am a patriot. Here's why.

Seattle is successful and must remain so. Seattle is successful because nearby is built successful airplanes. Successful airplanes are the best selling ones. The best selling ones are the most made ones. The most made ones are the ones that make the most money. The ones that make the most money are the ones that fly the most. The ones that fly the most are the safest ones. The safest airplane is the most successful airplane. Period.

So, to present an explanation for an unsafe event, the crash of TWA 800, an early Boeing 747, is a good thing to do, even if proven wrong later. The goal is to make safe airplanes which will fly the the most and be sold the most and be made the most, thereby keeping our country's economy thriving.

My personal goal is to prevent death by preventing airplane crashes by preventing hull ruptures in flight on early 747s by preventing cracked bare wires shorting on the door unlatch motor thereby allowing the aft midspan latch to rupture and allow the middle of the forward cargo door to burst open causing a large explosive decompression which allows the 300 knot slipstream to tear nose off. This inner goal was determined by the selfless action of my pilot who saved my life in a sudden night fiery fatal jet plane crash years ago and which I have never forgotten.

It is the duty of aviation professionals to strive to explain TWA

800. And yet, this loyal citizen is rebuffed when presenting to NTSB NTSB derived evidence of a supplemental explanation to TWA 800. Why is that?

If I can't have a real conversation with NTSB or FAA officials regarding TWA 800, here is an imaginary one that sums up the past two years.

JBS: "Hello, NTSB, I'm answering your plea for public assistance regarding the cause of TWA 800."

NTSB: "What do you want?"

"I believe the initial event is moisture meeting chafed to bare wire and shorting on cargo door motor to unlatch position causing rupture at aft midspan latch of forward cargo door in flight leading to thirty by forty foot hole of explosive decompression which allows 300 knot slipstream to tear nose off which leads to disintegrating aft fuselage, wings, and tail which ignite into fireball when fiery foddred engine number three meets vaporizing fuel thousands of feet lower and seconds later."

"No."

"There are many similarities to an event that happened before, UAL 811, and TWA 800."

"You're crazy. Who are you?"

"Commercial licensed pilot, instrument rated, 1000 PIC hours, Navy jet navigator, aircraft owner, FAA Part 135 certificate holder, avionics technician, and survivor of sudden night fiery fatal jet airplane crash talking about a sudden night fiery fatal jet

airplane crash."

"Go away."

"The evidence of red paint smears, outward peeled skin, and petal bulge at aft midspan latch support conclusion forward cargo door opened in flight, just like UAL 811."

"I'm ignoring you and will not respond to further comments."

"You are safety aviation officials who say you turn over every stone, who check out every explanation, who really want to know what happened to TWA 800, regardless of cause. Listen to me; talk to me."

"You are a wacky guy on the internet, you are bothering the real investigators and getting in the way, you have been told over and over again in great detail that you are wrong and we are right, you don't have your basic facts straight about the door, you should check with us before you say your nonsense to others, and you are a flake and we don't like you."

"Maybe, but so what? The messenger's style is independent of the truth of his content. Moisture and shorted wiring caused the crash of TWA 800. Why do you not ask questions to me, as real investigators do, as I ask you?"

"We don't ask questions of citizens that we don't already know the answers to, we just make statements such as this: No, you're wrong, you're crazy, go away, we will not respond, goodbye, and thank you your for your interest in aviation safety."

Below is real:

10 March 1998 letter of John B. Drake of NTSB to JBS :

"We consider our correspondence on this subject to be complete. Should you continue to reiterate your position on this issue in future correspondence, you should expect no further response from the Safety Board."

30 Jan 1998 letter of Neil Schalekamp of FAA to JBS :

"Please note that this office will no longer be responding to your further inquiries about these same concerns, including your February 6 and February 9 letters that I just received."

17 March 1998 letter of Jim Hall of NTSB to JBS :

"We do not believe a meeting is necessary to further discuss this issue."

Summarized conversation between me and ordinary citizens who visit my web site:

Visitor: "What does NTSB and FAA say when you tell them about wiring/cargo door explanation for TWA 800?"

JBS: "They write that all cargo doors were all latched, all locked, and all intact at water impact, they have told me that over and over again and they will not respond to any further inquiries from me."

"What do they say about the red paint smears?"

"They pretend they don't exist except one FAA official who did but changed his mind and now pretends they don't exist."

"What do they say about the outward peeled skin?"

"They say it was caused by inward water impact."

"What do they say about the petal outward bulge at aft midspan latch of forward cargo door?"

"They pretend it does not exist except one FAA official who did but changed his mind and now pretends it doesn't exist."

"What do they say about the missing manual locking handle, the two overpressure relief doors, the viewing ports, the torque tubes, the two pull-in hooks, the midspan latches, and the other eighty percent of forward cargo door skin?"

"They say they are unimportant."

"What do they say about the Orange Zone pieces, the possible mixup in cargo door sills, the unsooted pieces of center fuel tank, the thirty by forty foot shattered skin zone forward of the wing on the right side, the chafed to bare wire discovery in cargo door area, and the many significant matches to UAL 811?"

"Nothing. They say nothing. Well, actually they told me to go away, and stay away."

"Have you gone to your congressman?"

"Yes, Sam Farr, and he has asked many time to NTSB and FAA for information."

"What happened?"

"They wrote to him that the door was all latched, all locked, all intact at water impact, they have told me that many times, and

thanked him for his interest in aviation safety."

"Did you contact any other elected politician?"

"Yes, Senator John McCain, jet plane crash survivor and Chairman of the Committee that oversees NTSB."

"What happened?"

"He reviewed my data and submitted it to his committee for review. He asked me to wait until the hearings. He asked the NTSB to meet with me to related my concerns about the forward cargo door of TWA 800."

"What happened?"

"The Committee on Commerce, Science and Transportation still has the matter under review, I waited until the hearings, I went to the hearings. The suggested meeting by Senator McCain between NTSB officials and me was refused by Chairman Hall of NTSB saying there was sufficient evidence to rule out the cargo door opening in flight, he has told me that many times in great detail and a meeting was not necessary."

"Have you tried the press?"

"Yes, I've had several radio and TV interviews. Some get airplay and some don't."

"Have you tried Boeing?"

"Yes, Boeing and McDonnell Douglas both contacted before the merger. The two safety officers were polite and referred me to

NTSB. Boeing engineers referred me to the Public Relations office of Boeing. The Boeing Public Relations office referred me to the NTSB. NTSB told me to go away."

"Have you tried the internet?"

Yes, I have a 1200 page, 100 meg website which has been online since July, 1996 and visited about 70000 times, according to page counters."

"What are you doing now?"

"I'm continuing to write to appropriate officials presenting the evidence and trusting it will speak for itself. It's not going to go away."

"Have you tried calling them?"

"No, my wife and daughter were approached in my home by two armed federal agents within twenty four hours of me posting an email to Senator McCain about Air Force One crashing. Calling on the telephone out of the blue would be much too aggressive. Prior to the Secret Service interrogation, phone calls usually ended up with the official shouting and hanging up. So now I continue to write non-threatening, polite, full of facts letters and emails."

"Are you saying government public safety aviation officials in writing refuse to adequately respond to your request for a meeting to discuss facts, evidence, documents, photos, which clearly indicate a forward cargo door opening in flight on TWA 800?"

"Yes."

"They will not call you, write to you, or respond to polite letters with sources listed?"

"Nope."

"Are these the same guys that say safety is priority number one, they will turn over every stone, never give up to get a full explanation, and respond to every public inquiry?"

"Yup."

"Who are you? A wacky guy on the 'net?"

"Maybe, although I use government AARs for sources, and I'm also a survivor of a sudden night fiery fatal jet airplane crash, a commercial licensed pilot, instrument rated, FAA Part 135 certificate holder, light aircraft owner, jet carrier navigator, avionics technician including radar operator, and a retired military officer in a converted garage with a computer and a phone line."

"And you've tried for almost two years to meet face to face with the public officials involved with TWA 800?"

"Yes."

What happened?

"Nothing yet. But I'm still trying. It's only been two years for TWA 800. The investigation is open and active. The evidence is not changing or going away."

And I am still trying:

Real facts presented by NTSB about TWA 800 in exhibits, photographs, text, drawings, and testimony:

1. right horizontal stab has red paint smear
2. stator blade in right horizontal stab behind engine number 3
3. inward crush top of cargo door
4. top of cargo door attached to hinge
5. petal shape of rupture area around aft midspan latch
6. missing pieces of forward cargo door include locking handle, latching pins, overpressure relief doors, midspan latches
7. rectangle visible of explosive decompression zone of outward peeled skin on right side forward of the wing on right side
8. downward movement of floor beams near cargo door
9. hoop stresses found
10. CVR sudden loud sound
11. FDR abrupt power cut
12. missing turbine blades in engine number 3.
13. soft body impacts on blades in engine number 3.
14. outward peeled skin near top of nose, under belly, and in cargo door area.
15. red paint smears above cargo door on white paint
16. soot on most blades of engine 3.
17. starboard side more damaged than port side
18. intact R2 door near shattered cargo door.
19. poly x is known to be susceptible to chafing and present
20. section 41 is known to be weak
21. history of cargo door openings in past in various airliners
22. EPR problems on aircraft before or during fatal flight.
23. fires in forward cargo hold in the past on Boeing 747s.
24. vertical tears in fuselage skin forward of the wing on the right

side

25. singe marks on right side of fuselage show burnt skin, then abruptly at tear line there are no singe marks
26. red paint rubbed off revealing white paint underneath on skin above cargo door area
27. first pieces off plane came from forward cargo hold just forward of the wing
28. at least nine missing never recovered bodies, just fragments
29. initially thought to be a bomb
30. wreckage debris shows cargo door shattered in many pieces
31. aft portion of forward door which includes aft midspan latch and locking handle missing from recovery effort
32. no soot on maintenance hatch
33. no soot on front spar of center wing tank
34. no burned bodies forward of the wing and very few burned at all
35. aft cargo door sill, latches, and locks recovered
36. forward cargo door sill, latches, and locks not recorded in data base
37. no orange zone pieces recorded in database
38. no orange zone discussion in public record other than identification
39. chafed to bare wires found in cargo door area
40. wiring defects found on Boeing airliners
41. water observed pouring out of forward cargo hold of a Boeing airliner, cargo holds have bilges.
42. no soot on keel beam forward of the wing
43. compression fractures right side forward of the wing
44. tension fractures left side forward of the wing
45. seats in the rows in the explosive shatter zone above cargo door are in red zone and not sooted
46. aft cargo door sill is sooted
47. many witnesses said they saw downward streak that was red-

orange

48. NTSB official said possibility of forward door popping open was intriguing.

49. FAA official said, then recanted, that paint smears and structural deformation indicated outward explosion.

50. initial event time was 20:31:12 at 13700 on 17 July 1996 eight miles off coast of Long Island.

Reasonable conclusions derived from facts above:

1. water in forward cargo bay.
2. chafed bare wire touched by water.
3. electrical short occurs.
4. forward door motor turns on to unlatch position.
5. aft midspan latch of forward cargo door partially unlatches.
6. pressurized hull ruptures at aft midspan latch.
7. cargo door tears into pieces, some pieces stay with nose, some don't.
8. shiny metal pieces spin away reflecting evening sunlight and perceived as red-orange streak to observers far away.
9. explosive decompression occurs shattering cargo door area forward of the wing on right side exposing twenty foot by forty foot hole in nose producing sudden loud sound on CVR.
10. 300 knots slipstream tears weakened nose off.
11. ejected debris is ingested by starboard engines which catch fire.
12. wing and wing fuel tanks; engines, tail, and fuselage fall and disintegrate on way down.
13. fiery starboard engine ignites fuel vapor clouds from disintegrating tanks, including center tank.
14. fireball observed on the ground.
15. water impact of wreckage, cargo bay material first to hit water.

I may not be alone: "NTSB investigators have suggested unofficially that the streaks the pilots saw could have been light reflections from the skin of the aircraft, tongues of flame from the airliner or the forward door of the aircraft popping open, a possibility that still intrigues investigators, the second official said." AW&ST 3/10/97

Regarding the Aviation Week and Space Technology article quoted above, the following is supplied: <<http://www.corazon.com/800avweekintrigue.html>>

Monica Warnock
Washington Bureau
Aviation Week & Space Technology

Dear Ms. Monica Warnock,

21 May 1998

You wrote to me:> You must remove these
articles and any other Aviation Week copyrighted material from
your
website immediately, or we will consider legal action.

I replied>Consider it done. And not because you threatened me,
but because you may be right."

Ms. Warnock, I now believe you to be wrong.

I'm putting the 10 March 97 Aviation Week and Space
Technology article in dispute back up on my web site at
www.corazon.com at one minute after midnight on 1 June 1998.

Here's why: The content is everything and the content of the
article is very, very important. I agree with the content. AvWeek

agrees with content. The public officials quoted in your article agree with the content. The content quotes a public NTSB official who says that the cause of TWA 800 may have been forward door popping open. It also said the streak seen before TWA 800 crash may have been reflection off the skin of aircraft. I agree with that. It is very important. Let us call it the door pop streak article.

Ms. Warnock, you have done your job well by searching the web for Avweek articles. You found one. You then followed orders and directed it be removed. It was removed. The problem is now above your level of authority. So I direct my comments to your boss: Mary Francis Koerner, the Manager of Bureaus.

Will you please see that this letter goes to her?

Dear Ms. Koerner, I am told several things:

1. Get the door pop streak article off my web site.
2. I should ask permission to put AvWeek articles on web site.
3. Permission will be denied.

I asked permission. It was denied. You were right.

You have done all you can do. The problem is now above your level of authority. I assume you would refer me to 'The Lawyers.' I direct my statements to the lawyers.

Will you please see that this letter goes to them?

Dear AvWeek lawyers:

Ah, copyright, don't you love it?

My name is John Barry Smith. I have a 1200 page, 100 meg website at www.corazon.com mainly devoted to high time Boeing 747 accidents in which the hull ruptures in flight forward of the wing. It contains mostly government scanned in aviation accident reports, AARs, and occasionally copyrighted material from media, such as yours.

Please note, let us stipulate:

1. My site is non profit. I have not made a penny on anything related to that website. In fact, much of my money has gone out, nothing has come in, a problem as my wife will attest.
2. It is research oriented with airplane crash related comments, investigations, reports, pictures, and text.
3. I give full and clear credit to the sources I quote. AvWeek was clearly stated as the author of the door pop streak 10 Mar 97 article in question. In fact, that is very important, that's why I quote clearly and give credit to Aviation Week by scanning in the entire article instead of paraphrasing, which would be quicker to download but not have the authority of the best aviation magazine on the planet, Aviation Week and Space Technology. And I omitted the advertising on the pages, too.

Now for argument:

1. I stole nothing from you.
2. It's fair use.
3. I can publish that article without your permission if certain conditions are met, and are: Non profit, small parts used, and credit given.

"Fair use and implied licenses.

Fair use is a legal license to use others' work, whether they approve or not. It constitutes one of the most important, and least clear cut, limits to copyright. The basic problem is that words like "fair" or "reasonable" cannot be defined with the precision non-lawyers (or many law students) would like. Until 20 years ago, fair use did not appear in U.S. legislation, but it now occupies about half of the copyright statute. In the U.S., partial or limited reproduction of another's work may be permitted under this doctrine.

On the one hand, fair use offers an especially liberal defense to uses that advance public interests such as education or scholarship. On the other hand, it is unlikely to be available if one fails to credit the original artist or author. It is not apt to be available to those who profit or interfere with original artists' or authors' ability to derive income from their works."

" 1998 Franklin Pierce Law Center. All rights reserved." (I hope I have fair use to quote the above.)

I believe I advance the public interest in aviation safety, I credit the original speaker, the reporter, and the magazine, and I do not profit from it. I have fair use.

Conclusion: It will take a Judge to order me to remove the 10 March 97 AvWeek article from my website after it is put back up on 1 June 1998 or to permit me to continue to post it.

So, Lawyers, the problem is above your level of authority. I turn my attention to the Managing Editor:

Will you please see that this letter goes to him?

Dear Managing Editor,

What's the beef? You and your reporter, David Fulghum, have done a fine piece of work. You have pinpointed the cause of a mystery crash now under current investigation, TWA 800. It was the door popping open in flight. The NTSB official you quoted was correct. The streak was the skin spinning away reflecting evening red orange sunlight to observers below. The official was correct and he was quoted correctly by your aviation reporter. The implications of the truth you printed are profound. The cause now leads to chafed wiring shorting on cargo door unlatch motor and allowing rupture at aft midspan latch of forward cargo door which opened in flight. Exactly as has happened before with UAL 811 as described in NTSB AAR 92/02. The 300 knot slipstream tore the nose off TWA 800 because the explosive decompression shatter zone was much bigger on TWA 800 than on UAL 811, as shown by NTSB reconstruction photo of TWA 800 wreckage.

I encourage you to do a follow up story on the wiring/cargo door explanation as described on the website in question, www.corazon.com. Mr. Fulghum and Mr. McKenna are familiar with the details of TWA 800 and wiring cargo door explanation.

Attached:

1. Correspondence between AvWeek Ms. Warnock and me.
2. Three .jpgs of the images published on website of 10 March door pop streak article.
3. Recent email to Government officials regarding this matter. Please note accurate numbers and sources given.

So, I must publish your copyrighted material, the 10 March 97 article on my website at URL <http://www.corazon.com/800avweekintrigue.html> on June 1, 1998.

I'm at email barry@corazon.com or 408 659 3552 or 551 Country Club Drive, Carmel Valley, CA 93924.

I encourage discussion regarding this matter. It's a hot story even though almost two years old. Wiring is the main culprit, not the door, not the center tank. NSTB is in the right church but the wrong pew. Wiring is the problem and it's in places other than the fuel tank tubes. It's in the cargo door unlatching motor circuits.

Cheers,
John Barry Smith

From: monica_warnock@mcgraw-hill.com
Date: Thu, 14 May 98 10:24:37 -0500
To: <barry@corazon.com>
Subject: Aviation Week
Mime-Version: 1.0

To: barry@corazon.com

Dear Sir,

Your website "<http://www.corazon.com/800avweekintrigue.html>" contains several scanned-in pictures of the Aviation Week & Space Technology article "ANG Pilot: TWA Hit By Object," March 10, 1997. Our records do not show that you requested permission to use these articles

on
your website.

Aviation Week & Space Technology is covered by copyright law which states that permission must be granted before our material is used.

Your website is in violation of this law. You must remove these articles and any other Aviation Week copyrighted material from your website immediately, or we will consider legal action.

Sincerely,
Monica Warnock
Washington Bureau
Aviation Week & Space Technology
monica_warnock@mcgraw-hill.com
(202)383-2314

To: monica_warnock@mcgraw-hill.com
From: John Barry Smith <barry@corazon.com>
Subject: Request permission to present article on website.
Cc:
Bcc:
X-Attachments:

To: barry@corazon.com

Dear Sir,

Your website "<http://www.corazon.com/800avweekintrigue.html>" contains

several scanned-in pictures of the Aviation Week & Space Technology article "ANG Pilot: TWA Hit By Object," March 10, 1997. Our records do not show that you requested permission to use these articles on your website.

Dear Madam, 14 May 1998

A thousand pardons. I immediately request permission to reprint Aviation Week & Space Technology article "ANG Pilot: TWA Hit By Object," March 10, 1997 on my website, www.corazon.com. (Corazon is my wife's name.)

The reason I scanned in exact image instead of paraphrasing text was to be precise and show source, very important for a research paper.

Should my request be denied, I shall of course, immediately comply with your request and remove the article from my web site.

AWST is a fine magazine and one which I have read diligently for over thirty years. I have watched AWST's web site mature as time goes on. <http://awgnet.com/awgnews.htm> is on my bookmarks list and I check it first thing every morning. I'm in your database of subscribers. Keep up the good work!

Regarding this life and death matter of a sudden night fiery fatal jet plane crash about which I have published a 1200 page website presenting my shorted wiring opening forward cargo door in flight explanation to the general public in a non profit effort:

1. You surely understand I can not alter my website just on an unsolicited email out of the blue from:

Monica Warnock
Washington Bureau
Aviation Week & Space Technology
monica_warnock@mcgraw-hill.com
(202)383-2314

The absence of title indicates your request may be personal in nature and not official. Please confirm your official title which corresponds to your request that I delete an article from AWST from my site. You may be spoofing me and my asking for credentials is prudent and an established protocol.

2. Your response indicates an interest in the subject of TWA 800. Could you refer a reporter to me so I can present my wiring/cargo door explanation to him/her? I would appreciate the opinion of an aviation professional regarding my nine years of amateur research into hull ruptures of hour high time Boeing 747s. Your reporter, David Fuhlgum, in the referenced article, was able to elicit important material from NTSB officials regarding TWA 800; the forward door may have popped open in flight, and the streak may have been pieces of the aircraft reflecting evening sun. I am able to amplify those observations by an anonymous NTSB 'second official' using NTSB documents and photographs. It's a good story and one worthy of AWST's interest. FAA, NSTB, and Boeing are all saying wiring in older Boeing airliners is fraying and shorting causing problems, and so am I, long before the officials came to the realization.

3. >or we will consider legal action.

Why, O why did you threaten me? Your first contact, out of the blue, and it contains a threat of 'legal action'. What does that mean? I don't think it means a good thing. It just sets a wrong tone. Is politeness gone from even presentations about a plane crash?

4. >Your website is in violation of this law.

Whoa! You are calling me a criminal? Just like that? I'm breaking the law? I'm a lawbreaker? This is very disturbing. Maybe that's the way AWST works with the big boys who only respond to threats, not to polite requests with explanation attached. I'm not a big boy. I'm a retired military officer working out of a converted garage in California. I don't like anybody telling me I'm breaking the law unless it's a policeman, judge, or jury. And I still don't like it, but I obey. I really can't tell my friends that I changed my cherished web site because of a strange unauthenticated email from some babe named Monica at McGraw-Hill, now can I? I mean, am I a man or a mouse?

See, a threat always turns a pleasant conversation into stressful one. Squeek, squeek.

To review:

1. I respectfully request permission to display scanned in images of Aviation Week & Space Technology article "ANG Pilot: TWA Hit By Object," March 10, 1997 on my personal website, www.corazon.com.

2. Please to show credentials, madam.

4. Refer reporter to me regarding a subject that you feel strongly enough to want to affect with correspondence, TWA 800.

5. Keep up the good work covering aviation subjects around the world.

Cheers,

John Barry Smith
551 Country Club Drive,
Carmel Valley, CA 93924
408 659 3552
barry@corazon.com
www.corazon.com

From: monica_warnock@mcgraw-hill.com
Date: Thu, 14 May 98 13:48:41 -0500
To: <barry@corazon.com>
Subject: Re: Request permission to present article on website.
Mime-Version: 1.0

Dear Mr. Barry,

I am an editorial assistant in the Washington Bureau of Aviation Week & Space Technology. I work for Mary Francis Koerner. She is the Manager of Bureaus and she is the official contact for Reprints & Permission. We will periodically search the web for Aviation Week on outside websites and that is what brought me to your site.

Unfortunately, at present, Aviation Week & Space Technology does not

allow its material to be reprinted on any websites other than our own.

We appreciate your interest in Aviation Week & Space Technology;

however, we must ask that you remove the article from your website, as

you have indicated you are willing to do.

My interest in this regard is not related to TWA800 but protecting the

magazine in general. Many people are not aware of the rules regarding

copyright on the internet. You may reference the section "Photocopy

and Rights & Permission" on the Contact Us page of Aviation Week if

you have any future requests for permission.

James McKenna would be the best editor to send your correspondence to

regarding TWA 800. He is located in the Washington bureau: 1200 G

Street, NW Suite 922, Washington, DC 20005. (202) 383-2332.

I will mail you a hard copy of this letter on Aviation Week & Space

Technology letterhead to satisfy any concerns you might have about my

identity. Thank you for your understanding.

Monica Warnock
Editorial Assistant, Washington Bureau
Aviation Week & Space Technology

To: monica_warnock@mcgraw-hill.com
From: John Barry Smith <barry@corazon.com>
Subject: Re: Request permission to present article on website.
Cc:
Bcc:
X-Attachments:

Dear Mr. Barry,

I am an editorial assistant in the Washington Bureau of
Aviation Week
& Space Technology. I work for Mary Francis Koerner. She is
the
Manager of Bureaus and she is the official contact for Reprints
&
Permission. We will periodically search the web for Aviation
Week on
outside websites and that is what brought me to your site.

Dear Ms. Monica,

Thank you for your prompt reply. I am saddened by the denial to
present the AWST article on my web site. I shall search through
it and delete it. Do I need permission to post your email in its
place to explain why the article was deleted? I should explain
why the article was removed to squelch any conspiracy coverup
nonsense that pervades this TWA 800 investigation.

Unfortunately, at present, Aviation Week & Space Technology does not allow its material to be reprinted on any websites other than our own.

So sad.

We appreciate your interest in Aviation Week & Space Technology; however, we must ask that you remove the article from your website, as you have indicated you are willing to do.

As soon as I am finished with this upcoming TV interview about wiring/cargo door explanation, I will. The TV station is KOMO-TV, Channel 4, ABC, in Seattle Washington and the arrive within the hour. I'm preparing for it so am unable now to find page, delete, change links, upload it to server right now. But how long to I have? Is 48 hours OK?

My interest in this regard is not related to TWA800 but protecting the magazine in general. Many people are not aware of the rules regarding copyright on the internet. You may reference the section "Photocopy and Rights & Permission" on the Contact Us page of Aviation Week if you have any future requests for permission.

Protecting the magazine? Well, OK, if you say so. I feel that quoting AWST in a non profit website about aviation safety helps AWST, but what do I know.

James McKenna would be the best editor to send your correspondence to regarding TWA 800. He is located in the Washington bureau: 1200 G Street, NW Suite 922, Washington, DC 20005. (202) 383-2332.

Thank you very much, ma'm, and I shall. I shall say you referred me, is that OK?

I will mail you a hard copy of this letter on Aviation Week & Space Technology letterhead to satisfy any concerns you might have about my identity. Thank you for your understanding.

Fine, can I put that on my website?

Let me get back to you on this. I will delete offending article and then send you URL of the new page so you can confirm I have cleansed the dirty deed.

Cheers,
John Barry Smith

Monica Warnock
Editorial Assistant, Washington Bureau
Aviation Week & Space Technology

From: monica_warnock@mcgraw-hill.com
Date: Thu, 14 May 98 14:47:54 -0500
To: <barry@corazon.com>

Subject: Re[2]: Request permission to present article on website.
Mime-Version: 1.0

Mr. Smith,

I will mail your letter today. When it arrives, you are welcome to

place it on your website. We understand that you are busy right now-

as long you are able to delete the pages by next Friday, that's fine

with us. The complete URL is

<<http://www.corazon.com/800avweekintrigue.html>>

If you do contact Mr. McKenna, you may tell him I referred you. Again,

thank you for your interest in Aviation Week.

Monica Warnock

Editorial Assistant, Washington Bureau

Aviation Week & Space Technology

To: monica_warnock@mcgraw-hill.com

From: John Barry Smith <barry@corazon.com>

Subject: Done

Cc:

Bcc:

X-Attachments:

Dear Ms. Warnock,

You must remove these

articles and any other Aviation Week copyrighted material from your

website immediately, or we will consider legal action.

Consider it done. And not because you threatened me, but because you may be right.

<http://www.corazon.com/800avweekintrigue.html>

is the URL which now has deleted article. Completed 6:57PM 14 May 97, nine hours after your request. The TV interview went swimmingly. In fact, the interviewer from KOMO TV ABC Seattle, asked that I send him an email of the article in question. He was interested to hear about your request.

I just want you to know that you have made an old man very very sad. I shall have to research the web, as is my wont, to find out for sure if the copyright laws exist to keep non profit websites from fairly using one article of a magazine to support an aviation safety hypothesis. I make no money from this site, on the contrary, it costs me money to keep it up. The site is 1200 pages deep with on one page assigned to article. The goal of the website is aviation safety, a common goal with Aviation Week. The officials quoted on the article are public officials whose comments are public.

It seems to me that permission should not be necessary for me to put your article on my website as long as I give credit to the author and make no money from it.

It seems to me that when permission was requested to put the article on my website, permission should have been granted.

You said 'protect your magazine,' as motive for requesting I delete the article. Protection from whom? Me? Aviation Week

needs protection from me? I am a retired guy working out of a converted garage with a computer and a modem. You have nothing to fear from me, we are on the same side, aviation safety.

Regardless, the excellent article by David Fulghum in the March 10, 1997 issue has been deleted at your request. Should it become apparent that I do have the fair right to use your article under conditions which I fulfill, then, pop! up it goes again. I shall let you know in advance so you may attempt to dissuade me if you wish. It just seems that a guy ought to be able to pull out old magazine articles to quote from when he's trying to persuade visitors of an aviation safety point. In case I'm wrong, and I'm never wrong, I have erred on the side of safety and complied with your request.

Cheers,
John Barry Smith

Mr. Smith,

I will mail your letter today. When it arrives, you are welcome to place it on your website. We understand that you are busy right now-

as long you are able to delete the pages by next Friday, that's fine

with us. The complete URL is

<<http://www.corazon.com/800avweekintrigue.html>>

If you do contact Mr. McKenna, you may tell him I referred you. Again,

thank you for your interest in Aviation Week.

Monica Warnock

Editorial Assistant, Washington Bureau
Aviation Week & Space Technology

DAVID A. FULGHUM/WASHINGTON

Two New York Air National Guard pilots, with the best view of the crash of TWA Flight 800 last July, are disagreeing about what they saw immediately before destruction of the Boeing 747-131 jetliner.

One believes the airliner was struck by a fast-moving object coming from the east, while the other saw only a fiery trail from the west.

However, both believe a violent explosion ripped the aircraft apart, propelling some of its passengers high enough that they did not hit the water's surface until 3-4 min. after the initial explosion.

Maj. Frederick C. Meyer, pilot of an HH-60 helicopter from the ANG's 106th Rescue Wing, has just been freed from an FBI gag order preventing him from giving interviews about the 1996 disaster off Long Island, N.Y. The copilot, Capt. Christian Baur, remains under FBI restrictions not to speak about the accident. But two officials familiar with his testimony told Aviation Week & Space Technology in detail what he told investigators.

In the days immediately after the accident, before being ordered not to speak, Meyer discussed his initial impressions with news media (AW&ST July 29, 1996, p. 32). Last week, he chose Aviation Week as the first news organization to hear a detailed account of his recollections and his testimony to federal investigators.

Meyer and Baur were in one of the wing's two aircraft operating north of the crash site. The helicopter was operating over Long Island about 12 mi. north of the TWA crash site. Baur, the copilot, was at the controls practicing instrument approaches. The crew was awaiting darkness so they could begin training with night vision goggles.

The key point on which the two pilots disagree is whether a streak of light appeared from the opposite direction of the flight of TWA 800 (which was flying from west to east after takeoff from Kennedy Airport), a possible indication of an intercepting missile or some other object.

Meyer's attention was first called to the area of the sky where the accident occurred "by a streak of light moving from my right (west) to my left (east)," the same direction as the TWA flight, he said.

Baur's account differs on this point. According to the two officials who have heard both pilots' accounts, Baur, on the left side of the cockpit, saw a streak moving from left to right toward the approaching TWA aircraft before the initial explosion.

"Almost due south [of the helicopter], there was a hard white light, like burning pyrotechnics, in level flight," Baur told investigators from the National Transportation Safety Board, FBI and a Federal anti-terrorist task force. "I was trying to figure out what it was. It was the wrong color for flares. It struck an object coming from the right and made it explode."

Baur's first impression was that there had been a midair collision, possibly between two light aircraft that tow banners along the beach.

"They had witnessed these aircraft come very close to each other at that time of day, and that's what they assumed," the second official said.

NTSB investigators have suggested unofficially that the streaks the pilots saw could have been light reflections from the skin of the aircraft, tongues of flame from the airliner or the forward door of the aircraft

popping open,
a possibility that still intrigues investigators, the second official said.

Meyer could not actually see the aircraft, but only the streak, and he admits that Baur, a younger man, has better eyesight. Moreover, Meyer adds, "Whatever Chris saw on the left side I didn't see because he blocked my view." Baur disputes this, saying that the explosions and crash were virtually dead ahead of the aircraft.

The helicopter was executing a missed approach and was about halfway down Runway 24 at the Francis S. Gabreski International Airport at Westhampton Beach, N.Y. It had started a climbing left turn to the south when the accident occurred. The Sun had not yet set and the sky was still bright.

According to Meyer, the streak was about 15-20 deg. above his line of sight and perhaps 15 deg. left of the aircraft's centerline.

"I don't know if it was a missile that struck the airliner," Meyer said.

"Nothing at that moment said 'missile' to me. I spent a number of years in Vietnam and had seen missiles fired, some of them at me. But, that was

25-year-old missile technology, which left smoke trails. I understand today that they are made with smokeless rocket fuel and don't leave trails. What I saw was a streak of light, not a smoke trail."

The streak of light that Meyer saw made a very shallow, gradually descending arc. He points out that he never saw the actual airframe of the TWA 747 within the streak or subsequent explosions or smoke trails. It was virtually identical to the trajectory of a meteor, with only a slight curve. But unlike a meteor, the streak was red-orange in color, he said.

Meyer observed the descending streak for 3-5 sec. Then there was what Meyer describes as a hard, very sudden, yellowish-white explosion that looked identical to the detonation of an anti-aircraft shell. He did not suggest an anti-aircraft weapon was fired at TWA Flight 800, however.

"It left a cloud of smoke just like a flak explosion does," Meyer said. "One to two seconds later, there was a second, hard explosion almost pure white in color. The position of that explosion appeared to be slightly below and behind where one would have anticipated the streak of light to have gone. The trajectory at that point appeared to be slightly bent down and

slowed."

A new detail in Meyer's story was that almost immediately there was a third explosion and fireball. Meyer doesn't remember if there was an explosion and fireball or if the third explosion turned into the fireball.

"That was a soft explosion unlike the first two," Meyer said. "It began as a tiny point and it grew very rapidly into a huge fireball four times the diameter of the Sun. I was dumbstruck."

Baur also saw three explosions. But he contends that they started from left (east) and went to right (west). He said the explosions created a "huge waterfall of flame that cascaded down," the first official said. "The column of flame was being whipped around violently. First it was tumbling, and then it refined itself into a spiral. The explosions were all before the cascade of flame began."

In the helicopter, Baur spoke first, asking if it was pyrotechnics. ANG operations that night were to have included flares dropped by a HC-130 transport aircraft. The crew then called the Gabreski tower.

"We said we'd observed a fireball south of the field and we would

like
clearance to the beach to investigate," Meyer said. Baur actually
made the
call and reported a possible midair collision, the second official
involved
in the investigation said.

The crash time has been variously reported as being from 8:31 to
8:45 p.m.,
Meyer said. He believes the earlier time is more likely to be
correct
although he can't be sure.

Baur continued to fly the helicopter during the search while
Meyer functioned
as copilot and primary communicator. As they approached the
crash site, after
about 4 min. of flight, debris was still falling so they slowed to
avoid
being hit.

"As they got closer, within two or three miles, Baur could see the
aircraft
body, not tumbling, but in a vortex almost like inside a tornado,"
the second
official said.

Meyer made another revelation that was the result of long
reflection after
the accident.

"I was looking ahead . . . as we approached the crash site,"
Meyer said. "I

saw some debris at 1,200-1,300 ft. falling at terminal velocity and fuselage fragments tumbling at 40-50 mi. per hour. The things falling at high speed were bodies still strapped in their seats. That is logically inconsistent if they came from the same explosion at the same time. On reflection, I have concluded that the bodies must have been blown upward before they came down. That indicates a violent explosion."

On this point, the two pilots' accounts agree, the officials said.

"Debris was falling like snow," according to Baur's testimony. "Among the particulate there was metal and paper, some of it glowing. Through all of that, things would come racing through -- two or three high-speed objects like sacks of potatoes. I believed them to be bodies that had been blown upward."

The pilots' opinion differ from the conclusion of inspectors that all the passengers were in the fuselage when it ripped apart from aerodynamic forces.

In an attempt to debunk the most egregious coverup and conspiracy theories, Meyer and other ANG officials remain adamant that their unit was not part of any larger, undisclosed, multiservice operation. Operations the

night of the
crash were standard training flights to maintain currency with
night vision
goggles, rescue operations and in-air refueling.

The HH-60 flight was to be of about two hours' duration and
would not extend
more than 2 mi. off the Long Island southern coast. The HC-130
would drop
flares, rafts and a para-rescueman and later refuel the helicopter
in a
communications-out, lights-out operation.

"No other people of other services were on the base at the time,"
Meyer said.

Nor were there indications of the operations of drone aircraft,
another
theory that has surfaced as the possible cause of the crash. "No,
there would
have been some kind of notice."

AW&ST 3/10/97

Until the streak is adequately explained, the missile explanation
will always be possible. I say missile explanation will always be
could be, but wasn't. The evidence refutes every missile
explanation suggested event. Likewise for meteor and bomb
explanations, they will always be could have been, but weren't.

The center tank did catch fire and there was a fireball, so center
tank explanation will always be could have been and was, the
only issue is when.

The wiring/ cargo door explanation explains the streak, refutes the bomb and meteor, and supplements the center tank explanation.

The wiring/cargo door explanation for TWA 800 is the more correct, more complete explanation.

I urge that Boeing 747s with Poly-X wiring be grounded until wiring is checked in cargo door areas known to have been faulty in the past.

I again request to meet with NTSB officials to present my wiring/ cargo door explanation.

Sincerely,

John Barry Smith
551 Country Club Drive
Carmel Valley, CA 93924
408 659 3552
barry@corazon.com
www.corazon.com
Citizen: USA
Major: US Army Retired
Pilot: Commercial, instrument rated, FAA Part 135 certificate.
Navigator: RA5C Vigilante
Owner: Mooney M20C
Survivor: Sudden night fiery fatal jet plane crash.

From: John Barry Smith <barry@corazon.com>

Date: June 5, 1998 8:38:01 PM PDT
To: Tom.McSweeney@faa.dot.gov
Subject: **Inspect cargo door wiring too**

Sam Farr
Member of Congress
17th District, California
House of Representatives
Congress of the United States
1117 Longworth Bldg
Washington, DC 20515-2861

John McCain III
Member of Congress
Chairman, Committee on Commerce, Science, and
Transportation
United States Senate
241 Russell Senate Office Bldg
Washington, DC 20510-0303

James Hall
Chairman,
National Transportation Safety Board
490 L'Enfant Plaza East, SW.
Washington, DC 20594

Robert Francis II
Vice Chairman
National Transportation Safety Board
490 L'Enfant Plaza East, SW.
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Bernard Loeb,
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Thomas E. Haueter
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Bob Breneman,
Aerospace Engineer,
Federal Aviation Administration
Transport Airplane Directorate, ANM-100
1601 Lind Ave. S.W.
Renton, WA 98055-4056

Dear Mr. McSweeny and Official Persons who feel responsibility
in
explaining TWA 800, 5 June 1998

There are cracked wires to the bare conductors in the cargo door
area of
TWA 800 as described by NTSB Systems Exhibit 9A, page 116:
"Some wires found in the section of W480 from forward of
station 570 and
identified as BMS13-42A had numerous cracks in the insulation.
Most of the
cracks in this bundle were found to expose the core conductor
when examined
by microscope. Only within five feet of the aft end of the W480
bundle from
station 570-900 were insulation cracks found." Page 47 also
states,
"Evidence of arcing or short circuiting was found in the fuselage
of
N93119, (TWA 800) in addition to what was found in the wiring

from the
raceway below the left cabin floor and near the forward wing
spar.

That's a fact and NTSB told me so. To be prudent, determine if
the forward
cargo door unlatch motor power on wire is among those cracked
to the bare
wires located by NTSB in TWA 800. NTSB did it before with
UAL 811 in AAR
92/02 where a bare chafed wire turned on the forward cargo door
unlatch
motor. There is a precedent of bare wires in that area causing a
fatal
accident in a high time Boeing 747. It would be prudent to rule
out that
event happening again by checking the bare wires discovered by
NTSB in TWA
800 wreckage in cargo door area to see if it is the door unlatch
motor wire.

True power always wants to know if it may be wrong and
immediately take
steps to confirm or rebut. True power knows error is weakness
and will
immediately correct the error to become strong again. Fake
power ignores
any evidence of error. It is weak and will fail. NTSB discovers
the cause
and makes recommendations to FAA. FAA orders the
manufacturer to fix the
problem. The problem is old cracked wiring. I come to elected
officials,

NTSB, and FAA officials because only you have to power to persuade the manufacturer to replace defective, old, and chafed wiring if necessary and it is necessary.

Very many, very red, and very large red paint smears exist on TWA 800 above the forward cargo door area on top of normal white paint in between the passenger windows. That's a fact and NTSB showed it to me by presenting the TWA 800 reconstruction photograph in which the many, large, red paint smears are clearly evident. <<http://www.corazon.com/TWA800hullrupture.html>>

A precedent has been set of paint transfer marks in that area by UAL 811 as described in NTSB AAR 90/01 and AAR 92/02. <<http://www.corazon.com/811page42paintondoor.html>>

It would be prudent to confirm or rule out the red paint smears indicating an open cargo door in flight or not. One way would be to examine the cargo door hinge for overtravel impression damage, another precedent set by UAL 811 in NTSB in AAR 92/02. <<http://www.corazon.com/811reportcontentpage.html>>

There is outward peeled skin high up on the right side of TWA 800, also more outward shattered skin on the belly, and most of all, there is

outward
peeled skin forward of the wing on the right side, centered
around the
outward petal shaped bulge at the aft midspan latch of the
forward cargo
door. That's a fact and I know that because NTSB presented the
photograph
of TWA 800 wreckage reconstruction and described the outward
peeled skin in
NTSB exhibits.

Main deck floor beams above the forward cargo hold were
broken downward in
UAL 811 during the explosive decompression. That also
happened in TWA 800.
An explanation was offered by Mr. James Wildey of NTSB:
Docket No. SA-516,
Exhibit No. 18A, Sequencing Study, page 20, "The initial
opening of the
fuselage lower lobe (e.g. LF6A) would have the expected result
of rapid
depressurization accompanied by collapse of the main deck floor
for some
distance forward of STA 1000. The red area recovery of interior
components
as far forward as STA 600 would not be inconsistent with this
floor
collapse and associated structural breakup."

The red paint smears and the outward peeled skin strongly
indicate the
forward cargo door opened in flight, an opinion shortly held by
Mr. Fred

Schalekamp of FAA:

30 Jan 1998 letter from Neil Schalekamp, FAA, to JBS: "The paint markings and structural deformation that you cite, do indicate an outward explosion, generally accepted to be caused by the explosion of the CWT."

That's a fact and NTSB and FAA told me so in a letter and shown in sooting diagrams in exhibits. To not see the very red, very many, and very large unusual paint smears, and to not see the outward, not inward, peeled skin is to defy reality. The red smears, downward floor beams, and the outward skin are there and strongly indicate cargo door opened in flight based on physics and precedent.

The forward cargo door did open in flight, but not by the overpressure of a center tank explosion because the cargo door pieces were unsooted, just like the forward pieces of the center fuel tank.

What else could cause the forward cargo door to open in flight? There is a precedent, UAL 811, as described in NTSB AAR 90/01 and AAR 92/02 in which a high time Boeing 747 suffered a hull rupture in flight forward of the wing which left a sudden loud sound on the CVR and an abrupt power

cut to the
FDR, paint transfer marks in cargo door area, and outward
peeled skin, all
caused by chafed to bare wire conductor in the cargo door area.
<<http://www.corazon.com/811reportcontentpage.html>>

TWA 800 had a hull rupture forward of the wing which left a
sudden loud
sound on the CVR and an abrupt power cut to the FDR, paint
transfer marks
in cargo door area, outward peeled skin, and chafed to bare wire
conductor
discovered in cargo door area.

That is enough of a match to justify inspection of cargo door
wiring in
early Boeing 747s irrespective of other corroborative evidence of
faulty
Poly-X wiring discovered in Boeing airliners under NTSB and
FAA orders.

Bare shorted wires have also caused fires in forward cargo holds
of Boeing
747s before.

NTSB Exhibit 9C, Attachments to the Systems Group Factual
Report page 44,
45, 46. "1996, burning smell in forward cargo compartment,
found damaged
wiring shorted to ground, charring found.
B. Oct 12, 1996, Wire bundle arcing and resultant fire at aft
bulkhead of
forward lower lobe cargo hold on 747-200 freighter."

It would be prudent to inspect cargo door wiring in the forward cargo hold of early 747s since that wiring has been shown to be faulty in general, early Boeing airliner wiring has been shown to be faulty in particular, UAL 811, and faulty cargo door area wiring has shown up in the same area on a new fatal accident, TWA 800.

A solution to the mystery of the ignition source of the fireball and center tank fire may well be a foddred and on fire engine number 3 igniting disintegrating wing fuel tanks thousands of feet lower and seconds later than the initial event.

TWA 800 engine number three shows foreign object damage, fire, and uncontainment in the NTSB powerplant report and the structures report.

Exhibit 8A, page 11, paragraph 3, discussing results of engine 3 disassembly, "Of the 46 fan blades in the fan rotor, 21 blades with complete or partial airfoils and 6 root sections were recovered. All of the fan blades had sooting on the convex airfoil surfaces. Most of the full length airfoils were bent rearward and the tips outboard of the outer

midspan shroud were bent forward slightly. About half of the fan blades had impact damage to the leading and trailing edges. Almost all of the impact damage to the airfoils could be matched to contact with the midspan shroud on an adjacent blade. One full length blade had four soft body impacts along the leading edge and a partial airfoil had a soft body impact, which had some streaking extending rearward."

Exhibit No. 7A, Structures Group Report, page 33: "5.1

Horizontal

Stabilizer, "Some of the items found in the horizontal stabilizer are

sections of seat track, a stator blade from turbine section, and glitter."

On 5.1.1 Right Horizontal Stabilizer, page 34, "An engine stator blade from

turbine section penetrated the upper honeycomb surface near the outboard trailing edge.

A prudent action would be to rule in or rule out the precedent of UAL 811

applied to TWA 800. A risky action is to ignore many large red paint

smears, downward broken floor beams, and much outward peeled skin and their

clear implication of cargo door open in flight. The red paint smears will

not fade away; they will always be many, large, and red in the

photographs
on the NTSB CD-ROM. The floorbeams will always be broken
in Exhibit 18A.
The outward peeled skin will always be shattered outward on the
belly, the
upper fuselage, and around the aft midspan latch of the forward
cargo door
in the photographs of TWA 800 on the NTSB CD-ROM. Engine
number three will
always be sooted, blades missing, and have soft body impacts as
shown by
NTSB Exhibit 8A.

A more prudent action is to ground all Boeing 747s with Poly-X
wiring for
total inspections and replacement of that wiring. A total wiring
inspection
casts the net wider to catch faulty wiring. By inspecting all the
wiring to
include the fuel tank wiring, the yaw damper wiring, and the
known
previously faulty cargo door power wiring, all wiring can all be
cleared as
intact and pose no danger of shorting on, as has happened before
fatally.

I understand the difficulty and turmoil the grounding would
cause. Boeing
would have much work to rewire the planes if necessary. If not
feasible,
new airliners would have to be built and the grounded ones used
for parts,
similar to what the Navy has done with their Poly-X F-14

Tomcats.

Am I a traitor? Does my belief of a wiring cargo door fault for TWA 800 and other early 747s hurt my country? Specifically, the Northwest quadrant which has an economy derived from the design, manufacture, and selling of 747s.

Here's my answer to myself on that one. No, I am not a traitor, I am a patriot. Here's why.

Seattle is successful and must remain so. Seattle is successful because nearby is built successful airplanes. Successful airplanes are the best selling ones. The best selling ones are the most made ones. The most made ones are the ones that make the most money. The ones that make the most money are the ones that fly the most. The ones that fly the most are the safest ones. The safest airplane is the most successful airplane. Period.

So, to present an explanation for an unsafe event, the crash of TWA 800, an early Boeing 747, is a good thing to do, even if proven wrong later. The goal is to make safe airplanes which will fly the the most and be sold the

most and be made the most, thereby keeping our country's economy thriving.

My personal goal is to prevent death by preventing airplane crashes by preventing hull ruptures in flight on early 747s by preventing cracked bare wires shorting on the door unlatch motor thereby allowing the aft midspan latch to rupture and allow the middle of the forward cargo door to burst open causing a large explosive decompression which allows the 300 knot slipstream to tear nose off. This inner goal was determined by the selfless action of my pilot who saved my life in a sudden night fiery fatal jet plane crash years ago and which I have never forgotten.

It is the duty of aviation professionals to strive to explain TWA 800. And yet, this loyal citizen is rebuffed when presenting to NTSB NTSB derived evidence of a supplemental explanation to TWA 800. Why is that?

If I can't have a real conversation with NTSB or FAA officials regarding TWA 800, here is an imaginary one that sums up the past two years.

JBS: "Hello, NTSB, I'm answering your plea for public assistance regarding

the cause of TWA 800."

NTSB: "What do you want?"

"I believe the initial event is moisture meeting chafed to bare wire and shorting on cargo door motor to unlatch position causing rupture at aft midspan latch of forward cargo door in flight leading to thirty by forty foot hole of explosive decompression which allows 300 knot slipstream to tear nose off which leads to disintegrating aft fuselage, wings, and tail which ignite into fireball when fiery foddred engine number three meets vaporizing fuel thousands of feet lower and seconds later."

"No."

"There are many similarities to an event that happened before, UAL 811, and TWA 800."

"You're crazy. Who are you?"

"Commercial licensed pilot, instrument rated, 1000 PIC hours, Navy jet navigator, aircraft owner, FAA Part 135 certificate holder, avionics technician, and survivor of sudden night fiery fatal jet airplane crash talking about a sudden night fiery fatal jet airplane crash."

"Go away."

"The evidence of red paint smears, outward peeled skin, and
petal bulge at
aft midspan latch support conclusion forward cargo door opened
in flight,
just like UAL 811."

"I'm ignoring you and will not respond to further comments."

"You are safety aviation officials who say you turn over every
stone, who
check out every explanation, who really want to know what
happened to TWA
800, regardless of cause. Listen to me; talk to me."

"You are a wacky guy on the internet, you are bothering the real
investigators and getting in the way, you have been told over and
over
again in great detail that you are wrong and we are right, you
don't have
your basic facts straight about the door, you should check with us
before
you say your nonsense to others, and you are a flake and we don't
like you."

"Maybe, but so what? The messenger's style is independent of
the truth of
his content. Moisture and shorted wiring caused the crash of
TWA 800. Why
do you not ask questions to me, as real investigators do, as I ask
you?"

"We don't ask questions of citizens that we don't already know the answers to, we just make statements such as this: No, your're wrong, you're crazy, go away, we will not respond, goodbye, and thank you your for your interest in aviation safety."

Below is real:

10 March 1998 letter of John B. Drake of NTSB to JBS :

"We consider our correspondence on this subject to be complete. Should you continue to reiterate your position on this issue in future correspondence, you should expect no further response from the Safety Board."

30 Jan 1998 letter of Neil Schalekamp of FAA to JBS :

"Please note that this office will no longer be responding to your further inquiries about these same concerns, including your February 6 and February 9 letters that I just received."

17 March 1998 letter of Jim Hall of NTSB to JBS :

"We do not believe a meeting is necessary to further discuss this issue."

Summarized conversation between me and ordinary citizens who visit my web site:

Visitor: "What does NTSB and FAA say when you tell them about wiring/cargo

door explanation for TWA 800?"

JBS: "They write that all cargo doors were all latched, all locked, and all intact at water impact, they have told me that over and over again and they will not respond to any further inquiries from me."

"What do they say about the red paint smears?"

"They pretend they don't exist except one FAA official who did but changed his mind and now pretends they don't exist."

"What do they say about the outward peeled skin?"

"They say it was caused by inward water impact."

"What do they say about the petal outward bulge at aft midspan latch of forward cargo door?"

"They pretend it does not exist except one FAA official who did but changed his mind and now pretends it doesn't exist."

"What do they say about the missing manual locking handle, the two overpressure relief doors, the viewing ports, the torque tubes, the two pull-in hooks, the midspan latches, and the other eighty percent of forward cargo door skin?"

"They say they are unimportant."

"What do they say about the Orange Zone pieces, the possible mixup in cargo door sills, the unsooted pieces of center fuel tank, the thirty by forty foot shattered skin zone forward of the wing on the right side, the chafed to bare wire discovery in cargo door area, and the many significant matches to UAL 811?"

"Nothing. They say nothing. Well, actually they told me to go away, and stay away."

"Have you gone to your congressman?"

"Yes, Sam Farr, and he has asked many time to NTSB and FAA for information."

"What happened?"

"They wrote to him that the door was all latched, all locked, all intact at water impact, they have told me that many times, and thanked him for his interest in aviation safety."

"Did you contact any other elected politician?"

"Yes, Senator John McCain, jet plane crash survivor and

Chairman of the
Committed that oversees NTSB."

"What happened?"

"He reviewed my data and submitted it to his committee for review. He asked me to wait until the hearings. He asked the NTSB to meet with me to related my concerns about the forward cargo door of TWA 800."

"What happened?"

"The Committee on Commerce, Science and Transportation still has the matter under review, I waited until the hearings, I went to the hearings. The suggested meeting by Senator McCain between NTSB officials and me was refused by Chairman Hall of NTSB saying there was sufficient evidence to rule out the cargo door opening in flight, he has told me that many times in great detail and a meeting was not necessary."

"Have you tried the press?"

"Yes, I've had several radio and TV interviews. Some get airplay and some don't."

"Have you tried Boeing?"

"Yes, Boeing and McDonnell Douglas both contacted before the merger. The two safety officers were polite and referred me to NTSB. Boeing engineers referred me to the Public Relations office of Boeing. The Boeing Public Relations office referred me to the NTSB. NTSB told me to go away."

"Have you tried the internet?"

Yes, I have a 1200 page, 100 meg website which has been online since July, 1996 and visited about 70000 times, according to page counters."

"What are you doing now?"

"I'm continuing to write to appropriate officials presenting the evidence and trusting it will speak for itself. It's not going to go away."

"Have you tried calling them?"

"No, my wife and daughter were approached in my home by two armed federal agents within twenty four hours of me posting an email to Senator McCain about Air Force One crashing. Calling on the telephone out of the blue would be much too aggressive. Prior to the Secret Service interrogation, phone calls usually ended up with the official shouting and hanging up. So

now I continue to write non-threatening, polite, full of facts letters and emails."

"Are you saying government public safety aviation officials in writing refuse to adequately respond to your request for a meeting to discuss facts, evidence, documents, photos, which clearly indicate a forward cargo door opening in flight on TWA 800?"

"Yes."

"They will not call you, write to you, or respond to polite letters with sources listed?"

"Nope."

"Are these the same guys that say safety is priority number one, they will turn over every stone, never give up to get a full explanation, and respond to every public inquiry?"

"Yup."

"Who are you? A wacky guy on the 'net?"

"Maybe, although I use government AARs for sources, and I'm also a survivor of a sudden night fiery fatal jet airplane crash, a commercial

licensed
pilot, instrument rated, FAA Part 135 certificate holder, light
aircraft
owner, jet carrier navigator, avionics technician including radar
operator,
and a retired military officer in a converted garage with a
computer and a
phone line."

"And you've tried for almost two years to meet face to face with
the public
officials involved with TWA 800?"

"Yes."

What happened?

"Nothing yet. But I'm still trying. It's only been two years for
TWA 800.

The investigation is open and active. The evidence is not
changing or going
away."

And I am still trying:

Real facts presented by NTSB about TWA 800 in exhibits,
photographs, text,
drawings, and testimony:

1. right horizontal stab has red paint smear
2. stator blade in right horizontal stab behind engine number 3
3. inward crush top of cargo door
4. top of cargo door attached to hinge

5. petal shape of rupture area around aft midspan latch
6. missing pieces of forward cargo door include locking handle, latching pins, overpressure relief doors, midspan latches
7. rectangle visible of explosive decompression zone of outward peeled skin on right side forward of the wing on right side
8. downward movement of floor beams near cargo door
9. hoop stresses found
10. CVR sudden loud sound
11. FDR abrupt power cut
12. missing turbine blades in engine number 3.
13. soft body impacts on blades in engine number 3.
14. outward peeled skin near top of nose, under belly, and in cargo door area.
15. red paint smears above cargo door on white paint
16. soot on most blades of engine 3.
17. starboard side more damaged than port side
18. intact R2 door near shattered cargo door.
19. poly x is known to be susceptible to chafing and present
20. section 41 is known to be weak
21. history of cargo door openings in past in various airliners
22. EPR problems on aircraft before or during fatal flight.
23. fires in forward cargo hold in the past on Boeing 747s.
24. vertical tears in fuselage skin forward of the wing on the right side
25. singe marks on right side of fuselage show burnt skin, then abruptly at tear line there are no singe marks
26. red paint rubbed off revealing white paint underneath on skin above cargo door area
27. first pieces off plane came from forward cargo hold just

forward of the

wing

28. at least nine missing never recovered bodies, just fragments

29. initially thought to be a bomb

30. wreckage debris shows cargo door shattered in many pieces

31. aft portion of forward door which includes aft midspan latch and

locking handle missing from recovery effort

32. no soot on maintenance hatch

33. no soot on front spar of center wing tank

34. no burned bodies forward of the wing and very few burned at all

35. aft cargo door sill, latches, and locks recovered

36. forward cargo door sill, latches, and locks not recorded in data base

37. no orange zone pieces recorded in database

38. no orange zone discussion in public record other than identification

39. chafed to bare wires found in cargo door area

40. wiring defects found on Boeing airliners

41. water observed pouring out of forward cargo hold of a Boeing airliner, cargo holds have bilges.

42. no soot on keel beam forward of the wing

43. compression fractures right side forward of the wing

44. tension fractures left side forward of the wing

45. seats in the rows in the explosive shatter zone above cargo door are in

red zone and not sooted

46. aft cargo door sill is sooted

47. many witnesses said they saw downward streak that was red-orange

48. NTSB official said possibility of forward door popping open

was intriguing.

49. FAA official said, then recanted, that paint smears and structural

deformation indicated outward explosion.

50. initial event time was 20:31:12 at 13700 on 17 July 1996

eight miles

off coast of Long Island.

Reasonable conclusions derived from facts above:

1. water in forward cargo bay.

2. chafed bare wire touched by water.

3. electrical short occurs.

4. forward door motor turns on to unlatch position.

5. aft midspan latch of forward cargo door partially unlatches.

6. pressurized hull ruptures at aft midspan latch.

7. cargo door tears into pieces, some pieces stay with nose, some don't.

8. shiny metal pieces spin away reflecting evening sunlight and perceived

as red-orange streak to observers far away.

9. explosive decompression occurs shattering cargo door area forward of the

wing on right side exposing twenty foot by forty foot hole in nose

producing sudden loud sound on CVR.

10. 300 knots slipstream tears weakened nose off.

11. ejected debris is ingested by starboard engines which catch fire.

12. wing and wing fuel tanks; engines, tail, and fuselage fall and disintegrate on way down.

13. fiery starboard engine ignites fuel vapor clouds from disintegrating

tanks, including center tank.

14. fireball observed on the ground.

15. water impact of wreckage, cargo bay material first to hit water.

I may not be alone: "NTSB investigators have suggested unofficially that the streaks the pilots saw could have been light reflections from the skin of the aircraft, tongues of flame from the airliner or the forward door of the aircraft popping open, a possibility that still intrigues investigators, the second official said." AW&ST 3/10/97

Regarding the Aviation Week and Space Technology article quoted above, the following is supplied: <<http://www.corazon.com/800avweekintrigue.html>>

Monica Warnock
Washington Bureau
Aviation Week & Space Technology

Dear Ms. Monica Warnock,

21 May 1998

You wrote to me:> You must remove these articles and any other Aviation Week copyrighted material from your website immediately, or we will consider legal action.

I replied>Consider it done. And not because you threatened me, but because you may be right."

Ms. Warnock, I now believe you to be wrong.

I'm putting the 10 March 97 Aviation Week and Space Technology article in dispute back up on my web site at www.corazon.com at one minute after midnight on 1 June 1998.

Here's why: The content is everything and the content of the article is very, very important. I agree with the content. AvWeek agrees with content. The public officials quoted in your article agree with the content. The content quotes a public NTSB official who says that the cause of TWA 800 may have been forward door popping open. It also said the streak seen before TWA 800 crash may have been reflection off the skin of aircraft. I agree with that. It is very important. Let us call it the door pop streak article.

Ms. Warnock, you have done your job well by searching the web for Avweek articles. You found one. You then followed orders and directed it be removed. It was removed. The problem is now above your level of authority. So I direct my comments to your boss: Mary Francis Koerner, the Manager of Bureaus.

Will you please see that this letter goes to her?

Dear Ms. Koerner, I am told several things:

1. Get the door pop streak article off my web site.
2. I should ask permission to put AvWeek articles on web site.
3. Permission will be denied.

I asked permission. It was denied. You were right.

You have done all you can do. The problem is now above your level of authority. I assume you would refer me to 'The Lawyers.' I direct my statements to the lawyers.

Will you please see that this letter goes to them?

Dear AvWeek lawyers:

Ah, copyright, don't you love it?

My name is John Barry Smith. I have a 1200 page, 100 meg website at www.corazon.com mainly devoted to high time Boeing 747 accidents in which the hull ruptures in flight forward of the wing. It contains mostly government scanned in aviation accident reports, AARs, and occasionally copyrighted material from media, such as yours.

Please note, let us stipulate:

1. My site is non profit. I have not made a penny on anything

related to
that website. In fact, much of my money has gone out, nothing
has come in,
a problem as my wife will attest.

2. It is research oriented with airplane crash related comments,
investigations, reports, pictures, and text.

3. I give full and clear credit to the sources I quote. AvWeek was
clearly
stated as the author of the door pop streak 10 Mar 97 article in
question.

In fact, that is very important, that's why I quote clearly and give
credit

to Aviation Week by scanning in the entire article instead of
paraphrasing,

which would be quicker to download but not have the authority
of the best

aviation magazine on the planet, Aviation Week and Space
Technology. And I

omitted the advertising on the pages, too.

Now for argument:

1. I stole nothing from you.

2. It's fair use.

3. I can publish that article without your permission if certain
conditions

are met, and are: Non profit, small parts used, and credit given.

"Fair use and implied licenses.

Fair use is a legal license to use others' work, whether they
approve or

not. It constitutes one of the most important, and least clear cut, limits to copyright. The basic problem is that words like "fair" or "reasonable" cannot be defined with the precision non-lawyers (or many law students) would like. Until 20 years ago, fair use did not appear in U.S. legislation, but it now occupies about half of the copyright statute. In the U.S., partial or limited reproduction of another's work may be permitted under this doctrine. On the one hand, fair use offers an especially liberal defense to uses that advance public interests such as education or scholarship. On the other hand, it is unlikely to be available if one fails to credit the original artist or author. It is not apt to be available to those who profit or interfere with original artists' or authors' ability to derive income from their works."

" 1998 Franklin Pierce Law Center. All rights reserved." (I hope I have fair use to quote the above.)

I believe I advance the public interest in aviation safety, I credit the original speaker, the reporter, and the magazine, and I do not profit from it. I have fair use.

Conclusion: It will take a Judge to order me to remove the 10
March 97

AvWeek article from my website after it is put back up on 1 June 1998 or to permit me to continue to post it.

So, Lawyers, the problem is above your level of authority. I turn my attention to the Managing Editor:

Will you please see that this letter goes to him?

Dear Managing Editor,

What's the beef? You and your reporter, David Fulghum, have done a fine piece of work. You have pinpointed the cause of a mystery crash now under current investigation, TWA 800. It was the door popping open in flight. The NTSB official you quoted was correct. The streak was the skin spinning away reflecting evening red orange sunlight to observers below. The official was correct and he was quoted correctly by your aviation reporter. The implications of the truth you printed are profound. The cause now leads to chafed wiring shorting on cargo door unlatch motor and allowing rupture at aft midspan latch of forward cargo door which opened in flight. Exactly as has happened before with UAL 811 as described in NTSB AAR 92/02. The 300 knot slipstream tore the nose off TWA 800 because the explosive

decompression shatter zone was much bigger on TWA 800 than on UAL 811, as shown by NTSB reconstruction photo of TWA 800 wreckage.

I encourage you to do a follow up story on the wiring/cargo door explanation as described on the website in question, www.corazon.com. Mr.

Fulghum and Mr. McKenna are familiar with the details of TWA 800 and wiring cargo door explanation.

Attached:

1. Correspondence between AvWeek Ms. Warnock and me.
2. Three .jpgs of the images published on website of 10 March door pop streak article.
3. Recent email to Government officials regarding this matter. Please note accurate numbers and sources given.

So, I must publish your copyrighted material, the 10 March 97 article on my website at URL <http://www.corazon.com/800avweekintrigue.html> on June 1, 1998.

I'm at email barry@corazon.com or 408 659 3552 or 551 Country Club Drive, Carmel Valley, CA 93924.

I encourage discussion regarding this matter. It's a hot story even though almost two years old. Wiring is the main culprit, not the door, not the center tank. NSTB is in the right church but the wrong pew. Wiring is the problem and it's in places other than the fuel tank tubes. It's in the cargo door unlatching motor circuits.

Cheers,
John Barry Smith

From: monica_warnock@mcgraw-hill.com
Date: Thu, 14 May 98 10:24:37 -0500
To: <barry@corazon.com>
Subject: Aviation Week
Mime-Version: 1.0

To: barry@corazon.com

Dear Sir,

Your website "<http://www.corazon.com/800avweekintrigue.html>" contains several scanned-in pictures of the Aviation Week & Space Technology article "ANG Pilot: TWA Hit By Object," March 10, 1997. Our records do not show that you requested permission to use these articles on your website.

Aviation Week & Space Technology is covered by copyright

law which

states that permission must be granted before our material is used.

Your website is in violation of this law. You must remove these

articles and any other Aviation Week copyrighted material from your

website immediately, or we will consider legal action.

Sincerely,

Monica Warnock

Washington Bureau

Aviation Week & Space Technology

monica_warnock@mcgraw-hill.com

(202)383-2314

To: monica_warnock@mcgraw-hill.com

From: John Barry Smith <barry@corazon.com>

Subject: Request permission to present article on website.

Cc:

Bcc:

X-Attachments:

To: barry@corazon.com

Dear Sir,

Your website "<http://www.corazon.com/800avweekintrigue.html>" contains

several scanned-in pictures of the Aviation Week & Space Technology

article "ANG Pilot: TWA Hit By Object," March 10, 1997.

Our records

do not show that you requested permission to use these articles
on
your website.

Dear Madam, 14 May 1998

A thousand pardons. I immediately request permission to reprint
Aviation
Week & Space Technology article "ANG Pilot: TWA Hit By
Object," March 10,
1997 on my website, www.corazon.com. (Corazon is my wife's
name.)

The reason I scanned in exact image instead of paraphrasing text
was to be
precise and show source, very important for a research paper.

Should my request be denied, I shall of course, immediately
comply with
your request and remove the article from my web site.

AWST is a fine magazine and one which I have read diligently
for over
thirty years. I have watched AWST's web site mature as time
goes on.
<http://awgnet.com/awgnews.htm> is on my bookmarks list and I
check it first
thing every morning. I'm in your database of subscribers. Keep
up the good
work!

Regarding this life and death matter of a sudden night fiery fatal
jet

plane crash about which I have published a 1200 page website presenting my shorted wiring opening forward cargo door in flight explanation to the general public in a non profit effort:

1. You surely understand I can not alter my website just on an unsolicited email out of the blue from:

Monica Warnock
Washington Bureau
Aviation Week & Space Technology
monica_warnock@mcgraw-hill.com
(202)383-2314

The absence of title indicates your request may be personal in nature and not official. Please confirm your official title which corresponds to your request that I delete an article from AWST from my site. You may be spoofing me and my asking for credentials is prudent and an established protocol.

2. Your response indicates an interest in the subject of TWA 800. Could you refer a reporter to me so I can present my wiring/cargo door explanation to him/her? I would appreciate the opinion of an aviation professional regarding my nine years of amateur research into hull ruptures of

hour high
time Boeing 747s. Your reporter, David Fuhlgum, in the
referenced article,
was able to elicit important material from NTSB officials
regarding TWA
800; the forward door may have popped open in flight, and the
streak may
have been pieces of the aircraft reflecting evening sun. I am able
to
amplify those observations by an anonymous NTSB 'second
official' using
NTSB documents and photographs. It's a good story and one
worthy of AWST's
interest. FAA, NSTB, and Boeing are all saying wiring in older
Boeing
airliners is fraying and shorting causing problems, and so am I,
long
before the officials came to the realization.

3. >or we will consider legal action.

Why, O why did you threaten me? Your first contact, out of the
blue, and it
contains a threat of 'legal action'. What does that mean? I don't
think it
means a good thing. It just sets a wrong tone. Is politeness gone
from even
presentations about a plane crash?

4. >Your website is in violation of this law.

Whoa! You are calling me a criminal? Just like that? I'm breaking
the law?

I'm a lawbreaker? This is very disturbing. Maybe that's the way
AWST works
with the big boys who only respond to threats, not to polite
requests with
explanation attached. I'm not a big boy. I'm a retired military
officer
working out of a converted garage in California. I don't like
anybody
telling me I'm breaking the law unless it's a policeman, judge, or
jury.
And I still don't like it, but I obey. I really can't tell my friends
that
I changed my cherished web site because of a strange
unauthenticated email
from some babe named Monica at McGraw-Hill, now can I? I
mean, am I a man
or a mouse?

See, a threat always turns a pleasant conversation into stressful
one.
Squeek, squeek.

To review:

1. I respectfully request permission to display scanned in
images of
Aviation Week & Space Technology article "ANG Pilot: TWA
Hit By Object,"
March 10, 1997 on my personal website, www.corazon.com.
2. Please to show credentials, madam.
4. Refer reporter to me regarding a subject that you feel strongly

enough
to want to affect with correspondence, TWA 800.

5. Keep up the good work covering aviation subjects around the world.

Cheers,

John Barry Smith
551 Country Club Drive,
Carmel Valley, CA 93924
408 659 3552
barry@corazon.com
www.corazon.com

From: monica_warnock@mcgraw-hill.com
Date: Thu, 14 May 98 13:48:41 -0500
To: <barry@corazon.com>
Subject: Re: Request permission to present article on website.
Mime-Version: 1.0

Dear Mr. Barry,

I am an editorial assistant in the Washington Bureau of Aviation Week & Space Technology. I work for Mary Francis Koerner. She is the Manager of Bureaus and she is the official contact for Reprints & Permission. We will periodically search the web for Aviation Week on outside websites and that is what brought me to your site.

Unfortunately, at present, Aviation Week & Space Technology does not allow its material to be reprinted on any websites other than our own.

We appreciate your interest in Aviation Week & Space Technology;

however, we must ask that you remove the article from your website, as

you have indicated you are willing to do.

My interest in this regard is not related to TWA800 but protecting the

magazine in general. Many people are not aware of the rules regarding

copyright on the internet. You may reference the section "Photocopy

and Rights & Permission" on the Contact Us page of Aviation Week if

you have any future requests for permission.

James McKenna would be the best editor to send your correspondence to

regarding TWA 800. He is located in the Washington bureau: 1200 G

Street, NW Suite 922, Washington, DC 20005. (202) 383-2332.

I will mail you a hard copy of this letter on Aviation Week & Space

Technology letterhead to satisfy any concerns you might have about my

identity. Thank you for your understanding.

Monica Warnock
Editorial Assistant, Washington Bureau
Aviation Week & Space Technology

To: monica_warnock@mcgraw-hill.com
From: John Barry Smith <barry@corazon.com>
Subject: Re: Request permission to present article on website.
Cc:
Bcc:
X-Attachments:

Dear Mr. Barry,

I am an editorial assistant in the Washington Bureau of
Aviation Week
& Space Technology. I work for Mary Francis Koerner. She is
the
Manager of Bureaus and she is the official contact for Reprints
&
Permission. We will periodically search the web for Aviation
Week on
outside websites and that is what brought me to your site.

Dear Ms. Monica,

Thank you for your prompt reply. I am saddened by the denial to
present the
AWST article on my web site. I shall search through it and delete
it. Do I
need permission to post your email in its place to explain why
the article
was deleted? I should explain why the article was removed to
squelch any

conspiracy coverup nonsense that pervades this TWA 800 investigation.

Unfortunately, at present, Aviation Week & Space Technology does not allow its material to be reprinted on any websites other than our own.

So sad.

We appreciate your interest in Aviation Week & Space Technology; however, we must ask that you remove the article from your website, as you have indicated you are willing to do.

As soon as I am finished with this upcoming TV interview about wiring/cargo door explanation, I will. The TV station is KOMO-TV, Channel 4, ABC, in Seattle Washington and the arrive within the hour. I'm preparing for it so am unable now to find page, delete, change links, upload it to server right now. But how long to I have? Is 48 hours OK?

My interest in this regard is not related to TWA800 but protecting the magazine in general. Many people are not aware of the rules regarding copyright on the internet. You may reference the section "Photocopy and Rights & Permission" on the Contact Us page of Aviation

Week if

you have any future requests for permission.

Protecting the magazine? Well, OK, if you say so. I feel that quoting AWST in a non profit website about aviation safety helps AWST, but what do I know.

James McKenna would be the best editor to send your correspondence to regarding TWA 800. He is located in the Washington bureau: 1200 G Street, NW Suite 922, Washington, DC 20005. (202) 383-2332.

Thank you very much, ma'm, and I shall. I shall say you referred me, is that OK?

I will mail you a hard copy of this letter on Aviation Week & Space Technology letterhead to satisfy any concerns you might have about my identity. Thank you for your understanding.

Fine, can I put that on my website?

Let me get back to you on this. I will delete offending article and then send you URL of the new page so you can confirm I have cleansed the dirty deed.

Cheers,
John Barry Smith

Monica Warnock
Editorial Assistant, Washington Bureau
Aviation Week & Space Technology

From: monica_warnock@mcgraw-hill.com
Date: Thu, 14 May 98 14:47:54 -0500
To: <barry@corazon.com>
Subject: Re[2]: Request permission to present article on website.
Mime-Version: 1.0

Mr. Smith,

I will mail your letter today. When it arrives, you are welcome to

place it on your website. We understand that you are busy right now-

as long as you are able to delete the pages by next Friday, that's fine

with us. The complete URL is

<<http://www.corazon.com/800avweekintrigue.html>>

If you do contact Mr. McKenna, you may tell him I referred you. Again,

thank you for your interest in Aviation Week.

Monica Warnock
Editorial Assistant, Washington Bureau
Aviation Week & Space Technology

To: monica_warnock@mcgraw-hill.com

From: John Barry Smith <barry@corazon.com>

Subject: Done

Cc:

Bcc:

X-Attachments:

Dear Ms. Warnock,

You must remove these
articles and any other Aviation Week copyrighted material from
your
website immediately, or we will consider legal action.

Consider it done. And not because you threatened me, but
because you may be
right.

<http://www.corazon.com/800avweekintrigue.html>

is the URL which now has deleted article. Completed 6:57PM 14
May 97, nine
hours after your request. The TV interview went swimmingly. In
fact, the
interviewer from KOMO TV ABC Seattle, asked that I send him
an email of the
article in question. He was interested to hear about your request.

I just want you to know that you have made an old man very
very sad. I
shall have to research the web, as is my wont, to find out for sure
if the
copyright laws exist to keep non profit websites from fairly using
one

article of a magazine to support an aviation safety hypothesis. I make no money from this site, on the contrary, it costs me money to keep it up. The site is 1200 pages deep with on one page assigned to article. The goal of the website is aviation safety, a common goal with Aviation Week. The officials quoted on the article are public officials whose comments are public.

It seems to me that permission should not be necessary for me to put your article on my website as long as I give credit to the author and make no money from it.

It seems to me that when permission was requested to put the article on my website, permission should have been granted.

You said 'protect your magazine,' as motive for requesting I delete the article. Protection from whom? Me? Aviation Week needs protection from me? I am a retired guy working out of a converted garage with a computer and a modem. You have nothing to fear from me, we are on the same side, aviation safety.

Regardless, the excellent article by David Fulghum in the March

10, 1997

issue has been deleted at your request. Should it become apparent that I do have the fair right to use your article under conditions which I fulfill, then, pop! up it goes again. I shall let you know in advance so you may attempt to dissuade me if you wish. It just seems that a guy ought to be able to pull out old magazine articles to quote from when he's trying to persuade visitors of an aviation safety point. In case I'm wrong, and I'm never wrong, I have erred on the side of safety and complied with your request.

Cheers,
John Barry Smith

Mr. Smith,

I will mail your letter today. When it arrives, you are welcome to place it on your website. We understand that you are busy right now- as long you are able to delete the pages by next Friday, that's fine with us. The complete URL is <<http://www.corazon.com/800avweekintrigue.html>> If you do contact Mr. McKenna, you may tell him I referred you. Again, thank you for your interest in Aviation Week.

Monica Warnock
Editorial Assistant, Washington Bureau
Aviation Week & Space Technology

DAVID A. FULGHUM/WASHINGTON

Two New York Air National Guard pilots, with the best view of the crash of TWA Flight 800 last July, are disagreeing about what they saw immediately before destruction of the Boeing 747-131 jetliner.

One believes the airliner was struck by a fast-moving object coming from the east, while the other saw only a fiery trail from the west.

However, both believe a violent explosion ripped the aircraft apart, propelling some of its passengers high enough that they did not hit the water's surface until 3-4 min. after the initial explosion.

Maj. Frederick C. Meyer, pilot of an HH-60 helicopter from the ANG's 106th Rescue Wing, has just been freed from an FBI gag order preventing him from giving interviews about the 1996 disaster off Long Island, N.Y. The copilot, Capt. Christian Baur, remains under FBI restrictions not to speak about the accident. But two officials familiar with his testimony told Aviation Week &

Space Technology in detail what he told investigators.

In the days immediately after the accident, before being ordered not to speak, Meyer discussed his initial impressions with news media (AW&ST July 29, 1996, p. 32). Last week, he chose Aviation Week as the first news organization to hear a detailed account of his recollections and his testimony to federal investigators.

Meyer and Baur were in one of the wing's two aircraft operating north of the crash site. The helicopter was operating over Long Island about 12 mi. north of the TWA crash site. Baur, the copilot, was at the controls practicing instrument approaches. The crew was awaiting darkness so they could begin training with night vision goggles.

The key point on which the two pilots disagree is whether a streak of light appeared from the opposite direction of the flight of TWA 800 (which was flying from west to east after takeoff from Kennedy Airport), a possible indication of an intercepting missile or some other object.

Meyer's attention was first called to the area of the sky where the accident occurred "by a streak of light moving from my right (west) to my

left

(east)," the same direction as the TWA flight, he said.

Baur's account differs on this point. According to the two officials who have heard both pilots' accounts, Baur, on the left side of the cockpit, saw a streak moving from left to right toward the approaching TWA aircraft before the initial explosion.

"Almost due south [of the helicopter], there was a hard white light, like burning pyrotechnics, in level flight," Baur told investigators from the National Transportation Safety Board, FBI and a Federal anti-terrorist task force. "I was trying to figure out what it was. It was the wrong color for flares. It struck an object coming from the right and made it explode."

Baur's first impression was that there had been a midair collision, possibly between two light aircraft that tow banners along the beach.

"They had witnessed these aircraft come very close to each other at that time of day, and that's what they assumed," the second official said.

NTSB investigators have suggested unofficially that the streaks the pilots saw could have been light reflections from the skin of the

aircraft, tongues
of flame from the airliner or the forward door of the aircraft
popping open,
a possibility that still intrigues investigators, the second official
said.

Meyer could not actually see the aircraft, but only the streak, and
he admits
that Baur, a younger man, has better eyesight. Moreover, Meyer
adds,
"Whatever Chris saw on the left side I didn't see because he
blocked my
view." Baur disputes this, saying that the explosions and crash
were
virtually dead ahead of the aircraft.

The helicopter was executing a missed approach and was about
halfway down
Runway 24 at the Francis S. Gabreski International Airport at
Westhampton
Beach, N.Y. It had started a climbing left turn to the south when
the
accident occurred. The Sun had not yet set and the sky was still
bright.

According to Meyer, the streak was about 15-20 deg. above his
line of sight
and perhaps 15 deg. left of the aircraft's centerline.

"I don't know if it was a missile that struck the airliner," Meyer
said.

"Nothing at that moment said 'missile' to me. I spent a number of
years in

Vietnam and had seen missiles fired, some of them at me. But, that was 25-year-old missile technology, which left smoke trails. I understand today that they are made with smokeless rocket fuel and don't leave trails. What I saw was a streak of light, not a smoke trail."

The streak of light that Meyer saw made a very shallow, gradually descending arc. He points out that he never saw the actual airframe of the TWA 747 within the streak or subsequent explosions or smoke trails. It was virtually identical to the trajectory of a meteor, with only a slight curve. But unlike a meteor, the streak was red-orange in color, he said.

Meyer observed the descending streak for 3-5 sec. Then there was what Meyer describes as a hard, very sudden, yellowish-white explosion that looked identical to the detonation of an antiaircraft shell. He did not suggest an antiaircraft weapon was fired at TWA Flight 800, however.

"It left a cloud of smoke just like a flak explosion does," Meyer said. "One to two seconds later, there was a second, hard explosion almost pure white in color. The position of that explosion appeared to be slightly below and behind where one would have anticipated the streak of light to

have gone. The trajectory at that point appeared to be slightly bent down and slowed."

A new detail in Meyer's story was that almost immediately there was a third explosion and fireball. Meyer doesn't remember if there was an explosion and fireball or if the third explosion turned into the fireball.

"That was a soft explosion unlike the first two," Meyer said. "It began as a tiny point and it grew very rapidly into a huge fireball four times the diameter of the Sun. I was dumbstruck."

Baur also saw three explosions. But he contends that they started from left (east) and went to right (west). He said the explosions created a "huge waterfall of flame that cascaded down," the first official said. "The column of flame was being whipped around violently. First it was tumbling, and then it refined itself into a spiral. The explosions were all before the cascade of flame began."

In the helicopter, Baur spoke first, asking if it was pyrotechnics. ANG operations that night were to have included flares dropped by a HC-130 transport aircraft. The crew then called the Gabreski tower.

"We said we'd observed a fireball south of the field and we would like clearance to the beach to investigate," Meyer said. Baur actually made the call and reported a possible midair collision, the second official involved in the investigation said.

The crash time has been variously reported as being from 8:31 to 8:45 p.m., Meyer said. He believes the earlier time is more likely to be correct although he can't be sure.

Baur continued to fly the helicopter during the search while Meyer functioned as copilot and primary communicator. As they approached the crash site, after about 4 min. of flight, debris was still falling so they slowed to avoid being hit.

"As they got closer, within two or three miles, Baur could see the aircraft body, not tumbling, but in a vortex almost like inside a tornado," the second official said.

Meyer made another revelation that was the result of long reflection after the accident.

"I was looking ahead . . . as we approached the crash site," Meyer said. "I saw some debris at 1,200-1,300 ft. falling at terminal velocity and fuselage fragments tumbling at 40-50 mi. per hour. The things falling at high speed were bodies still strapped in their seats. That is logically inconsistent if they came from the same explosion at the same time. On reflection, I have concluded that the bodies must have been blown upward before they came down. That indicates a violent explosion."

On this point, the two pilots' accounts agree, the officials said.

"Debris was falling like snow," according to Baur's testimony. "Among the particulate there was metal and paper, some of it glowing. Through all of that, things would come racing through -- two or three high-speed objects like sacks of potatoes. I believed them to be bodies that had been blown upward."

The pilots' opinion differ from the conclusion of inspectors that all the passengers were in the fuselage when it ripped apart from aerodynamic forces.

In an attempt to debunk the most egregious coverup and conspiracy theories, Meyer and other ANG officials remain adamant that their unit

was not part of
any larger, undisclosed, multiservice operation. Operations the
night of the
crash were standard training flights to maintain currency with
night vision
goggles, rescue operations and in-air refueling.

The HH-60 flight was to be of about two hours' duration and
would not extend
more than 2 mi. off the Long Island southern coast. The HC-130
would drop
flares, rafts and a para-rescueman and later refuel the helicopter
in a
communications-out, lights-out operation.

"No other people of other services were on the base at the time,"
Meyer said.
Nor were there indications of the operations of drone aircraft,
another
theory that has surfaced as the possible cause of the crash. "No,
there would
have been some kind of notice."

AW&ST 3/10/97

Until the streak is adequately explained, the missile explanation
will
always be possible. I say missile explanation will always be
could be, but
wasn't. The evidence refutes every missile explanation suggested
event.
Likewise for meteor and bomb explanations, they will always be
could have

been, but weren't.

The center tank did catch fire and there was a fireball, so center tank explanation will always be could have been and was, the only issue is when.

The wiring/ cargo door explanation explains the streak, refutes the bomb and meteor, and supplements the center tank explanation.

The wiring/cargo door explanation for TWA 800 is the more correct, more complete explanation.

I urge that Boeing 747s with Poly-X wiring be grounded until wiring is checked in cargo door areas known to have been faulty in the past.

I again request to meet with NTSB officials to present my wiring/ cargo door explanation.

Sincerely,

John Barry Smith
551 Country Club Drive
Carmel Valley, CA 93924
408 659 3552
barry@corazon.com

www.corazon.com

Citizen: USA

Major: US Army Retired

Pilot: Commercial, instrument rated, FAA Part 135 certificate.

Navigator: RA5C Vigilante

Owner: Mooney M20C

Survivor: Sudden night fiery fatal jet plane crash.

From: John Barry Smith <barry@corazon.com>

Date: June 12, 1998 2:37:30 PM PDT

To: Tom.McSweeny@faa.dot.gov

Subject: Red Paint Transfer Marks TWA 800 Cargo Door Area

Sam Farr

Member of Congress

17th District, California

House of Representatives

Congress of the United States

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Washington, DC 20515-2861

John McCain III

Member of Congress

Chairman, Committee on Commerce, Science, and
Transportation

United States Senate

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Renton, WA 98055-4056

Dear Mr. McSweeney and Official Persons who feel
responsibility in explaining TWA 800,

Docket No. SA-516, Exhibit No. 7A, Structures Group Report,
page 34, A section of the structure outboard of H7 exhibited
evidence of red paint transfer marks on the upper skin (H8); only
the remnants of the shattered logo light window remain in the
window frame.

The above details a red paint transfer mark on the right

horizontal tail surface of TWA 800 directly aft of the red painted trim in cargo door area. This area shows missing red paint clearly in NTSB photo displayed at URL <<http://www.corazon.com/redpaintsmearssoloprint.html>>

The NTSB photographs are clear in color and detail. The TWA 800 reconstruction photograph shows abnormal green, white and red paint on the right side forward of the wing.

Normal TWA red trim paint scheme is seen at <<http://www.corazon.com/twapaintpixweb.html>> Only above the forward cargo door of the reconstructed fuselage of TWA 800 is seen the abnormal red paint smears.

The sequence is thus: bare aluminum skin is cleaned, primed, base coat of white applied, then red trim on top of white, then decals. This sequence is basic painting for Boeing 747s and confirmed by aviation professionals.

It is not red paint trim on primer with overspray, mask off, then paint white base coat around the trim.

The red trim is always on top of white base coat and means that the many, red, and large red paint smears between the passenger windows are red paint transfer marks. The red paint marks are not red paint exposed when white above is worn away, it is always red on top of white, not underneath.

This is further proven by skin which has red paint missing and thus exposing white undercoat. This is seen at URL <<http://www.corazon.com/TWA800hullrupture.html>> The white is always underneath the red. The green is always underneath the white.

Additionally, the added red paint between the windows is next to the missing red paint in the trim above the cargo door. Red paint went from one area to another.

The many red and large red paint transfer marks above the forward cargo door of TWA 800 indicate the cargo door opened in flight. The precedent of cargo door paint transfer marks was set by UAL 811 as described in NTSB AAR 92/02, page 41.

The red paint transfer marks indicate the red door below ruptured/opened in flight and slammed into the white paint above, removing the red trim paint and transferring it on top of the white paint. This is clearly seen between the passenger windows.

The red paint evidence coupled with the outward peeled skin on the side, and in the door area, and in the belly proves an explosive event occurred inflight in the cargo door area.

The downward crushed main floor beams confirm the explosive event. Docket No. SA-516, Exhibit No. 18A, Sequencing Study, page 20, "Downward separation directions were noted at STA 900, 880, 840, 820, 800, and 780..." and ""The initial opening of the fuselage lower lobe (e.g. LF6A) would have the expected result of rapid depressurization accompanied by collapse of the main deck floor for some distance forward of STA 1000. The red area recovery of interior components as far forward as STA 600 would not be inconsistent with this floor collapse and associated structural breakup."

The petal shaped outward bulge at the aft midspan latch of the forward cargo door pinpoints the location of the initial rupture of

the hull of TWA 800 as seen at URL <<http://www.corazon.com/petalbulge.html>> The aft latch is missing, the door frame is curved outward, and surrounding skin is shaped circular.

The analysis of red paint markings and structural deformation indicating an outward explosion was briefly held by FAA Branch Manager Neil Schalekamp of Northwest Region in a letter to me on 30 Jan 1998. "The paint markings and structural deformation that you cite, do indicate an outward explosion, generally accepted to be caused by the explosion of the CWT."

The cause of the outward cargo door explosion being the center tank is refuted by the lack of soot on the few recovered forward cargo door pieces and other right side fuselage pieces. Exhibit 20A page 129. Fire and Explosion Group Factual Report.

"RF2 C-004 No sooting No sooting
RF3A-H These pieces are part of the forward main cargo door.

Some have grimy corrosion inhibiting compound (CIC), but there is no apparent sooting.

These pieces are part of the forward main cargo door.

Some have grimy corrosion inhibiting compound (CIC), but there is no apparent sooting.

RF4 B-103 No sooting No sooting
RF5 A-071 No sooting No sooting
RF6A B-2004 No sooting No sooting
RF6B B-240 No sooting No sooting
RF6C B-318 No sooting No sooting
RF7 A-033 No sooting No sooting
RF8A No sooting No sooting

RF8B B-256 No sooting No sooting
RF8C B-263 No sooting No sooting
RF8D B-068 No sooting No sooting
RF8E B-268 No sooting No sooting
RF8F B-248 No sooting No sooting
RF9A C-117 No sooting No sooting
RF9B C-117 No sooting No sooting
RF9C C-259 No sooting No sooting"

NTSB investigators also are intrigued by the aircraft forward door popping open in flight, an explanation supported by red paint smears, outward peeled skin, downward floor beams, and petal shaped bulge at aft midspan latch. "NTSB investigators have suggested unofficially that the streaks the pilots saw could have been light reflections from the skin of the aircraft, tongues of flame from the airliner or the forward door of the aircraft popping open, a possibility that still intrigues investigators, the second official said." AW&ST 3/10/97

Basic NTSB generated evidence for TWA 800 in photos, text, sooting diagrams, tables, and drawings, a NTSB produced report AAR 92/02, and your visual interpretations of NTSB photograph at <http://www.corazon.com/redpaintsmearssoloprint.html> and on NTSB CD-ROM proves that the forward cargo door of TWA 800 opened in flight.

The evidence above proves the the cargo door was not all latched, all locked, and all intact at water impact, as previously believed based upon examination of only eight of the ten cargo door latches. Docket Number SA-516, Exhibit No. 15C, Report Number 97-82, Section 41/42 Joint, Forward Cargo Door, "Examination of the lower lobe forward cargo door showed that

all eight of the door latching cams remain attached (along with pieces of the door itself) to the pins along the lower door sill."

The cause of the door opening in flight is probably the same as UAL 811, as described in AAR 92/02; chafed wiring shorting on door unlatch motor based upon NTSB evidence for TWA 800 in Docket Exhibit 9A page 116: "Some wires found in the section of W480 from forward of station 570 and identified as BMS13-42A had numerous cracks in the insulation. Most of the cracks in this bundle were found to expose the core conductor when examined by microscope. Only within five feet of the aft end of the W480 bundle from station 570-900 were insulation cracks found."

NTSB agrees that a new explanation for the destruction sequence is possible based on new interpretations of the evidence such as shown by the red paint smears. Docket No. SA-516, Exhibit No. 18A, Sequencing Report, page 30: "It is therefore possible that new scenarios (sequences) may emerge as new information is acquired whether it be from newly identified parts, or simply a new interpretation of current information."

The wiring/cargo door explanation for TWA 800 must be thoroughly investigated to rule in or rule out the reasonable conclusions reached by the careful analysis of red paint smears, outward peeled skin, downward floor beams, petal shaped bulge at aft midspan latch, and cracked to bare conductor wires discovered in TWA 800 by NTSB.

The wreckage of TWA 800 is the victim at autopsy. It is the victim saying look at me, I exploded in flight, right there at the aft midspan latch. Just like I did before in 1989 with UAL 811

and left paint smears, outward peeled skin, aft midspan latch rupture, sudden loud sound on the CVR and power cut to the FDR. Don't ignore me; don't deny me; do something about me.

Sincerely,

John Barry Smith
551 Country Club Drive
Carmel Valley, CA 93924
408 659 3552
barry@corazon.com
www.corazon.com

Citizen: USA

Major: US Army Retired

Pilot: Commercial, instrument rated, FAA Part 135 certificate.

Navigator: RA5C Vigilante

Owner: Mooney M20C

Survivor: Sudden night fiery fatal jet plane crash.

Facts presented by NTSB about TWA 800 in exhibits,
photographs, text, drawings, and testimony:

1. right horizontal stab has red paint smear
2. stator blade in right horizontal stab behind engine number 3
3. inward crush top of cargo door
4. top of cargo door attached to hinge
5. petal shape of rupture area around aft midspan latch
6. missing pieces of forward cargo door include locking handle, latching pins, overpressure relief doors, midspan latches
7. rectangle visible of explosive decompression zone of outward peeled skin on right side forward of the wing on right side

8. downward movement of floor beams near cargo door
9. hoop stresses found
10. CVR sudden loud sound
11. FDR abrupt power cut
12. missing turbine blades in engine number 3.
13. soft body impacts on blades in engine number 3.
14. outward peeled skin near top of nose, under belly, and in cargo door area.
15. red paint smears above cargo door on white paint
16. soot on most blades of engine 3.
17. starboard side more damaged than port side
18. intact R2 door near shattered cargo door.
19. poly x is known to be susceptible to chafing and present
20. section 41 is known to be weak
21. history of cargo door openings in past in various airliners
22. EPR problems on aircraft before or during fatal flight.
23. fires in forward cargo hold in the past on Boeing 747s.
24. vertical tears in fuselage skin forward of the wing on the right side
25. singe marks on right side of fuselage show burnt skin, then abruptly at tear line there are no singe marks
26. red paint rubbed off revealing white paint underneath on skin above cargo door area
27. first pieces off plane came from forward cargo hold just forward of the wing
28. at least nine missing never recovered bodies, just fragments
29. initially thought to be a bomb
30. wreckage debris shows cargo door shattered in many pieces
31. aft portion of forward door which includes aft midspan latch and locking handle missing from recovery effort
32. no soot on maintenance hatch
33. no soot on front spar of center wing tank
34. no burned bodies forward of the wing and very few burned at

all

35. aft cargo door sill, latches, and locks recovered
36. forward cargo door sill, latches, and locks not recorded in data base
37. no orange zone pieces recorded in database
38. no orange zone discussion in public record other than identification
39. chafed to bare wires found in cargo door area
40. wiring defects found on Boeing airliners
41. water observed pouring out of forward cargo hold of a Boeing airliner, cargo holds have bilges.
42. no soot on keel beam forward of the wing
43. compression fractures right side forward of the wing
44. tension fractures left side forward of the wing
45. seats in the rows in the explosive shatter zone above cargo door are in red zone and not sooted
46. aft cargo door sill is sooted
47. many witnesses said they saw downward streak that was red-orange
48. NTSB official said possibility of forward door popping open was intriguing.
49. FAA official said, then recanted, that paint smears and structural deformation indicated outward explosion.
50. initial event time was 20:31:12 at 13700 on 17 July 1996 eight miles off coast of Long Island.

Reasonable conclusions derived from facts above:

1. water in forward cargo bay.
2. chafed bare wire touched by water.
3. electrical short occurs.
4. forward door motor turns on to unlatch position.
5. aft midspan latch of forward cargo door partially unlatches.
6. pressurized hull ruptures at aft midspan latch.

7. cargo door tears into pieces, some pieces stay with nose, some don't.
8. shiny metal pieces spin away reflecting evening sunlight and perceived as red-orange streak to observers far away.
9. explosive decompression occurs shattering cargo door area forward of the wing on right side exposing twenty foot by forty foot hole in nose producing sudden loud sound on CVR.
10. 300 knots slipstream tears weakened nose off.
11. ejected debris is ingested by starboard engines which catch fire.
12. wing and wing fuel tanks; engines, tail, and fuselage fall and disintegrate on way down.
13. fiery starboard engine ignites fuel vapor clouds from disintegrating tanks, including center tank.
14. fireball observed on the ground.
15. water impact of wreckage, cargo bay material first to hit water.

From: John Barry Smith <barry@corazon.com>
Date: June 23, 1998 4:43:39 PM PDT
To: Tom.McSweeny@faa.dot.gov
Subject: **My errors corrected**

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Dear Mr. McSweeney, June 23, 1998

NTSB just sent me a two page letter. It was indirectly from Dr. Bernard Loeb. The first page was a form letter from NTSB reporting that I had used the wrong zip code on my hand addressed letter to Dr. Bernard Loeb. The second page was a copy of the misaddressed letter which was my 13 March 1998 letter to everyone addressed above.

This recent letter from NTSB tells me much. It tells me Dr. Bernard Loeb received the letter all right because the correction came from NTSB which means NTSB received it all right and everyone in NTSB knows Dr. Bernard Loeb as the Director of Aviation Safety and point man for TWA 800. I assume that Director Loeb gives close scrutiny to my letters to catch a one digit zip code error from incorrect 20591 to correct 20594. I assume this is a way for Director Loeb to point out errors in my correspondence.

And he's right. It was an error. It may be trivial in this case but potentially catastrophic when flying. As a navigator I recognize a serious error and the lack of attention to detail in a wrong number. It is a mistake I shall remember always. Dr. Bernard Loeb has shown me the need to check my numbers. Accuracy is everything in aviation and one digit being wrong is enough to kill. It happened with a Korean flightcrewmember avoiding the digit '4' and putting in a different number into his inertial navigation computer which then led him, his plane and his passengers over enemy territory which led to a shootdown, KAL 007. It happened to me when hand addressing envelopes of hard copy letters to back up the electronic emails. I checked out the error and traced it to a mixup of zip codes between NTSB and FAA. NTSB is 20594 and FAA is 20591 and I mixed them up.

There is an additional error on my address to Dr. Bernard Loeb. I put "490 L'Enfant Plaza East SW" instead of the correct "490 L'Enfant Plaza SW."

The principle is the same: Errors kill and accuracy counts.

I shall follow the example of NTSB and recognize the error and correct it.

I may have made another error recently in regard to TWA 800: I said that the many large red paint marks between the passenger windows above the forward cargo door of TWA 800 wreckage were 'transfer marks'. I stated they were red marks from the red fuselage skin below coming up and smashing into the white and leaving the red paint on top, similar to UAL 811.

There is now serious dissent that states the many large red paint marks are red paint from overspray of the trim below. The red marks are revealed white paint between the passenger windows is peeled back, revealing the red underneath. Several painters of airliners give conflicting opinion. The conclusive evidence is on the wreckage of TWA 800.

I ask NTSB and Director Loeb, can you confirm the paint sequence for the many large red paint marks between the passenger windows as seen in URL <http://www.corazon.com/redpaintsmearssoloprint.html> and <http://www.corazon.com/TWA800hullrupture.html>? Are they red on top of white paint, or are they red underneath white paint? Is the red underneath or on top?

It's vitally important. If red is underneath white, then I have

made another error and wish to correct it. If red on top of white then it appears that the red could have come from skin below opening up and slamming together causing paint transfer marks, thus confirming cargo door opened in flight.

There is no expense involved, only a short time for a metallurgist to climb up on a stepladder with a magnifying glass and look at the TWA 800 red paint marks.

As NTSB pointed out to me, numbers are to be accurate. I believe NTSB also respects numbers.

That's why eight is not ten. And never will be. That's why all ten of the forward cargo door latches must be recovered and examined and determined to have been operating normally before the cargo door is ruled out as culprit. That conclusive examination of all ten has not been done and that's why the forward cargo door can not be ruled out.

As NTSB told me to use the right numbers in my zip code, I ask NTSB to use the right numbers on the forward cargo door. There are ten identical latching pins and cams on that door and examining only eight is not good, not trivial, and wrong for NTSB.

For me to write NTSB zip code accurately is right for me. To check all ten latches is right for NTSB.

The two missing midspan latches that NTSB have not examined have been shown to carry loads as reported in AAR 92/02 where the aft midspan latch pin showed heat damage from hard contact. All ten latches are vital for proper operation of that door.

Only checking eight of ten is as bad as putting 20591 instead of 20594.

So, I acknowledge an error pointed out to me by NTSB and I remark on another error nearby, and corrected both.

I ask that NTSB do the same for themselves.

There is additional NTSB evidence which is perplexing if the center tank explosion as initial event is to be confirmed:

Docket No. SA-516, Exhibit No. 7A, Structures Group Report, page 33: "5.1 Horizontal Stabilizer, "Some of the items found in the horizontal stabilizer are sections of seat track, a stator blade from turbine section, and glitter." On 5.1.1 Right Horizontal Stabilizer, page 34, "An engine stator blade from turbine section penetrated the upper honeycomb surface near the outboard trailing edge." And same page: "A section of the structure outboard of H7 exhibited evidence of red paint transfer marks on the upper skin (H8); only the remnants of the shattered logo light window remain in the window frame."

Seat track, glitter, stator blade and red paint all had to come from up front because that's where they were. All of these items must have become embedded in the horizontal stabilizer in flight, because it's the only way they could have gotten there based upon the separation of nose and tail long before water impact. The only way for the stuff in front to get to the back in flight is for it to come out of the forward baggage hold. One very good way, a reasonable way, a way that's happened before, is for the forward cargo door to come open inflight and allow glitter contents of cargo bins, a seat track, and red painted door top to be blown aft. It also allows a fodded engine three to cause stator

blade to be thrown out and back into right horizontal stabilizer.

A way to rule a repeat door opening event out is to examine the door and determine if it was functioning normally. That can not be done yet because only eight of ten latches have been recovered as well as on 20% of the door structure. Until door totally recovered it can not be totally ruled out. Until cargo door totally ruled out, TWA 800 investigation is not totally complete.

Examining many large red paint markings can assist in that determination. Are the red paint marks on top of the white paint or underneath the white paint between the passenger windows above the forward cargo door?

Sincerely,

John Barry Smith
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408 659 3552
barry@corazon.com
www.corazon.com
Citizen: USA
Major: US Army Retired
Pilot: Commercial, instrument rated, FAA Part 135 certificate.
Navigator: RA5C Vigilante
Owner: Mooney M20C
Survivor: Sudden night fiery fatal jet plane crash

From: John Barry Smith <barry@corazon.com>

Date: July 2, 1998 9:33:44 PM PDT

To: Tom.McSweeney@faa.dot.gov

Subject: Response to Chairman Hall's letter to Congressman Farr.

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Dear Mr. McSweeney,
1998

July 2,

Congressman Sam Farr sent me a letter on June 16th enclosing a letter to him from Chairman Jim Hall on June 8th discussing TWA 800 and cargo door cause. The letter from Chairman Hall to Congressman Hall contains various inaccuracies which require clarification:

Chairman Hall, "...Mr. Smith expressed his belief that the failure or cargo door led to the accident."

Chairman Hall has misstated my 'belief.' My belief is a wiring short led to the accident. As NTSB states a wiring short led to center tank explosion led to the accident, I say a wiring short led to cargo door rupturing in flight leading to the accident. Cargo door did not 'fail'; it did what it was told to do, unlatch.

Chairman Hall, "...numerous letters..."

Yes, that's correct. Three hundred and thirty eight to NTSB officials since July 20, 1996, three days after TWA 800, all with same consistent explanation; hull rupture forward of the wing on the right side at cargo door area. After researching hull ruptures on high time 747s for seven years, it was readily apparent that TWA 800 matched the previous accidents, one of which was confirmed as wiring/cargo door caused, UAL 811.

Chairman Hall, "Examination of the wreckage has not revealed any evidence..."

This is the Chairman of NTSB's opinion about a probable cause and is same as the Chairman of NTSB's opinion in 1990 about the forward cargo door for UAL 811 in AAR 90/01 which was in error and corrected with AAR 92/02. The forward cargo door has opened and fooled before.

Chairman Hall, "The cargo doors were found with their respective fuselage sections..."

Not accurate. Only 60% in pieces of the aft cargo door and only 20% in pieces of the forward cargo door were found, recovered and examined. Twenty percent of a door is not 'a door.'

Chairman Hall, "...the examination of the cargo door latches found that they were closed at the time of impact."

Not true. There are ten latches on each door and only eight of the forward door were examined because only eight were recovered. Above quote also implies some latches opened but not in flight. What is the status of the forward midspan latches? Found? Open or closed? Damaged? They are not in the wreckage database,

they are not hung on wreckage reconstruction, and they are not discussed in the forward cargo door Exhibit 15C.

Chairman Hall, "Safety Board metallurgists and structures engineers have carefully examined the cargo door..."

Not true because it's impossible. Only 60% in pieces of the aft cargo door and only 20% in pieces of the forward cargo door were found so it was impossible to carefully examine the cargo doors. Missing from the forward cargo door recovery are two midspan latches, manual locking handle, eight viewing ports, two overpressure relief doors, and 80% of the door skin. Most of the forward cargo door is not in wreckage recovery database nor hung on wreckage reconstruction. Who is the 'metallurgist'? Mr. Wildey? Who is the 'structures engineer'? Mr. Breneman?

Asking someone who said something once to say it again is not an impartial confirmation of a questioned evaluation.

Chairman Hall, "...carefully examined...the latching mechanisms..."

Not true. Only eight of the ten latching mechanisms were recovered to be examined. Two latches have not been examined at all.

Chairman Hall, "...carefully examined...the surrounding structure..."

Not accurate. Most of the surrounding structure is missing. Many nearby large red unusual paint markings were not evaluated.

Chairman Hall, "...found no evidence of pre-impact failure..."

Not supported opinion. There is much clear visual evidence of pre-impact failure with petal shaped rupture at aft midspan latch, outward peeled skin on side and belly, unilateral shattered fuselage in cargo door area, downward floor beams, and several large red paint markings between passenger windows only above cargo door.

Chairman Hall, "...no evidence...that the door had opened in flight."

Not true. A FAA structures engineer at one time agreed that paint markings and structural deformation indicated an outward explosion in cargo door area. There is much hard, real, and documented evidence below that forward cargo door ruptured/opened in flight.

1. right horizontal stab has red paint smear
2. stator blade in right horizontal stab behind engine number 3
3. inward crush top of cargo door
4. top of cargo door attached to hinge
5. petal shape of rupture area around aft midspan latch
6. missing pieces of forward cargo door include locking handle, latching pins, overpressure relief doors, midspan latches
7. rectangle visible of explosive decompression zone of outward peeled skin on right side forward of the wing on right side
8. downward movement of floor beams near cargo door
9. hoop stresses found
10. CVR sudden loud sound
11. FDR abrupt power cut
12. missing turbine blades in engine number 3.
13. soft body impacts on blades in engine number 3.
14. outward peeled skin near top of nose, under belly, and in cargo door area.

15. red paint smears above cargo door on white paint
16. soot on most blades of engine 3.
17. starboard side more damaged than port side
18. intact R2 door near shattered cargo door.
19. poly x is known to be susceptible to chafing and present 20.
section 41 is known to be weak
21. history of cargo door openings in past in various airliners
22. EPR problems on aircraft before or during fatal flight.
23. fires in forward cargo hold in the past on Boeing 747s.
24. vertical tears in fuselage skin forward of the wing on the right side
25. singe marks on right side of fuselage show burnt skin, then abruptly at tear line there are no singe marks
26. red paint rubbed off revealing white paint underneath on skin above cargo door area
27. first pieces off plane came from forward cargo hold just forward of the wing
28. at least nine missing never recovered bodies, just fragments
29. initially thought to be a bomb
30. wreckage debris shows cargo door shattered in many pieces
31. TWA 800 matched to AI 182, PA 103, and UAL 811.
32. no soot on maintenance hatch
33. no soot on front spar of center wing tank
34. no burned bodies forward of the wing and very few burned at all
35. aft cargo door sill, latches, and locks recovered
36. forward cargo door sill, latches, and locks not recorded in data base
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46. aft cargo door sill sooted
47. many witnesses said they saw downward streak that was red-orange
48. NTSB official said possibility of forward door popping open was intriguing.
49. FAA official said, then recanted, that paint smears and structural deformation indicated outward explosion.

I again ask for a meeting with an NTSB representative to present my nine years of research for an impartial evaluation of the evidence derived from official governmental aviation agencies.

Sincerely,

John Barry Smith

From: TOPGUNJPD <TOPGUNJPD@aol.com>
Date: May 24, 1998 9:00:39 AM PDT
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Cc: youngsters@gte.net, polytech@att.net, clittle@cari.net,
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CrispyTeal@aol.com, barry@corazon.com, dhendrix@pe.com
Subject: Re: Answer to your E-mail

Come on Pat -

Show me some signs of credibility and reasonableness.

Tell me, are you listening to Rush Limbaugh again??

I like Paul Harvey far more. Besides Paul is an "Aviator"
himself!!

From: John Barry Smith <barry@corazon.com>
Date: May 24, 1998 5:42:24 PM PDT
To: TOPGUNJPD@aol.com
Subject: Wiring/cargo door reasonable line of investigation.

Dear Mr. Dimtroff,

You asked Pat Price for "some signs of credibility and reasonableness." It reminded me of a letter that I had just sent out asking for the same consideration from FAA and NTSB regarding wiring/cargo door explanation for TWA 800. I enclose it below.

Mr. Lyle Streeter of FAA Safety Office has been very helpful in this matter, he may be able to fill in some history of this nine year research project of wiring/cargo door problems in high time 747s.

Respectfully,

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Dear

21 May 1998

The missing eighty percent of the forward cargo door of TWA 800 may be in the Orange debris field. The retrieved items have tag numbers 9000 to 9999:

Public Docket SA-516, Exhibit No. 7A, Structures Group
Chairman's Factual Report of Investigation, page 5, "In addition,
an area 2.7. nautical miles in radius, centered at 40 degrees 38

minutes 54 seconds North, 072 degrees 40 minutes 23 seconds West, was defined. The portions of this area that did not already lie in either the Red, Yellow or Green zone were designated the Orange Zone. The center of this zone corresponds to the last secondary radar return from the aircraft."

"The database created to track recovered parts is known as the TAGS database. A series of metal tags were issued to be attached to the recovered parts as durable identification tags. The metal tags were colored one of six possible colors."

"Orange Recovered from areas other than Areas 1, 2 or 3 during the trawling operation."

"9000-9999 Issued by the trawlers working the western half of the Orange zone."

Gentlemen, please note there are no Orange Zone pieces in the TAGS database. There is no mention anywhere of the pieces which were found in the Orange zone by trawlers and issued 9000 series metal identification tags. Eighty percent of the forward cargo door is missing. The NTSB Trajectory Study Exhibit, page 50, shows pieces from the forward cargo bay were the first to leave TWA 800 and left at the same time as the last secondary radar beacon was returned. It is very likely that the missing pieces of the forward cargo door are in the Orange zone and may have already been retrieved and tagged with 9000 series tags.

Where are the Orange zone pieces recovered from TWA 800? What pieces were they? Where did they come from on the aircraft? Where are the missing eighty per cent of the forward cargo door?

I direct the questions for answers to Mr. David Mayer, the person in charge of the wreckage database.

The larger point is this, chafed wiring to the core is reported on TWA 800 in NTSB Public Docket Exhibit 9A page 116:

"Some wires found in the section of W480 from forward of station 570 and identified as BMS13-42A had numerous cracks in the insulation. Most of the cracks in this bundle were found to expose the core conductor when examined by microscope. Only within five feet of the aft end of the W480 bundle from station 570-900 were insulation cracks found."

Please note that BMS13-42A is known faulty Poly-X wiring. Cargo door location is FS 560-670 and cracked wires are within that zone. Frayed wires in that area have shorted before and caused the forward cargo door to open in flight, NTSB AAR 92/02 UAL 811.

Fuel tank wiring is shown to be chafed to bare wire. The TWA 800 NTSB document shows cargo door area wiring is chafed to bare wire also. FAA and NTSB officials are taking efforts to inspect fuel tank wiring. Cargo door wiring should also be inspected, especially since cargo door wiring is a known killer of nine in UAL 811 accident.

There's more reason to inspect cargo door wiring in 747s as stated in NTSB Exhibits:

- "A. 1996, burning smell in forward cargo compartment, found damaged wiring shorted to ground, charring found.
- B. Oct 12, 1996, Wire bundle arcing and resultant fire at aft

bulkhead of forward lower lobe cargo hold on 747-200 freighter. Source: NTSB Exhibit 9C, Attachments to the Systems Group Factual Report page 44, 45, 46."

These are real reports of real events showing real danger. They are reported to you, Mr. McSweeney.

To be blind to the red paint smears above the cargo door of TWA 800 is not right; your rods and cones respond to color the same as mine. Those red paint smears indicate door opened in flight, just like paint smears indicated door opened in flight for UAL 811. Are they not there? Are there not many? Are they not red?

I see them and Mr. Schalekamp of FAA saw them, so I know they exist as well as being in pictures on the NTSB CD-ROM of TWA 800. They are not going to fade away with time.

The forward cargo door opened in flight for TWA 800. To disregard paint smears, outward peeled skin on the side and bottom of fuselage, and the petal shaped outward bulge at the aft midspan latch of the forward cargo door is very strange, it's not right. It's not worthy of NTSB.

It's one thing to be forceful in prosecuting the center tank as the initial villain, but it's another thing to ignore a previous killer of nine that left very similar evidence to this crime as in another crime.

To check the cargo door wiring as well as the fuel tank wiring is wise and prudent. To not do so is reckless in the face of compelling evidence. I direct that opinion to Dr. Loeb.

A citizen has done much research into high time Boeing 747

accidents involving hull ruptures in flight. I ask that I be allowed a meeting during which I may present evidence for consideration and discussion to government aviation safety officials.

I pose that request to Congressman Farr and Senator McCain. It is apparent the aviation officials themselves will not comply without orders from above. I need help.

To me, the following is reasonable and prudent:

1. Check known faulty Poly X wiring in cargo door areas of early 747s for chafed to bare wires.
2. Offer explanation of red paint smears, outward peeled skin, and petal bulge at aft midspan latch of forward cargo door of TWA 800.
3. Locate missing eighty percent of forward cargo door by either finding it in Orange Zone, Calverton hangar, or locating it on the bottom of the ocean.
4. Meet with citizen, as the suggestion of a Senator, to discuss and consider real evidence as discovered in research of NTSB and FAA documents regarding wiring/cargo door explanation for TWA 800.

Will you please be reasonable and prudent?

I ask that question of all.

Respectfully,
John Barry Smith
551 Country Club Drive,

Carmel Valley, CA 93924
408 659 3552
barry@corazon.com

From: John Barry Smith <barry@corazon.com>
Date: May 26, 1998 9:04:52 AM PDT
To: TOPGUNJPD@aol.com
Subject: **Email tone for wiring.**

Mr. Dimtroff, I just sent this to Pat Price. All guys on the net about TWA 800 are not wacky conspiratorialists. Lyle Streeter has much background on wiring/cargo door explanation. Who is going to replace Guy Gardner?

Regards,
John Barry Smith

Dear Pat, as I have watched the missile guys/conspiracy guys for the last year I have lost respect for them and their reasoning power. Their facts do not back up their claims and they act a certain way.

Your facts do back up your claims but you still act the same way.

You don't need to.

This is the way you act which is the way the conspiracy guys act:

1. Capitals in inappropriate places, as if the reader is stupid and needs to be told which words are important.
2. Asking questions that aren't, but are really statements.

3. Assuming coverup and lies everywhere.

4. Use of religious terms such as 'truth,' and 'light'.

5. Anger at personal statements such as watching a TV show like Limbaugh.

The stages of discovery are:

Surprise

Astonishment

Outrage

Indignation

Anger

Frustration

Disappointment

Discouragement

Hope.

You are stuck in the outrage and anger stage.

You do not do two things the conspiracy guys do, spell wrong and swear. Good.

You have the facts on your side, that's all you need. These officials are throwing your stuff away as soon as you start capitalizing words and spouting moral generalities.

Wiring is a problem, help these guys by giving them more facts, not trying to make them feel bad for being slow.

Cheers,

John Barry Smith

From: TOPGUNJPD <TOPGUNJPD@aol.com>
Date: May 26, 1998 10:12:56 PM PDT
To: barry@corazon.com
Subject: Re: Email tone for wiring.

Thanks John! Very Intuitive.

JD

From: John Barry Smith <barry@corazon.com>
Date: May 27, 1998 9:03:44 AM PDT
To: TOPGUNJPD@aol.com
Subject: Prudent

pruđent \ˈprud-ent\ adj 1 : shrewd in the management of practical affairs 2 : cautious, discreet 3 : provident, frugal syn judicious, foresighted, sensible, sane ~ pruđence \-ens\ n ~ pruđenđtial \pru-ˈden-che\ adj ~ pruđently adv

Dear JD, this is JB,

FAA, Boeing, NTSB now agree that wiring is a problem in airliners. OK, they had evidence of chafed/frayed/cracked wiring in tubes in fuel tanks on a few planes so they expanded the inspection to many planes. That's prudent.

However, there is another wiring problem that should be inspected also, that's the chafed wiring causing cargo door motor to short on. That has happened before on UAL 811 and PA 125 and UAL preflight, three NTSB confirmed events as described in

NTSB AAR 92/02.

And cracked to bare wire has been discovered in the same fuselage station area in TWA 800 as was in UAL 811.

TWA 800 NTSB Public Docket Exhibit 9A page 116:

"Some wires found in the section of W480 from forward of station 570 and identified as BMS13-42A had numerous cracks in the insulation. Most of the cracks in this bundle were found to expose the core conductor when examined by microscope. Only within five feet of the aft end of the W480 bundle from station 570-900 were insulation cracks found." Please note that BMS13-42A is known faulty Poly-X wiring. Cargo door location is FS 560-670 and cracked wires are within that zone.

When three high time Boeing 747s have confirmed cargo door wiring problems, and a current accident plane, TWA 800, is found to have cracked to bare wire in same general area, it is prudent to inspect all high time 747s for cracked to bare wire cargo door places.

After UAL preflight uncommanded opening of cargo door the following recommendations were made to FAA:

NTSB Safety Recommendations Rprt_Nbr: A-91-83 and -84

(1) the wiring bundle in the area normally covered by the conduit for the presence of damaged insulation (using either an electrical test method or visual examination);

(2) the conduit support bracket and attached standoff pin on the upper arm of the forward lift actuator mechanism;

(3) the flexible conduit for the presence of cracking in the convoluted innercore.

After UAL 811: NTSB AAR 92/02 UAL 811 cargo door accident:

Plug P3 and Plug P4 at a distance between three to four inches from plug pin tips. The P4 damage location may correspond to wire bundle clamp positions. These areas are where the chafed bare wires shorted on the door latch actuator motor to the unlatch position.

Other wiring events in 747 forward cargo holds:

A. 1996, burning smell in forward cargo compartment, found damaged wiring

shorted to ground, charring found.

B. Oct 12, 1996, Wire bundle arcing and resultant fire at aft bulkhead of

forward lower lobe cargo hold on 747-200 freighter.

Source: NTSB Exhibit 9C, Attachments to the Systems Group Factual Report page 44, 45, 46:

It is cautious, sensible, foresighted and shrewd to check for chafed to bare wire in the cargo door area for high time Boeing 747s, based on past events and newly discovered evidence.

The authorities are in the right church, but the wrong pew for TWA 800.

The right church is wiring; the right pew is cargo door related wiring.

Do you agree?

<http://www.corazon.com/correspondence.html> are pages of all my correspondence from government officials.

Regards,

John Barry Smith
551 Country Club Drive,
Carmel Valley, CA 93924
408 659 3552
barry@corazon.com
www.corazon.com

From: TOPGUNJPD@aol.com
Date: May 27, 1998 10:36:34 PM PDT
To: barry@corazon.com
Subject: **Re: Prudent**

JB --

Thanks for the good info. I will check it out and see what we've done on this.

This is the kind of valuable info I need to do my job. I appreciate your level of sanity when dealing with this subject. It's a subject that's charged emotionally and unfortunately -- people start to lose their focus -- as we have seen.

Thanks again.

JD

From: TOPGUNJPD@aol.com
Date: May 27, 1998 10:41:00 PM PDT
To: barry@corazon.com
Subject: **Re: Email tone for wiring.**

Don't know yet who's replacing Guy Gardener. Jane Garvey, Administrator, will be here tomorrow morning for a briefing.

First time I 've seen her!

JD

From: John Barry Smith <barry@corazon.com>
Date: May 28, 1998 12:34:07 AM PDT
To: TOPGUNJPD@aol.com
Subject: **Re: Email tone for wiring.**

Don't know yet who's replacing Guy Gardener. Jane Garvey, Administrator, will be here tomorrow morning for a briefing.

First time I 've seen her!

JD

Has she soloed yet?

Being up in the sky alone puts a certain mental set into a pilot.

It's a set that really relies on the ground for help. There's nothing like the reassuring sound of ATC saying, "Radar Contact."

Cheers,
JB

From: John Barry Smith <barry@corazon.com>
Date: May 28, 1998 9:29:14 AM PDT
To: TOPGUNJPD@aol.com
Subject: Email level of comm

. I appreciate your level of sanity when dealing with this subject. It's a subject that's charged emotionally and unfortunately -- people start to lose their focus -- as we have seen.

Dear JD,

Email is an interesting phenomenon. I've been doing it for four years. As an audiologist in another life, I studied communication modes. Email is unique. There's mime, voice, telegraph morse code, radio, TV, phone, letter, and now email. It's a different level.

Email has the power of the written word yet none of the reflective perspective of a letter. Email has the emotional impact of a telephone call but none of the qualifying signs of laughs or sighs. Email has the persuasive force of a face to face but none of the disclaiming aspects of body language. So, emoticons were born. I can't stand them. It is a symbol mixed with text, it doesn't

work for me.

I've flamed with the best and gotten worse. It is definitely counter productive and I regret all the shoot from the hip emails sent in haste, without proof reading, and without contemplation. In interacting with government, it is especially important to be polite and factual at all times. I have received correspondence from Sam Farr, my congressman for Carmel Valley, and Senator McCain regarding my wiring/cargo door explanation over the past year and a half. They set the example.

Their letters are always short, polite, helpful and encouraging. They usually enclose any relevant correspondence they have received.

Email keeps an electronic record which is like a big file cabinet. It can be quoted from easily. It can be sent to many quickly.

The bad part is that one error is magnified. I've sent stuff to the wrong person because of one click a fraction of an inch wrong. Very embarrassing.

In slogging through the jungle of TWA 800 I often wonder why the persons feel the need to shout with capitals. The facts will speak loud enough if correct and relevant.

And I also wonder why the persons explain every rebutting fact to their theory with, "It's coverup and the person is part of it."

This conspiracy nonsense is out of hand. These are plane crashes not shadowy dealings with money or sex.

I even go so far as to say no conspiracy, no plot, no coverup for

AI 182, PA 103 and of course TWA 800. All have the same mechanical boring cause according to my research, wiring short to door unlatch motor. It has profound implications if confirmed by evidence.

The wiring/cargo door explanation should be ruled in or ruled out, one way or the other, it should not be allowed to dangle.

The missile guys will always be able to say missile until that streak is adequately explained. Wiring/cargo door does that as spinning piece of shiny metal flying away after door rupture and reflecting evening sun as red-orange streak. That can be replicated by tossing out some shiny metal at 13700 feet at 300 knots with same sun angle and time at TWA 800 off Long Island.

It gets back to prudent. Although the implications are difficult to contemplate, wiring/cargo door explanation for TWA 800 and others should be checked out because it is a reasonable line of investigation based on precedent of UAL 811 and chafed to bare wire found in TWA 800. It is a mechanical explanation and it includes NTSB center tank explanation too.

My correspondence with FAA officials Bob Breneman and Neil Schalekamp of FAA Northwest Region are on web site www.corazon.com. Mr. Schalekamp agreed the red paint smears indicated an outward explosion but recanted a few weeks later with no explanation of the red paint smears.

It is prudent to check out door more than has been done by only checking eight of ten latches when an FAA official agrees the door may have opened in flight.

My efforts have been to persuade NTSB that it is a reasonable

line of investigation equal to that given to bomb, missile, or center tank as initial event.

Senator McCain suggested to the NTSB that they meet with me to relate my concerns about the forward cargo door. Chairman Hall declined. That was not prudent.

NTSB is acting as prosecutor of center tank to the exclusion of other reasonable mechanical explanations with precedent. And actually, center tank and cargo door were innocent bystanders.

Wiring is the culprit in high time 747 hull ruptures forward of the wing, according to my research of nine years.

But, that's me, using the informality of email to attempt to present my research about a subject I know a lot about, the least of which is being there, a sudden night fiery fatal jet airplane crash. I speak as survivor, pilot, and FAA commercial licensed, instrument rated, and former FAA Part 135 certificate holder.

Mr. Streeter of FAA FOIA asked several very interesting questions at the TWA 800 public hearing which revealed he has an open mind. He asked about hoop stresses and the strange action of the manufacturing access hatch. Both questions went to the heart of the matter, center tank was not initial event because of what the hatch did and looked like, and the hoop stress revealed door opened in flight. He was very insightful about the crash, Maybe that's why he is in the Office of Accident Investigation. If you have questions about wiring/ cargo door, Mr. Streeter has the answers one way or the other.

Regards,
JB

From: John Barry Smith <barry@corazon.com>
Date: May 28, 1998 10:38:25 PM PDT
To: TOPGUNJPD@aol.com
Subject: Request to correspond officially

JD,

request to email you officially at
John_Dimtroff@admin.tc.faa.gov email address, regarding TWA
800, shorted wiring in airliners, and cargo doors.

One is formal, and TOPGUNJPD@aol.com would be informal.

JB.

From: John Barry Smith <barry@corazon.com>
Date: May 29, 1998 12:17:14 PM PDT
To: TOPGUNJPD@aol.com
Subject: Wiring/cargo door

Dear JD,

I would have added
John_Dimtroff@admin.tc.faa.gov
as recipient to the email below just sent to those addressed but

would prefer to have your permission first to address you officially, during working hours.

After your reply that you appreciated factual data and citizens should be reasonable I decided to leave out the emotional stuff and concentrate of facts for this email. It does have an impact.

Cheers,
JB

Sam Farr
Member of Congress
17th District, California
House of Representatives
Congress of the United States
1117 Longworth Bldg
Washington, DC 20515-2861

John McCain III
Member of Congress
Chairman, Committee on Commerce, Science, and
Transportation
United States Senate
241 Russell Senate Office Bldg
Washington, DC 20510-0303

James Hall
Chairman,
National Transportation Safety Board
490 L'Enfant Plaza East, SW.
Washington, DC 20594

Robert Francis II

Vice Chairman
National Transportation Safety Board
490 L'Enfant Plaza East, SW.
Washington, DC 20594

Bernard Loeb,
Director of Aviation Safety
National Transportation Safety Board
490 L'Enfant Plaza East, SW.
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Thomas E. Haueter
Chief, Major Investigations Division
National Transportation Safety Board
490 L'Enfant Plaza East, SW.
Washington, DC 20594

John B. Drake
Division Chief
Aviation Engineering Division
National Transportation Safety Board
490 L'Enfant Plaza East, SW.
Washington, DC 20594

Al Dickinson,
Lead Investigator, TWA 800
National Transportation Safety Board
490 L'Enfant Plaza East, SW.
Washington, DC 20594

Ron Schleede,
Investigator, TWA 800
National Transportation Safety Board

490 L'Enfant Plaza East, SW.
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James F. Wildey II
National Resource Specialist
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490 L'Enfant Plaza East, SW.
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David Mayer
NTSB Wreckage Database Manager
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Thomas McSweeny
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Neil Schalekamp
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Transport Airplane Directorate, ANM-100
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Renton, WA 98055-4056

Bob Breneman,
Aerospace Engineer,
Federal Aviation Administration
Transport Airplane Directorate, ANM-100
1601 Lind Ave. S.W.
Renton, WA 98055-4056

Dear elected, appointed, and employed US government officials
involved with TWA 800 investigation, 29 May 1998

Gentleman, I respectfully address all as if this were a cyberspace meeting and it is my turn to speak. Most of us have exchanged letters, emails, conversations in person or telephone calls in the past. The case for wiring/cargo door opening in flight as an explanation for the TWA accident grows stronger every day with evidence such as this:

Quote from TWA 800 Public Docket 516A, Exhibit 9A Systems Group Chairman's Factual report of Investigation, Page 47, "A Boeing telefax of June 25, 1997, stated that: The Poly-X wire was used as general purpose wire on the RA164 (TWA 800) aircraft. Wire insulation known as Poly-X had three in-service

problems:

- Abrasion of the insulation in bundles installed in high vibration areas.

(This problem was corrected by Boeing Service Bulletin No. 747-71-7105, Dated July 19, 1974)

- Random flaking of the topcoat.

- Insulation radial cracks in tight bend radii.

Radial cracking phenomenon of the Poly-X wire was mainly associated with mechanical stress. Bend radius is the largest contributor to mechanical stress in installed wire or cable.

Presence of moisture in conjunction with mechanical stress is also a contributor."

The Systems Exhibit 9A continues on same page 47, "Evidence of arcing or short circuiting was found in the fuselage of N93119, (TWA 800) in addition to what was found in the wiring from the raceway below the left cabin floor and near the forward wing spar.

The Systems Exhibit 9A continues, page 116:

"Some wires found in the section of W480 from forward of station 570 and identified as BMS13-42A had numerous cracks in the insulation. Most of the cracks in this bundle were found to expose the core conductor when examined by microscope. Only within five feet of the aft end of the W480 bundle from station 570-900 were insulation cracks found."

(Please note that BMS13-42A is Poly-X wiring. Cargo door location is FS 560-670 and cracked wires discovered are within that zone. Frayed wires in that area have shorted before and caused the forward cargo door to open in flight, NTSB AAR 92/02 UAL 811. Water has been seen pouring out of a forward cargo bay of a Boeing airliner. Water and leaking electricity

make a powerful conductor. Both are known to exist in Boeing airliners.)

NTSB Exhibit 9C, Attachments to the Systems Group Factual Report, page 44:

"Response: There was one reported wire insulation abrasion on the 747 in 1996. The operator reported that a burning smell was noted during cargo loading in the forward cargo compartment. Cargo loading system wiring was found damaged and shorted to ground below the cargo floor at station 650, below the aft right corner of a large ball mat. A wiring loom "p" clip was found broken enabling the wire to chafe against structure. A hole was found burned through the bottom angle of the cargo floor cross member, where the wiring clip attached, and charring was evident in the surrounding insulation blanket. Repairs were made."

Page 44: "Response: There were seven reported wiring fires on the 747 in 1996."

Page 45: "f. 747-200 reported on October 12, 1996
Wire bundle arcing and resultant fire at aft bulkhead of forward lower lobe cargo hold on a 747-200 freighter. This occurred with the airplane on the ground, during post C-check functional test. Note: Portions of the damaged wire bundles were forwarded to Boeing for evaluation in determining the cause of the damage. The results of the analysis indicated the primary conductor(s) sustained mechanical or thermal damage prior to the application of electrical power."

Page 46, "g. 747-400 reported on November 1, 1997, (see response to question 1)

There was one reported wire insulation abrasion on the 747 in

1996. There operator reported that a burning smell was noted during cargo loading in the forward cargo compartment. Cargo loading system wiring was found damaged and shorted to ground below the cargo floor at station 650, below the aft right corner of a large ball mat. A wiring loom "p" clip was found broken enabling the wire to chafe against structure. A hole was found burned through the bottom angle of the cargo floor cross member, where the wiring clip attached, and charring was evident in the surrounding insulation blanket. Repairs were made."

Page 57, Letter from Commander Naval Air Systems Command to National Electrical Manufacturers Association, 1 Oct 82, "As you know, the problems with poly-x wire are well known to headquarters and its use had been curtailed."

FAA Aircraft Certification Service Mission Statement:

<http://www.faa.gov/avr/air/hq/mission.htm>

"Aviation Safety Begins With Safe Aircraft

The Aircraft Certification Service is responsible for the safety of civil aircraft. The inherent safety of an aircraft is a function of its design integrity and its manufacturing quality. It is the mission of the Aircraft Certification Service to promote safety by:

Prescribing safety standards governing the design, production quality, and airworthiness of civil aeronautical products;

Administering design, production quality, and finished product certification programs in compliance with the prescribed safety standards;

Monitoring safety performance, and acting to provide continued operational safety of aircraft;

Working in partnership with aviation safety authorities of other countries to continuously improve the safety of the international air transportation system and achieve international harmonization

of aircraft certification standards and practices.

Our program priorities are:

ÊÊÊÊÊFIRST: Continued operational safety including surveillance.

ÊÊÊÊÊSECOND: Safety standards, policies, and procedures.

ÊÊÊÊÊTHIRD: Type, production, and airworthiness certification."

Text of 1 May 98 letter from Congressman Farr:

"Dear Mr. Smith:

Thank you for contacting me recently regarding your ongoing interest in the forward cargo door of TWA flight 800. I appreciated hearing from you.

I am, of course, glad to help, and am therefore in touch with the appropriate government agency on your behalf. I will write to you again as soon as a response is available, but please let me know if there is anything further that I can do for you in the interim.

Sincerely,

Sam Farr
Member of Congress

Text of 12/19/86 email Senator McCain:

Dear Mr. Smith,

Thank you again for contacting me with your concerns regarding the potential hazards involving Boeing 747s.

As you know, I have passed the information you sent to Chris

Paul and he has informed me of your findings. I have since forwarded the material you sent to the Commerce, Science and Transportation Committee for their review.

Again, thank you for contacting me. I am always glad to have the opportunity to be of assistance.

Sincerely,
John McCain
U.S. Senator
JM/jes

Excerpt of 4 Mar 98 letter from Senator John McCain to me: "I have received your letter regarding the forward cargo door of TWA Flight 800, and your interest in meeting with someone at the National Transportation Safety Board (NTSB) relating your concerns.

I have contacted the NTSB on your behalf, about your concerns. I have asked for a prompt response to be sent directly to you."

FAA and NTSB and manufacturers are taking efforts to inspect fuel tank wiring on all airliners. Cargo door wiring on Boeing 747s should also be inspected. A wiring caused inadvertent opening of the forward cargo door of TWA 800 in flight should also be investigated.

It's prudent.

1. Check known faulty Poly X wiring in cargo door areas of early 747s for chafed to bare wires.
2. Figure out explanation of red paint smears, outward peeled skin, and petal bulge at aft midspan latch of forward cargo door of TWA 800.

3. Attempt to locate missing eighty percent of forward cargo door by either finding it in Orange Zone, Calverton hangar, or from the bottom of the ocean.

4. Meet face to face with a citizen, as the suggestion of Senator McCain, to discuss and consider real evidence as discovered in research of NTSB and FAA documents regarding wiring/cargo door explanation for TWA 800.

Following the example of Congressman Farr of open discussion of TWA 800 and the inclusion of relevant correspondence in letters, I have put all your correspondence to me on my web site www.corazon.com. All emails and scanned letters are seen at [<http://www.corazon.com/correspondence.html>](http://www.corazon.com/correspondence.html)

Democracy and the internet in action.

Regards,

John Barry Smith
551 Country Club Drive,
Carmel Valley, CA 93924
408 659 3552
barry@corazon.com

From: TOPGUNJPD@aol.com

Date: May 29, 1998 12:45:09 PM PDT

To: barry@corazon.com

Subject: Re: Request to correspond officially

JB --

A lot of things have occurred in my office this past week. I don't know what is going on behind my back, but I have the feeling that I know too much! I'm starting to feel like Ed Block!

Also starting to fear for my well-being. I may need protection. Am considering my Congressperson.

My official E-Mail is: John.Dimtroff@FAA.DOT.GOV

Not case specific.

Gotta go. Trying to locate Chicago Tribune office for an inquiry to them about an article they wrote May 24th.

Take care.

JD

From: John Barry Smith <barry@corazon.com>

Date: May 29, 1998 8:22:01 PM PDT

To: TOPGUNJPD@aol.com

Subject: Relax

JB --

A lot of things have occurred in my office this past week. I don't

know what
is going on behind my back,

Normal office politicking when Gardner moved away and
everything shifts.

but I have the feeling that I know too much!

No one knows too much.

I'm
starting to feel like Ed Block!

Don't we all at times. Semi-hysterical?

Also starting to fear for my well-being.

Come on.

I may need protection.

From what? Award committees who want to give you something
for pursuing the cause of TWA 800 as wiring/cargo door rupture?
And the evidence keeps on supporting the explanation.

Am
considering my Congressperson.

I love my congressperson, I put his letters on my website.
Everything is out in the open. We are the good guys. We are calm

with reasonable explanations based on the evidence. <http://www.corazon.com/correspondence.html>

We all say wiring is a problem.

Mr. Streeter did. Boeing did. FAA did. NTSB did, and I did.

We are all in the same church, different pews. Where specifically is the problem wiring.

Lyle.Streeter@faa.dot.gov
Neil_Schalekamp@admin.tc.faa.gov
Bob_Breneman@admin.tc.faa.gov
Ronald_Wojnar@admin.tc.faa.gov
Tom_McSweeny@admin.tc.faa.gov

are all aware of wiring/cargo door explanation and have been for many many months. They have written letters to my congressman and Senator McCain discussing the very matter of bare chafed wire shorts on door motor as initial event for TWA 800.

May I suggest that you email Mr. Schalekamp of FAA and discuss his statement of 'paint markings and structural deformation indicate outward explosion.'? That means cargo door opened in flight. That means wiring could have done it because UAL 811 had shorted wiring cause cargo door to open in flight. That means cargo door wiring should be inspected in Boeing 747 aircraft. It is not being inspected now, the fuel tank wiring is being checked while ignoring nearby wiring which has been known to short and kill nine.

It is prudent JD and FAA and safety and Boeing and everyone

want to be prudent when it comes to aviation safety of US manufactured airliners.

Mr. Streeter of FAA OAI believes that too. He would be interesting to talk to.

My official E-Mail is: John.Dimtroff@FAA.DOT.GOV

note the address I have has an underline and yours has a period. Which is right? 'n_D' or 'n.D'?

Gotta go. Trying to locate Chicago Tribune office for an inquiry to them about an article they wrote May 24th.

I researched the paper on the net but found nothing, what was it about?

I'm having a discussion with Aviation Week about an article I put on my website and they want it off. It's about the streak of 800 being a piece of the plane flying off and the cause possibly a 'forward door popping open' as said by an NTSB official to David Fulghum of AvWeek. It supports wiring/cargo door explanation but the NTSB official was anonymous in article.

Josh Kerns of KOMO TV of ABC Seattle flew a crew down to interview me a few weeks ago. He would be very interesting to talk to, too. He knows and cares about Boeing 747s and thinks there is something to the wiring/cargo door explanation for TWA 800 as described on my website at www.corazon.com

JoshK@komotv.com is his email. His is a powerful sympathetic

ear.

Take care.

OK, but any special reason why more than usual?

We are the good guys, we are saving lives by preventing plane crashes for reasons we have discovered.

Cheers

JB

Something to cheer you up below: This is from a TWA 800 discussion group I contribute to, mainly rebutting the many missile guys in it. I'm JBS below.

WHY DID THE CHICKEN CROSS THE ROAD?

Plato:

For the greater good.

Captain James T. Kirk:

To boldly go where no chicken has gone before.

Karl Marx:

It was an historical inevitability.

Thomas de Torquemada:

Give me ten minutes with the chicken and I'll find out.

Timothy Leary:

Because that's the only kind of trip the Establishment would let it take.

Nietzsche:

Because if you gaze too long across the Road, the Road gazes also across you.

Oliver North:

National Security was at stake.

Carl Jung:

The confluence of events in the cultural gestalt necessitated that individual chickens cross roads at this historical juncture, and therefore synchronicitously brought such occurrences into being.

Jean-Paul Sartre:

In order to act in good faith and be true to itself, the chicken found it necessary to cross the road.

Ludwig Wittgenstein:

The possibility of "crossing" was encoded into the objects "chicken" and "road," and circumstances came into being which caused the actualization of this potential occurrence.

Albert Einstein:

Whether the chicken crossed the road or the road crossed the chicken depends upon your frame of reference.

Bhuddha:

If you ask this question, you deny your own chicken-nature.

Salvador Dali:
The Fish.

Emily Dickinson:
Because it could not stop for death.

Ralph Waldo Emerson:
It didn't cross the road; it transcended it.

Johann Friedrich von Goethe:
The eternal hen-principle made it do it.

Ernest Hemingway:
To die. In the rain.

David Hume:
Out of custom and habit.

Saddam Hussein:
This was an unprovoked act of rebellion and we were quite
justified in
dropping 50 tons of nerve gas on it.

Jack Nicholson:
'Cause it fucking wanted to, man. That's the goddamned reason.

Ronald Reagan:
I forget.

John Sununu:
The Air Force was only too happy to provide the transportation,

so quite
understandably the chicken availed himself of the opportunity.

Sappho:
Due to the loveliness of the hen on the other side, more fair than
all of
Hellas' fine armies.

Henry David Thoreau:
To live deliberately ... and suck all the marrow out of life.

Machiavelli:
So that its subjects will view it with admiration, as a chicken
which has the
daring and courage to boldly cross the road, but also with fear,
for whom
among them has the strength to contend with such a paragon of
avian virtue?
In such a manner is the princely chicken's dominion maintained.

Hippocrates:
Because of an excess of pleghm in its pancreas.

Andersen Consultant:
Deregulation of the chicken's side of the road was threatening its
dominant
market position. The chicken was faced with significant
challenges to create
and develop the competencies required for the newly competitive
market.
Andersen Consulting, in a partnering relationship with the client,
helped the
chicken by rethinking its physical distribution strategy and

implementation processes. Using the Poultry Integration Model (PIM) Andersen helped the chicken use its skills, methodologies, knowledge capital and experiences to align the chicken's people, processes and technology in support of its overall strategy within a Program Management framework. Andersen Consulting convened a diverse cross-spectrum of road analysts and best chickens along with Andersen consultants with deep skills in the transportation industry to engage in a two-day itinerary of meetings in order to leverage their personal knowledge capital, both tacit and explicit, and to enable them to synergize with each other in order to achieve the implicit goals of delivering and successfully architecting and implementing an enterprise-wide value framework across the continuum of poultry cross-media processes. The meeting was held in a park like setting enabling and creating an impactful environment which was strategically based, industry-focused, and built upon a consistent, clear, and unified market message and aligned with the chicken's mission, vision, and core values. This was conducive towards the creation of a total business integration solution. Andersen Consulting helped the

chicken change to become more successful.

Ian Goddard:

/^^^^^^^^^^^^^^\ Gestalt (Meme) of Chicken X Road /
^^^^^^^^^^^^^^\
/visual memory\ interassociative _____ / auditory \
| /-----|-----\ memory / syntax \ lepisodic
memory|
| | recog-nition | _____/<--|-----\
|
| ___|___ | | flush-vector| spirall _____ |
|
| /images \ | ___|___ ___V___ loop|/"chicken"\ |
|
| / of bird \ | /deep \<-----/lexical\<---|-\ "niwatori"
|
| \ and road/<--|-->/concepts\--->/concepts \---|-->"Henne" /
|
| _____/ | _____/ _____/ | _____/

Socrates:

You already know the answer.

Descartes:

The chicken thought "I cross the road, therefore I am." The chicken's trajectory was described by the equation for a straight line.

Newton:

The chicken applied force to its body and accelerated across the

road.

Linus Pauling:

A very complex chain of biochemical reactions enabled the chicken to apply force to its body and cross the road.

Heisenberg:

Any attempt to observe the chicken crossing the road will cause it not to cross the road. Therefore we cannot know when or why the chicken crosses the road.

Feynman:

The chicken's movement across the road was determined by the path integral of its interactions with a cloud of virtual chickens.

Everett:

The chicken only crossed the road in one of multiple parallel universes. Why didn't it cross the road in the other universes?

Turing:

The chicken's brain was in a state such that when it observed the road, it moved across the road and entered a different state. It is unsolvable whether the chicken halted.

Don Knuth:

The average and worst-case number of steps the chicken needed

to cross
the road can be determined by careful analysis. See volume 17,
pp. 353-375.

Stephen Cook:

The problem of finding out why the chicken crossed the road is
NP-complete,
requiring exponential time to solve as we increase the number of
variables
being considered.

Minsky:

The chicken's behavior emerged from the interaction of a society
of
chicken-agents within its mind.

McCarthy:

The chicken used predicate calculus to prove that it had to cross
the road,
given what it knew about its situation. The program for its
behavior is a
recursive function in CLOS (Chicken Lisp On-road System).

Schank:

The chicken was following a standard chicken-crossing-road
script.

Longley:

The chicken had no intention of crossing the road, it just did, in
response
to some stimulus. I'm constructing a large database of chicken-
crossing the
road behaviors to identify ways to control such chickens. See the

following

10 pages of quotes from Quine, Skinner, et al.

Chomsky:

The chicken crossing the road can be viewed as a linguistic event, described by a context-sensitive grammar. However, the news media did not fully report why the chicken crossed the road.

Orwell:

The pigs persuaded the chicken to cross the road, as part of their plot to take over the farm. They hoped the farmer would get struck by a car while chasing the chicken.

JBS:

Chafed wiring, sudden loud sound, coop door opened. On the website, of course.

Goddard:

Chicken is a superset of cock. The GovtMedia are concealing the true nature of cock.

Sammy:

Clinton arranged a plot involving Turkey and the Cluck Klax Klan.

Clinton:

To find Hope in Arkansas.

BillyBob:

Why doesn't Chris Olsson believe one or all of the above theories?

Tom Twerp:

Witness C doesn't want me to tell you about the chicken.

Mike Hull:

It was a Hezbollah suicide attack-chicken.

Fred Meyer:

Did I say it crossed the road? I meant it didn't cross the road.

OK, it

actually walked along the road a bit and then there was a flak explosion to

my left. Actually when I said to the left I meant straight in front of me.

Well OK so it was to the right of me but it was definitely a flak attack on

that chicken. I saw chickens in Vietnam, so I know about these things.

Chris Baur:

The chicken was crossing the road in the other direction, but I can't tell

you about that right now.

Kallstrom:

I hope to find some evidence about the chicken any day now.

Jim Hall:

I want the American public to understand that American chickens

are perfectly
safe and we are going to get to bottom of this chicken some day.

Marshall Houston:
To save it's eternal soul.

Dana International:
The chicken was passed over for promotion and had to leave that
side of the
road.

Bill Serrahn:
I've got a box full of FOIA stuff on that chicken, but I don't want
these
secrets to get into the hands of chickens.

Stan Martin:
If JBS knew jack shit about chickens he would know that the
coop door can't
open. It's says so the NorthWorst squawk sheet.

George Donaldson:
The chicken was trailing feathers which caught fire and burned
its ass. OK,
it was hit by a stealth missile that nobody could see.

Elmer Barr:
None of the witnesses could have seen that chicken arrive on the
other side
of the road in the 3 to 4 seconds between leaving one kerbside
and reaching
the other. Nobody has interviewed that chicken properly.

Admiral Moron:

Send us \$35 dollars and we'll send you some free chicken shit.

Tax
deductable.

Joe Shepherd:

My post-grad class built a cannon which we filled with methane producing chicken shit from AIM and we fired that chicken clear across the road. We've done that 36 times now, but we need to do it some more to be sure that we got the mixture and trajectory right. We've bought an awful lot of shit from AIM.

From: TOPGUNJPD@aol.com
Date: May 30, 1998 8:23:57 AM PDT
To: barry@corazon.com
Subject: Re: Relax

Thanks JB.

It was a bad day. I'm still mourning the death of my best friend's son (21 year sold and a budding aviatorwho already made it into the aviation record books) and a little glass of wine and voila. Like you said the joys of E-Mail.

I'm doing better -- not as depressed, but why do a good kid have to go so soon!!

I'm going flying today in my Skyhawk, without the wine - if the weather holds.

I like to fly it about once a week to keep the engine lubed.

Are you still current?

JD

From: TOPGUNJPD@aol.com
Date: May 30, 1998 8:43:26 AM PDT
To: barry@corazon.com
Subject: **Re: Wiring/cargo door**

That's fine.

But be cautious in the sense that the "Official E-MAIL" can be monitored by our staff. That is not a paranoid statement! They make sure we all know it, partly to prevent frivolous use (by all) of the official system.

But, I trust you will use fair judgement on the official site, well, here too.

By the way - what is your stock in life, in other words, what are you doing

these days? A commercial pilot or politician or movie producer??

Can you clue me in a little??

JD

From: John Barry Smith <barry@corazon.com>
Date: May 30, 1998 11:08:07 AM PDT
To: TOPGUNJPD@aol.com
Subject: **Young death**

It was a bad day. I'm still mourning the death of my best friend's son (21 year sold and a budding aviatorwho already made it into the aviation record books)

Dear JD,

A parent's nighmare. I have a six year old daughter that even a cut finger sends a shiver through me as if it's me.

How did it happen? A transportation accident. The kind that can be prevented instead of this crazy human sacrifice we call car accidents to appease the 'machine' god? I love machines, computer, bike, plane, car, and I know they don't love me. They are to be treated like the 'machines' they are, replaceable. Son's are not.

why do a good kid have to go so soon!!

Indifference from most of society. A road, the software, should be designed so that the hardware, the car, can crash, no problem. Just start again. For a 21 year old to make one mistake in his life, and pass on a curve, or fall asleep at the wheel, and then die for the error is crazy. The human circulation system does not have blood cells coming at each other and neither should the cars in the arteries called roads. One way always, never cars coming at you, or you coming at them.

I'm going flying today in my Skyhawk,
I like to fly it about once a week to keep the engine lubed.

Are you still current?

No, and you explained it above. It's smart to fly it once a week. As soon as I read, "Skyhawk," I thought, 'Ah, a pilot, he understands airplanes!'

I had my Mooney M20C for four years and devoted myself to the machine. I believe that is necessary to stay alive. Flying is not a cool thing to do once in a while. It is full time mental and physical. Just like the motorcycle. Full time on nothing. So, my daughter came along and she became the full time object for protection and understanding.

In Carmel Valley where we live the local unfenced airport wants to expand into a Skypark. A few years ago a Skyhawk, a rental, took off on a hot summer California day, with four on board, turned right instead of left and could not climb over the 1000

foot valley wall, and hit in front of our house. Killed three. He was an infrequent pilot who did not know the airport on a Sunday fun flight.

I'm about to get involved with the expanded airport thing because my daughter goes to school which is just at the end of the unpaved runway section. My thrust will be either get this airport up to FAA standards or close it down. And Monterey airport is six miles away. And Salinas 12.

It's an accident waiting to happen and then what? Why did we allow an unfenced airport with dogs and kids playing on the runway to be active?

But be cautious in the sense that the "Official E-MAIL" can be monitored by our staff. That is not a paranoid statement! They make sure we all know it, partly to prevent frivolous use (by all) of the official system.

I have no problem with that. In fact, I encourage everything I say to be recorded. I stand by everything I say, even the emotional claptrap I occasionally let loose. And I love the paper trail of email. I respect my words and am glad they are 'monitored,' or recorded. If I don't want others to see what I say, then I don't say it.

But, I trust you will use fair judgement on the official site, well, here too.

No problem, my goal is preventing death by preventing plane crashes by prevent hull ruptures in 747s forward of the wing by

preventing cargo door from opening in flight by preventing door motor shorting on by preventing wire from chafing to bare wire.

That is my focus and everything I do will be understood from that viewpoint.

I'm able to be objective because the only fish to fry is safety. I'm not an employee of any company, including Boeing, I'm not a lawyer, not a government official, not a media person (except for website and that's non profit), not a victim, not a politician and not a dumb ignorant member of the public.

By the way - what is your stock in life, in other words, what are you doing these days? A commercial pilot or politician or movie producer??

Can you clue me in a little??

Movie producer, I wish. I'd do "Deep Impact" the way it should have been done.

I was a commercial pilot with my FAA Part 135 certificate flying whale watchers and exec around California in my Mooney. Lots of fun and very little money.

I'm a retired military officer working in my home at 551 Country Club Drive, Carmel Valley, CA 93924, 408 659 3552, call anytime. My last ten years before retirement 14 years ago were in the Army as an audiologist in hospitals evaluating hearing disorders. My first 14 years were in the Navy as enlisted and officer, from P2 aviation radar operator, to RA 5C navigator off carriers in the Gulf of Tonkin. My wife is a registered nurse and

works at Community Hospital in Carmel full time. So I take care of our real estate, our daughter Laura Ashley, the house, the cars, and Boeing 747 wiring cargo door problems. It's been nine years of research.

The internet blew it wide open in 1995, a year before TWA 800. I was originally involved by the many significant similarities between PA 103 and UAL 811. TWA 800 was no surprise to me after I read about the sudden loud sound on the CVR and the abrupt power cut the FDR, just like 103 and 811. Then after 800, I discovered Air India 182, another nose/head off hull rupture 747 event that left sudden loud sound on the CVR and abrupt power cut the FDR for a total of four. And then the more severe similarities started piling up and piling up, and still piling up. The raw data is best.

The research and communications ability of the internet have changed all the rules on aircraft investigation. I trust for the better.

Wacky guys on the net is a cliché but true. The thing is, even a wacky guy can be right once in a while.

That's why I always quote from FAA and NTSB documents and reputable news media. Source is so important for credibility.

What is your title? How do you fit into the wacky world of TWA 800?

The main players for the center tank as initial event are Tom McSweeney of FAA and Bernard Loeb of NTSB.

Mr. McSweeney is on the hot seat because ACS said a single

chafed wire could not cause the opening of a cargo door in a 747. And it may have. He did not account for water in the cargo hold which bypasses safety cut out switches.

Since the issuance of this NPRM, the FAA has further reviewed the circumstances surrounding this door opening incident and has confirmed that an inadvertent in-flight opening of the cargo door cannot be caused solely by wire chafing. The FAA has determined that in addition to chafing at least four independent failures must also occur in order to drive the door latches to the open position. In light of these findings, the FAA determined that the requirements proposed by the NPRM were unnecessary. On December 21, 1992, the FAA withdrew the NPRM. I have enclosed a copy of the notice of withdrawal for the Board's information.

Dr. Loeb and Chairman Hall have all said the center tank was the initial event and if not, they would have to change.

So, there is much effort to confirm bad wiring blew center tank of TWA 800 apart. Right church, wrong pew.

Here is a recent quote from Mr. McSweeney. I disagree with the 95% is close enough for government work, not for aviation safety when cheap and doable.

He's replying to a poster in a forum, Compuserve AvGroup, I believe.

Guess we will have to disagree. To me, bare wires in conduits

inside fuel tanks is enough reason to become concerned. We know that the wires can arc and slowly work a hole into the conduit, without tripping the circuit breaker. To me, we understand 95% of the problem here. Going after the last 5% isn't worth the time or money. Besides, while doing that we might miss some other safety problem in another airplane - our resources are not unlimited.

Tom McSweeney
FAA Hq

I understand the tradeoff of money and safety. I also understand checking the cargo door wiring while checking the fuel tank wiring is very cost effective.

To go after maybe bad fuel tank wiring in 747s and ignore known bad cargo door wiring in 811 and known cracked to bare wiring in 800 is not right. Check out the prime suspect first, and that's cargo door wiring.

So, JD, you see my passion. It was started when my pilot thought of me and told me to eject, thus saving my life while losing his. That is my motive. I am a survivor of a sudden night fiery fatal jet airplane crash talking about a sudden night fiery fatal jet airplane crash.

Can you help prevent another sudden night fatal crash? Can you help expand wiring checks on 747s to cargo door wiring?

Too bad about young death. 21. What a tragedy.

Cheer up,
JB

NTSB Safety Recommendation Brief

Data_Source: U.S. NTSB Safety Recommendations

Rprt_Nbr: A-91-84

Last Updated: 03-13-95

[O] On June 13, 1991, United Airlines (UAL) maintenance personnel were unable to electrically open the aft cargo door on a Boeing 747-222B, N152UA, at John F. Kennedy Airport (JFK), Jamaica, New York. The airplane was one of two used exclusively on nonstop flights between

Narita, Japan, and JFK. This particular airplane had accumulated 19,053 hours and 1,547 cycles at the time of the occurrence.

Recommendations:

A-91-84. Evaluate the design, installation, and operation of the forward cargo door flexible conduits on Boeing 747 airplanes so equipped and issue, if warranted, an Airworthiness Directive for inspection and repair of the flexible conduit and underlying wiring bundle, similar to the provisions recommended in A-91-83.

Responses:

FAA LTR DTD: 11/01/91

The FAA agrees with the intent of these safety recommendations and is considering the issuance of a notice of proposed rulemaking to address these issues. I will provide the Board with a copy of any document that may be issued.

NTSB LTR DTD: 11/27/91

These recommendations were issued as a result of the Board's investigation of an incident in which the rear cargo door on a Boeing 747-222B initially would not open electrically and then opened electrically without activation of the door open switches. Your letter indicates that the Federal Aviation Administration agrees with the intent of these recommendations and is considering the issuance of a notice of proposed rulemaking to address these issues. The Board urges the FAA to move expeditiously on the recommendations. Pending receipt of additional information concerning the action to be taken by the Federal Aviation Administration, the Safety Board is classifying Safety Recommendations A-91-83 and -84 as "Open--Acceptable Action."

FAA LTR DTD: 4/5/93

The Federal Aviation Administration (FAA) agrees with the intent of these recommendations. On February 18, 1992, the FAA issued a notice of proposed rulemaking (NPRM) applicable to certain Boeing Model 747 series airplanes. This NPRM proposed to require inspection of the

flexible conduit, wiring, and support brackets between the fuselage and the forward and aft cargo doors. Since the issuance of this NPRM, the FAA has further reviewed the circumstances surrounding this door opening incident and has confirmed that an inadvertent in-flight opening of the cargo door cannot be caused solely by wire chafing. The FAA has determined that in addition to chafing at least four independent failures must also occur in order to drive the door latches to the open position. In light of these findings, the FAA determined that the requirements proposed by the NPRM were unnecessary. On December 21, 1992, the FAA withdrew the NPRM. I have enclosed a copy of the notice of withdrawal for the Board's information.

Airworthiness Directive (AD) 90-09-06 (Docket No. 89-NM-148-AD) mandates the installation of a door warning switch located on the lock sector, as well as a reinforcement of the lock sector to ensure that the latches remain locked against backdriving of the latches by the latch power drive unit. Failure of lock sectors that are reinforced in accordance with AD 90-09-06 has been shown to be unlikely and, even in the event of such a failure, an indication by means of the door warning switch will warn the flightcrew of the problem. The modifications, tests, and inspections required in AD 90-09-06 provide an acceptable level of safety to preclude inadvertent actuation of the cargo door power drive unit and possible injury to maintenance or cargo handling personnel. I

have enclosed a copy of the AD for the Board's information. The FAA believes that the current requirements of AD 90-09-06 address the full intent of these safety recommendations to preclude an uncommanded opening of the forward and aft cargo doors.

I consider the FAA's action to be completed, and I plan no further action on Safety Recommendations A-91-83 and -84.

NTSB LTR DTD: 11/8/93

The National Transportation Safety Board has reviewed the Federal Aviation Administration (FAA) response of April 5, 1993, to Safety Recommendations A-91-83 and -84. These recommendations asked that the FAA issue an airworthiness directive applicable to all Boeing 747

airplanes with a flexible conduit protecting the wiring bundle between-the-fuselage and aft cargo door to require an expedited inspection of:

(1) the wiring bundle in the area normally covered by the conduit for the presence of damaged insulation (using either an electrical test method or visual examination); (2) the conduit support bracket and attached standoff pin-on the upper arm of the forward lift actuator mechanism; (3) the flexible conduit for the presence of cracking in the convoluted innercore.

The Board further recommended that wires with damaged insulation be repaired before further service. Damage to the flexible conduit,

conduit support bracket, and standoff pin should result in an immediate replacement of the conduit as well as the damaged parts. The inspection should be repeated at an appropriate cyclic interval.

The Safety Board then asked, in Safety Recommendation A-91-84, that the FAA evaluate the design, installation, and operation of the forward cargo door flexible conduits on Boeing 747 airplanes so equipped and issue, if warranted, an airworthiness directive for inspection and repair of the flexible conduit and underlying wiring bundle, similar to the provisions recommended in Safety Recommendation A-91-83.

The FAA's April 5, 1993, response listed a number of findings of an FAA review of the circumstances surrounding the subject door opening.

Among the findings, the FAA confirmed that an inadvertent inflight opening of the cargo door cannot be caused solely by wire chafing.

Further, the FAA determined that at least four independent failures must occur to drive the door latches to the open position.

The FAA also

stated that failure of lock sectors that are reinforced in accordance with AD 90-09-06 has been shown to be unlikely and, even in the event of such a failure, the door warning switch would warn the flightcrew, of the problem.

Based on these findings, the FAA has decided that the requirements of AD 90-09-06 address the full intent of these recommendations-to

preclude an uncommanded opening of the forward and aft cargo doors.

FAA staff has also expressed concern that the recommended inspections could result in damage to the wire bundle insulation during the intrusive inspection. Therefore, based on the level of redundancy that now exists to prevent inadvertent door opening in flight, the Safety Board has classified Safety Recommendations A-91-83 and -84 as "Closed-Reconsidered. The Board will closely monitor incidents related to the uncommanded opening of cargo doors on 747 airplanes to further document this position.

<WEBMASTER>

NTSB Safety Recommendation Brief

Data_Source: U.S. NTSB Safety Recommendations

Rprt_Nbr: A-91-83

Last Updated: 03-13-95

[O] On June 13, 1991, United Airlines (UAL) maintenance personnel were unable to electrically open the aft cargo door on a Boeing 747-222B, N152UA, at John F. Kennedy Airport (JFK), Jamaica, New York. The airplane was one of two used exclusively on nonstop flights between Narita, Japan, and JFK. This particular airplane had accumulated 19,053 hours and 1,547 cycles at the time of the occurrence.

Recommendations:

A-91-83. Issue an Airworthiness Directive applicable to all Boeing 747 airplanes with a flexible conduit protecting the wiring bundle between the fuselage and aft cargo door to require an expedited inspection of:

- (1) the wiring bundle in the area normally covered by the conduit for the presence of damaged insulation (using either an electrical test method or visual examination);
- (2) the conduit support bracket and attached standoff pin on the upper arm of the forward lift actuator mechanism;
- (3) the flexible conduit for the presence of cracking in the convoluted innercore.

Wires with damaged insulation should be repaired before further service. Damage to the flexible conduit, conduit support bracket and standoff pin should result in an immediate replacement of the conduit as well as the damaged parts. The inspection should be repeated at an appropriate cyclic interval.

Responses:

FAA LTR DTD: 11/1/91

The FAA agrees with the intent of these safety recommendations and is considering the issuance of a notice of proposed rulemaking to address these issues. I will provide the Board with a copy of any document that may be issued.

NTSB LTR DTD: 11/27/91

These recommendations were issued as a result of the Board's investigation of an incident in which the rear cargo door on a Boeing 747-222B initially would not open electrically and then opened electrically without activation of the door open switches. Your letter indicates that the Federal Aviation Administration agrees with the intent of these recommendations and is considering the issuance of a notice of proposed rulemaking to address these issues. The Board urges the FAA to move expeditiously on the recommendations. Pending receipt of additional information concerning the action to be taken by the Federal Aviation Administration, the Safety Board is classifying Safety Recommendations A-91-83 and -84 as "Open--Acceptable Action."

FAA LTR DTD: 4/5/93

The Federal Aviation Administration (FAA) agrees with the intent of these recommendations. On February 18, 1992, the FAA issued a notice of proposed rulemaking (NPRM) applicable to certain Boeing Model 747 series airplanes. This NPRM proposed to require inspection of the flexible conduit, wiring, and support brackets between the fuselage and the forward and aft cargo doors. Since the issuance of this NPRM, the FAA has further reviewed the circumstances surrounding this

door opening incident and has confirmed that an inadvertent in-flight opening of the cargo door cannot be caused solely by wire chafing. The FAA has determined that in addition to chafing at least four independent failures must also occur in order to drive the door latches to the open position. In light of these findings, the FAA determined that the requirements proposed by the NPRM were unnecessary. On December 21, 1992, the FAA withdrew the NPRM. I have enclosed a copy of the notice of withdrawal for the Board's information.

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uncommanded
opening of the forward and aft cargo doors.

I consider the FAA's action to be completed, and I plan no further action on Safety Recommendations A-91-83 and -84.

NTSB LTR DTD: 11/8/93

The National Transportation Safety Board has reviewed the Federal Aviation Administration (FAA) response of April 5, 1993, to Safety Recommendations A-91-83 and -84. These recommendations asked that the FAA issue an airworthiness directive applicable to all Boeing 747 airplanes with a flexible conduit protecting the wiring bundle between-the-fuselage and aft cargo door to require an expedited inspection of:

(1) the wiring bundle in the area normally covered by the conduit for the presence of damaged insulation (using either an electrical test method or visual examination); (2) the conduit support bracket and attached standoff pin-on the upper arm of the forward lift actuator mechanism; (3) the flexible conduit for the presence of cracking in the convoluted innercore.

The Board further recommended that wires with damaged insulation be repaired before further service. Damage to the flexible conduit, conduit support bracket, and standoff pin should result in an

immediate replacement of the conduit as well as the damaged parts. The inspection should be repeated at an appropriate cyclic interval.

The Safety Board then asked, in Safety Recommendation A-91-84, that the FAA evaluate the design, installation, and operation of the forward cargo door flexible conduits on Boeing 747 airplanes so equipped and issue, if warranted, an airworthiness directive for inspection and repair of the flexible conduit and underlying wiring bundle, similar to the provisions recommended in Safety Recommendation A-91-83.

The FAA's April 5, 1993, response listed a number of findings of an FAA review of the circumstances surrounding the subject door opening.

Among the findings, the FAA confirmed that an inadvertent inflight opening of the cargo door cannot be caused solely by wire chafing.

Further, the FAA determined that at least four independent failures must occur to drive the door latches to the open position.

The FAA also

stated that failure of lock sectors that are reinforced in accordance with AD 90-09-06 has been shown to be unlikely and, even in the event of such a failure, the door warning switch would warn the flightcrew, of the problem.

Based on these findings, the FAA has decided that the requirements of AD 90-09-06 address the full intent of these recommendations-to preclude an uncommanded opening of the forward and aft cargo

doors.

FAA staff has also expressed concern that the recommended inspections could result in damage to the wire bundle insulation during the intrusive inspection. Therefore, based on the level of redundancy that now exists to prevent inadvertent door opening in flight, the Safety Board has classified Safety Recommendations A-91-83 and -84 as "Closed-Reconsidered. The Board will closely monitor incidents related to the uncommanded opening of cargo doors on 747 airplanes to further document this position.

Quote from TWA 800 Public Docket 516A, Exhibit 9A Systems Group Chairman's Factual report of Investigation, Page 47, "A Boeing telefax of June 25, 1997, stated that: The Poly-X wire was used as general purpose wire on the RA164 (TWA 800) aircraft. Wire insulation known as Poly-X had three in-service problems:

- Abrasion of the insulation in bundles installed in high vibration areas.

(This problem was corrected by Boeing Service Bulletin No. 747-71-7105, Dated July 19, 1974)

- Random flaking of the topcoat.

- Insulation radial cracks in tight bend radii.

Radial cracking phenomenon of the Poly-X wire was mainly associated with mechanical stress. Bend radius is the largest contributor to mechanical stress in installed wire or cable.

Presence of moisture in conjunction with mechanical stress is also a contributor."

The Systems Exhibit 9A continues on same page 47, "Evidence

of arcing or short circuiting was found in the fuselage of N93119, (TWA 800) in addition to what was found in the wiring from the raceway below the left cabin floor and near the forward wing spar.

The Systems Exhibit 9A continues, page 116:

"Some wires found in the section of W480 from forward of station 570 and identified as BMS13-42A had numerous cracks in the insulation. Most of the cracks in this bundle were found to expose the core conductor when examined by microscope. Only within five feet of the aft end of the W480 bundle from station 570-900 were insulation cracks found."

(Please note that BMS13-42A is Poly-X wiring. Cargo door location is FS 560-670 and cracked wires discovered are within that zone. Frayed wires in that area have shorted before and caused the forward cargo door to open in flight, NTSB AAR 92/02 UAL 811. Water has been seen pouring out of a forward cargo bay of a Boeing airliner. Water and leaking electricity make a powerful conductor. Both are known to exist in Boeing airliners.)

NTSB Exhibit 9C, Attachments to the Systems Group Factual Report, page 44:

"Response: There was one reported wire insulation abrasion on the 747 in 1996. There operator reported that a burning smell was noted during cargo loading in the forward cargo compartment. Cargo loading system wiring was found damaged and shorted to ground below the cargo floor at station 650, below the aft right corner of a large ball mat. A wiring loom "p" clip was found broken enabling the wire to chafe against structure. A hole was found burned through the bottom angle of the cargo floor cross member, where the wiring clip attached, and charring

was evident in the surrounding insulation blanket. Repairs were made."

Page 44: "Response: There were seven reported wiring fires on the 747 in 1996."