Sample/Chapter 19

(Fire! Fire! Fire!)

The 55th Wing and a Prayer

A Whistleblower's Story



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The 55th Wingandaprayer.com

About the Cover:

During the month of June 2018, the <u>Omaha World-Herald</u> published a three-day investigative series exposing aircraft maintenance deficiencies of the 55th Wing, located at Offutt AFB in the State of Nebraska. Illustrations accompanying the series were drawn by editorial cartoonist <u>Jeffery Koterba</u>.

On 18 July 2018, the Secretary of the Air Force responded to an inquiry from Nebraska legislators, dismissing the data compiled by investigative reporter Steve Liewer. Subsequently, on 19 July 2018, the Omaha World-Herald published an editorial cartoon drawn by Jeff Koterba, presenting a hyperbolic view of the C-135 variants maintained by the 55th Wing.

Jeffrey Koterba is an American editorial cartoonist based in Omaha, Nebraska. He was an editorial cartoonist for the Omaha World-Herald from 1989 to September 2020. His work is syndicated nationwide to over 850 newspapers by Cagle Cartoons. Wikipedia

Also see Lawmakers Call for Safety Checks After C-135 Failures at Offutt

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(Last Entry, July 2023)

George G. Sarris

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Note: A Freestyle of editing has been applied to this manuscript. For the benefit of the reader, editorial discretion of citations and official reports may have been applied without altering the intended meaning of the original sources.

Foreword

The hunt for Osama bin Laden was well underway when I blew-the-whistle on the 55th Wing for operating a fleet of reconnaissance aircraft that were not airworthy. The RC-135 fleet was plagued with in-flight emergencies, ground aborts, air aborts, and ineffective missions due to substandard maintenance practices.

The impact that my disclosures had on the <u>Global War on Terrorism</u> may never be known, but it was clear that I had embarrassed the Agency. Military managers and defense department officials employed the use of harassment, intimidation, and reprisals to keep me in check. Ultimately, my disclosures were validated.

You are about to read a series of events that demonstrate the degrading evolution of an excellent and highly experienced military aircraft mechanic of thirty years, to the point of being just as negligent as the managers masquerading as leaders.

These events take place at Offutt AFB, Nebraska, home to the USAF's 55th Wing. The aircraft involved are managed by programs with code names such as <u>Big Safari</u>, <u>Combat Sent</u>, <u>Constant Phoenix</u>, and <u>Open Skies</u>. These are highly specialized intelligence-gathering aircraft vital to the security of the United States and its allies.

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Chapter 19

Fire! Fire! Fire!

On 30 April 2015, RC-135V 64-14848 experienced a fire in the rear cabin during takeoff roll. The aircraft had reached a speed of about 50 knots when crewmembers in the rear compartment reported seeing a fire above the galley. The pilots aborted the takeoff.

The pilots and all 27 mission crewmembers safely evacuated. Fire crews arrived and extinguished the flames. The fire burned a hole through the upper fuselage above the rear galley area, causing structural damage and damage to aircraft control and mission related systems. Four crewmembers received treatment for minor smoke inhalation. The aircraft was out of service for over two years.

The Accident Investigation Board (AIB) findings determined that the cause of the mishap was a leak in the high-pressure oxygen system due to poor assembly of the system tubing during the aircraft's previous overhaul at Depot. Click here for the final report (1341 pages). It is widely believed that the aircraft would have crashed had it left the ground.



(Image/USAF

The mishap drew the attention of a military affairs reporter named Steve Liewer. Mr. Liewer worked for the *Omaha World-Herald*, a news agency located in Omaha, Nebraska.

I first met Mr. Liewer when I was a union vice president. At that time, I was representing the civilian workers of Offutt AFB during the government furlough of 2013.

A few days after the fire, Mr. Liewer contacted me seeking details of the mishap. I advised him on the process to obtain aircraft maintenance records utilizing the Freedom of Information Act. Responsive records are promptly provided when you know exactly what to ask for, identify the exact location of the information requested, and identify the custodian of said records. I had this information, and I had the knowledge to decipher most of the data in the records.

Acting upon my input, Mr. Liewer submitted FOIA requests for the aircraft's maintenance records. He also asked for the "Aircraft Incident Worksheets" for the entire 55th Wing.

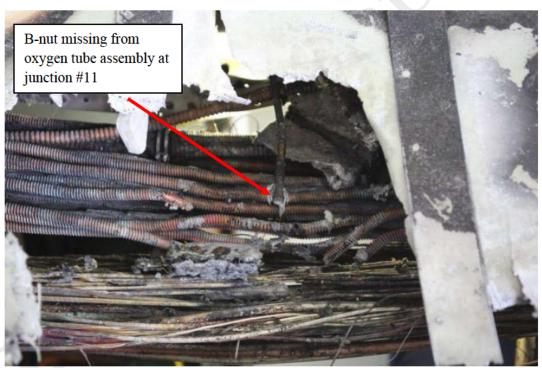
The volume of documents released by the 55th Wing exceeded Mr. Liewer's expectations, as well as mine. Their content exposed multiple serious maintenance discrepancies, including trends that were unknown to me. While awaiting additional documents, I examined the AIB Report, which characterized the cause of the fire in this manner:

Failure by L-3 Communications depot maintenance personnel to tighten a retaining nut connecting a metal oxygen tube to a junction fitting above the galley properly caused an oxygen leak. This leak created a highly flammable oxygen-rich environment that ignited. The resulting fire melted the retaining nut causing the tubing to become detached from the junction fitting, feeding more oxygen to the fire, increasing its size, and causing severe damage to the airframe, galley, and mission equipment onboard the aircraft.

Like other outside sources, I noted that the AIB did not identify a source of ignition. A glaring clue to the source of ignition is mentioned on page 8 of the Air Force Research Lab's Technical Report (AFRL/RXS 15-030A). The AIB Report missed this clue and other relevant facts pointing to the possible source of ignition:

 The aluminum B-nut connecting a section of oxygen tube to an aluminum fitting at Junction #11, was missing. <u>Melted fragments</u> of the missing B-nut were found on the floor behind the galley. (Ref AIB Report J-30)

- 2. The AIB Report recognized a defect known as "pitting" (i.e., tiny holes or "pits") around the oxygen tube assembly at junction #11. A substantial section of the report was dedicated to identifying the type of pitting. This particular type of pitting is caused by electrical arcing rather than corrosion. (Ref. AIB Report J-37 & J-38)
- 3. The AIB Report determined that several under torqued oxygen line B-nut fittings in the area of the galley were leaking, including that of junction #11. (AIB Report Tab J-9).
- 4. Junction #11 is located in an area surrounded by a large number of tightly bound coax cables, electrical wires, insulation, plastics, and common aircraft hardware.



(Image via USAF AIB Report)

5. The AIB Report determined that there were <u>no</u> electrical system anomalies 90 days prior to the mishap. I found this to be <u>false</u>. When looking further back into the maintenance history, it is apparent that RC-135V 64-14848 was plagued with unresolved electrical system problems up to the time of the fire. This includes a history of inflight emergencies and inflight aborts due to multiple circuit breakers tripping "open" during flight.

Electrical systems discrepancies

- 23 November 2014: The microwave oven was inoperative. The corrective action indicates that the microwave oven was replaced by the aircrew rather than qualified maintenance personnel. (Ref. Job Control Number 143270046)
- 24 November 2014: Multiple electrical system discrepancies occurred while in flight.
 - Transformer Rectifier #2 showed fluctuating voltage and eventually dropped to zero.
 - 2. The load distribution circuit breaker (50PLB) popped.
 - 3. The #2 main tank forward fuel boost pump circuit breaker popped.
 - 4. The #3 main tank aft fuel boost pump circuit breaker popped.
 - 5. The center wing right override fuel boost pump circuit breaker popped.
 - 6. Q-inlet heat circuit breaker popped.
 - 7. Series Yaw Damper will not engage.

The annotated corrective action read, "RESET DISTRO C/B PULLED BY AIRCREW AND ASSOCIATED C/B'S....OPS CHECK GOOD".

Note: The corrective action indicates that maintenance personnel merely reset the popped circuit breakers and performed an operational check on the effected systems. Concerning the Series Yaw Damper; the FCAS (Flight Control Augmentation System) computer was reset. (Ref. Job Control Numbers 143280028, 143280031, 143280032 & 143285410)

- 14 January 2015: Low RPM lights on IDG's (Integrated Drive Generators)
 continuously flickered after engine start. Maintenance personnel replaced the
 #4 Generator Control Unit (GCU). (Ref. Job Control Number 150140124)
- 14 January 2015: Multiple circuit breakers popped while in flight for a second time.
 This time, however, an In Flight Emergency (IFE) was declared. (Ref. 55th Wing Aircraft Incident Worksheet 15067 & Job Control Number 150140126)
 - 1. #2 forward fuel bust pump circuit breaker popped.
 - 2. #3 aft fuel boost pump circuit breaker popped.
 - 3. Right hand override fuel pump circuit breaker popped.
 - 4. Phase 'A' distribution circuit breaker on Generator #2 popped.

- 5. Series Yaw Damper disengaged. (Reengaging caused auto pilot to uncouple)
- 6. Asymmetric Thrust and Q-inlet power lights flickered during stab trim operation.
- 7. EFAS (Engine Fail Assist) Fail light illuminated.
- 8. Co-pilot window heat not appearing to work.

Note: These eight (8) discrepancies are nearly identical to those reported two months earlier. Once again, maintenance personnel could not duplicate the discrepancies, and therefore, attributed the faults to the #4 GCU. (Ref. Job Control Number 15014124) The circuit breakers were reset and the aircraft returned to service. (Ref. Job Control Numbers 150140125, 150140126, & 150140127)

- 24 January 2015: External Reconnaissance Power does not work in external but does in applied. Maintenance personnel replaced a contactor. (Ref. Job Control Number 150240016)
- 3 February 2015: The left wing landing light panel was removed to reset the taxi light circuit breaker. However, no reference could be found to indicate that a taxi light circuit breaker had popped. (Ref. Job Control Number 150340164)
- 18 February 2015: #4 Generator low RPM light illuminated. Maintenance personnel replaced the Generator Control Unit. (Ref. Job Control Number 150499615)
- 20 March 2015: Position 1 & 2 light control circuit breaker was intermittent. The circuit breaker was removed and replaced. The operational check was good. (Ref. Job Control Number 150790096)
- 20 April 2015: "3.5 Hours into flight, white smoke began issuing from (redacted).
 Isolated the location of the problem which appeared to be associated with the monitor panel which had negative voltage indications under patlet assembly." (Ref. Aircraft Incident Worksheet number 15106.) The discrepancy entered in IMDS read, "ENCOUNTERED HEAVY SMOKE AND BURNING SMELL FROM THE PCA AND/OR MONITOR PANEL IN THE CORVUS RAC". The 28VDC TR/power supply was replaced. (Ref. Job Control Number 151100188)
- 23 April 2015: Landing light circuit breaker popped in flight. Maintenance personnel replaced the landing light and annotated that the operational check was

good. (Job Control Number 151130114) This is a reoccurring discrepancy. See discrepancy dated 3 February 2015.

- 28 April 2015: Landing gear lever would not move to the up position. The corrective action reads, "R2 (Removed and Replaced) truck level switch". (Ref. Job Control Number 151180290)
- 28 April 2015: In flight, the antiskid showed releases on the outboards [wheels] only. The corrective action for this discrepancy read, "JOB CORRECTED IN RELATION TO JCN 151180307)". (Ref. Job Control Number 151180291)
- 30 April 2015: At the time of the mishap, a discrepancy in the Aircraft's 781 Forms indicated that a left hand landing light relay required replacement. A replacement part was "on order" and assigned document number J503EE51138026. (Ref. Job Control Number A151130114003)

The AIB Report did not consider the above-mentioned electrical system anomalies. Likewise, the AIB Report ignored the 'electric arcing' that caused tiny pits to form in the oxygen tube at junction #11. The AIB Report did not discuss the physics behind an electric arc, such as voltage, conditioned cabin air, cabin pressure, and trace gasses within an RC-135. To be direct, the AIB Report failed to consider electrical arcing at junction #11, as a possible source of ignition.

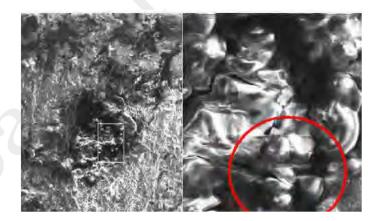


Figure 26: Evidence of pitting on junction #11 tube adjacent to sleeve after cleaning by acetate replication. Similar to the sleeve, the pitting was more prevalent on one side of the tube. A secondary electron image at the bottom of the figure shows nodular formations, circled in red, in the pit. The nodular formations are consistent with melting. Melting damage was localized in the pitted features. (Ref Tab J-38)

States of Matter

Old-school teachings recognized only three states of matter — solids, liquids, and gasses. The AIB did not consider the fourth state of matter — plasma.

Adding the unresolved electrical system discrepancies into the equation, it is conceivable that stray voltage from a compromised electrical circuit blead into the aluminum oxygen tube assembly. Each time the loose B-nut at junction #11 "broke ground", an electric arc occurred.

Repeated arcing, exasperated by an elevated concentration of oxygen due to the loose B-nut, further damaged the oxygen tube, possibly forming a small pinhole. The damaged oxygen tube, and/or the loose B-nut at junction #11, created a localized high velocity flow of pure oxygen gas. The pure oxygen gas became ionized by the persistent electric arc, resulting in a spontaneous oxygen plasma arc similar to that used in a modern-day oxygen plasma cutting torch.

The heat produced by a plasma arc is more than sufficient to instantaneously melt and compromise an aluminum B-nut. Pressure within the oxygen system most likely propelled fragments of the melted B-nut throughout the aft cabin, some of which were found behind the galley. This would account for the missing B-nut at junction #11. The AIB did not consider an inadvertent oxygen plasma arc-flash as a source of ignition, or as a cause for failure of the B-nut at junction #11.

Additional Omissions

Crew Comfort Systems

Aircraft 4848 had flown a mission earlier in the day, but the AIB did not interview the crew from the earlier mission. The crew cabin was in disarray when the mishap crew arrived at the aircraft for the second mission because the Aircraft Safety Equipment (ASE) specialists did not complete their portion of the required thruflight inspection.

The AIB Report contained transcripts with questions focused on the lavatories. Excerpts from witness statements pertaining to lavatories are posted below. A more in-depth look at the 287+ lavatory discrepancies is included in Chapter 20 — Vindicated.

[Pilot Member]: Right. So, you're sitting here and the LAV is there – I'm

curious. You smell anything from the LAV, did it smell abnormal?

[MR2]: Oh, like, like sewage?

[Pilot Member]: Yeah.

[MR2]: Uh, I thi – I think it did, actually, I think they were saying

that there was – a problem with the LAB, um.

[Pilot Member]: But not enough to cause it smelling, um, out of the ordinary, or?

[MR2]: I mean it was a little – I've smelled it that bad before, it was a little worse than - than if I guess had they had completely emptied it out but I remember I thi – I'm pretty sure I remember the uh one of the maintainers saying that the LAV was inop, uh, for it - it just wouldn't flush, so.

Another witness stated:

[MASE3]: ...we were on the bus and were making several jokes about it because we were getting ready to go into an 8 and a half hour mission and our lavatory was broken. Uh and nobody seemed to think that uh that would be a fun day.

A Chief Master Sergeant, identified as "Mishap Signals, Search and Development" (MSSD) said:

[MSSD]: Yeah, well, uh, to be quite honest I've been doing this a long time and, uh, it, it didn't smell out of sorts that day, uh, you know, it was leaking on the floor and you could see the, uh, liquid, uh, you know, sort of gravitating towards the back of the jet. Um, but, uh, I've smelt it much worse, uh, you know in the heat of the desert and stuff like that where, you know, they either, uh, the ground crew doesn't, uh, service it, or the, uh, we run out of blue tabs in the desert and all they have is water to, you know, sort of filter though there. So, it, it wasn't anything, you know, out of the norm. You know it wasn't overly overbearing.

One witness commented that some of the quick-don oxygen masks were left lying on the workstations "face up" indicating that the quick-don oxygen masks had been used during the previous mission — but there were no indicated malfunctions requiring the use of oxygen on the previous mission.

[MISHAP PILOT]: One thing I forgot to mention, the uh the AFE the masks were actually uh – they had not been cleaned totally, so they were open and uh what I mean by open is they had not been stowed yet so when we got onto

the jet all of them were on the desk of everyone's stations – um for the back end crew anyways, the recon compartment. Um all of those masks werewere face up and it looked like they were in the middle of some kind of inspection, so I called for AFE to come out and just let us know hey what was going on with tha- with that. Uh we wanted to make sure that- that either a checklist was completed or that some inspection had been completed. Just to get to the bottom line of what that was. We had AFE come and they basically told us 'Hey we – because of quick turn that the jet had flown earlier that day that uh' (pause) excuse me. Because of that quick turn they didn't have a chance to actually clean the masks with alcohol swabs.

The comments of [Mishap Pilot] present an interesting question that went unanswered until I attended a Retiree Appreciation Day event at Offutt AFB in October 2018. As customary, military retirees were given a tour of an RC-135. In this case, it was RC-135V 64-14844. I asked the young airman acting as my guide — and whose workstation was next to the aft lavatory — if he has ever used his quick-don oxygen mask to alleviate the stench from the lavatories? With a strange smile on his face, and with a slight nod of his head, he quietly answered. "Yes".

Lavatory & Urinals Discrepancies

- 26 January 2015: Front urinal extremely slow to drain. The corrective action read, "FRONT URINAL UNCLOGGED". (Ref. Work Unit Code 150260071)
- 2 April 2015: "Front Urinal is draining a lot slower than normal. Took 15 20 minutes to drain per use." The corrective action read, "URINAL SNAKED. OPS CHECK GOOD". (Ref. Job Control Number 150920098)
- 13 April 2015: 2 each forward urinal valves require replacement. Maintenance Personnel replaced "2 EACH BROKEN FITTINGS" (Ref. Job Control Number 151030090)
- 29 April 2015: Forward urinal inoperative. The corrective action indicates that maintenance personnel unclogged the urinal. (Ref. Job Control Number 151190101).
- 30 April 2015: At the time of the accident, the Aircraft's 781 Forms contained the following discrepancies, which do <u>not</u> appear in IMDS spreadsheets.
 - 1. Aft latrine water pump line cracked/broken. (Job control Number15120541001)
 - Aft latrine water pump cannon plug disconnected (Job Control Number 151205410002)

Pressurization System

Prior to the fire, the mishap aircraft experienced an excessive number of pressurization discrepancies. The AIB Report was void of this information:

- 3 December 2014: Left PAC (Left Pressurization Package) overpressure, on flow controller above limits. Maintenance personnel replaced the left hand airflow controller.
 "R2 LH CONTROLLER. SEE WCE 007 FOR CORRECTIVE ACTION." (Ref. Job Control Number 143370151)
- 12 January 2015: The Aircraft experienced several pressurizations problems:
 - Left ACM PAC (Air Cycle Machine Package) over pressurizes when ground maintenance came up to check out gravel noise. Maintenance personnel replaced the left hand flow controller. (REF Job Control Numbers 150120128)
 - Left ACM PAC (Air Cycle Machine Package) has gravel sound. Noticed on first touch and go and got worse on 2nd T&G. The PAC was shut down immediately. The corrective actions included removal and replacement of the water separator coalescer, and replacement of the ground ejector valve. (Ref. Job Control Number 150120129)
 - Left ACM PAC (Air Cycle Machine Package) shows "LLLL" while pack is turned off. The corrective actions included replacement of the left hand pressure regulator and the pressure transducer. (Ref. Job Control Number 150120130).
- 14 January 2015: Excessive whistling sound from flight deck when throttles brought back to Idle. Ground maintenance personnel could not duplicate the discrepancy. "NO EXCESSIVE WHISTLING SOUNDS FOUND DURING ENGINE RUNS AT VARIOUS SETTINGS AND PRESSURIZATIONS". (Ref. Job Control Number 150140128)
- 20 January 2015: Auxiliary heat panel reads 8 degrees when valve is in the full cold position. Ground maintenance personnel recalibrated the auxiliary heat panel. (Ref. Job Control Number 150206420)
- 17 February 2015: Left hand flow controller showed "UUUU" lasted longer than 30 seconds. Felt and heard rush of air. The corrective action annotated for this discrepancy read, "ALLOWED PAC ENOUGH TIME TO STABILIZE. OPS (Operational) CHECK GOOD" (Ref. Job Control Number 150480195)

- 23 February 2015: Left hand PAC over pressurizes when turned on. Flow Controller shows "UUUU" just after 4 inches H2O and loud rush of air. Maintenance personnel calibrated the left hand pack control panel. (Ref. Job Control Number 150540142)
- 24 February 2015: Left hand 35-degree control valve indicator inoperative. Maintenance personnel replaced the 35-degree control valve. (Job Control Number 150550030)
- 2 April 2015: Left hand pack over pressurized when set to condition air on climb out and cruise altitude. Maintenance personnel replaced the flow controller. (Job Control Number 150920084)
- 15 April 2015: Left pack over pressurizes, gives "UUUU" indication with loud rush of wind. Maintenance personnel could not duplicate the discrepancy and documented, "LEFT PACK RAN GOOD ON GROUND. RECALIBRATED PANEL. FOC (In-flight Operational Check) DUE." (Ref. 151050108)
- 24 April 2015: Left hand pack over pressurizes. Gives "UUUU" error on flow controller. Maintenance personnel again replaced the flow controller. (Ref. Job Control Number 151140180)
- 30 April 2015: At the time of the mishap, the Aircraft's 781 Forms indicated two
 pressurization discrepancies which do not appear in IMDS.
 - "Differential Pressure indicating system requires checkout at next available downtime on left hand pack." Two document numbers were listed, indicating that two replacement parts were on order. (Document numbers X438FE51181359 and X438FE51181359.) (Job Control Number A151180271001)
 - Aux heat valve would not go below [unreadable] no matter how long you hold "cooler" (Ref. Job Control Number 151200081)

Cabin pressure is maintained by the amount of air that is let out of the cabin through a component called an outflow valve. The original KC-135 configuration provided three outflow valves; one located in each of the three landing gear wheel wells. The outflow valves were engineered to operate with the amount of bleed air available from the original design specification of four Pratt & Whitney J57 turbojet engines.

The RC-135s required a higher volume of engine bleed air to cool the mission equipment. To satisfy this need, more powerful Pratt & Whitney TF-33 engines were utilized and a second air conditioning package was installed in the right hand keel beam bay. Later, skin heat exchangers were added to further supplement the cooling needs, but were only effective at altitudes in excess of 25,000 ft.

In 1998, Oklahoma City Air Logistics Center announced the programmed replacement of RC-135 TF-33 engines with CFM56 (F108) engines. The F108 engines provided another increase in bleed air. Unlike the <u>KC</u>-135 F-108 engines, which provide only 5th stage bleed air to the cabin, the <u>RC</u>-135 F108 engines provide 5th and 9th stage bleed air. This dramatic increase in bleed air may be the root cause for the pressurization problems associated with the RC-135s.

The RC-135 outflow valves are original to the KC-135 design. They were not intended to accommodate the higher volume of air necessary to cool the mission equipment that has been crammed into the RC-135 throughout its 60 years of service. It is possible that the RC-135 PACs are trying to push more air into the cabin than the outflow valves were designed to let out. Apparently, the Big Safari engineers forgot to consider the capacity of the outflow valves when figuring the cooling needs of the RC-135.

Supporting this theory is another factor. On several occasions, I participated in the replacement of the wing-to-fuselage seal. The wing-to-fuselage seal is a strip of grey-colored elastomeric rubber sheeting about twelve (12) inches wide. It spans the interior of the fuselage from the right wing to the left wing. The seal is located underneath the plywood flooring and carpet. It is not easily accessible, nor is it easy to install. In many instances, the defective seal went undetected until it was discovered by the ISO Dock inspection team.

On one occasion, I performed a wing-to-fuselage seal leak test after the installation of a new seal. The replacement seal failed. It sounded like a long-winded fart.

During normal flight operations, the interior of the RC-135 is very loud. In addition to the noise, crewmembers wear headsets in the performance of their duties — so a ruptured seal may never be heard. It is my opinion that the CFM56 engines produce so much bleed air, that a ruptured wing-to-fuselage seal can go undetected by the aircrew. Naturally, this condition degrades mission capabilities and may explain some of the unresolved pressurization problems.

Fuel System

RC-135V 64-14848 returned to Offutt AFB from Depot on 19 June 2014. Prior to the Fire of 30 April 2015, the aircraft spent a significant amount of time in the fuel repair hangar. Three sorties were lost in December 2014, because of unscheduled fuel system maintenance:

- 10 Aug: Class D fuel leak on aft spar beef up plate on #1 Reserve tank. (delayed discrepancy fixed 13 Nov 2014)
- 29 Sep 2 Oct 2014: #4 Engine sailboat leak.

- 13 Nov 2014: Fuel leak on lower side of left Production Break panel.
- 26 Nov 2014: Fuel leak aft of MLG doors.
- 3 Dec 21 Dec 2014: NMCMC for #6 Center Wing cavity leak; all leaks found to be coming from the integral tanks into the cavity.

Mission Equipment

- 30 April 2015: At the time of the accident, the Aircraft's 781 Forms indicated thirteen (13) separate discrepancies that do **not** appear on the IMDS spreadsheets:
 - 1. CAN 105 FAILS RFA (Job Control Number A150280272001)
 - CAN 105L, LB DECK 4, ALB 1-A5 FAILS RFA (Job Control Number A150490168001)
 - CAN 105L, MB DECK 2, AMB 2-AB FAILS RFA (Job Control Number A150490169001)
 - CAN 105L, MB DECK 3, AMB2-A7 FAILS RFA. (Job Control Number A150490170001)
 - KG250, #4 HAS ALTERNATING RED/GREEN PWR LIGHT. (Job Control Number A150490171001)
 - CAN 105L, MB DECK 4, AMB 2-A8 FAILS RFA. (Job Control Number A150490173001)
 - BLK ROUTER CONFIG FOR FIREBAT. (Job Control Number A150680157001)
 - 8. SPARE DATA IFCD INOP. (Job Control Number A151110163001)
 - DSS RPU #2 HAS NO INTERNAL VOLTAGES (Job Control Number A151170086001)
 - E5/E6 ANTENNA FOIL PATCH REQUIRES TOUCH UP. (JOB CONTROL NUMBER A151190097001)
 - 11. RF GEN FAILED CALL TEST IN 9 & 13 GHZ RANGE. (Job Control Number A151190100001)
 - 12. POSN 22 CANNOT TRANSFER FILES TO ER. (Job Control Number 151200079)
 - 13. ESP UNABLE TO AQUIRE UXI [unreadable]. (Job Control Number 151200080)

Maintenance Integrity

Shortly after the fire, L-3 Communications conducted a covert, one-time inspection of the RC-135 fleet. Three years later, while touring an RC-135 that had recently returned from Depot, I noticed that the oxygen system fittings had been replaced with new aluminum fittings. The new fittings stood out because they were anodized to a bronze color. As indicated in the AIB Report, Depot had been reusing old, unserviceable, and sometimes unauthorized fittings.

It is also apparent that Depot had failed to conduct oxygen system leak checks after reassembly of the oxygen system tubing. MIL-PRF-25567 is a leak detection solution similar to that of soapy water and is authorized for use with oxygen systems. (Leaks show up as tiny air bubbles.) Every junction in the system should have been checked for leaks prior to the aircraft's return to service.

In part, the fire onboard aircraft RC-135V 64-14848 was a result of negligent aircraft maintenance practices passed down through the generations.



Interior damage caused by the fire. (Image via USAF AIB Report)



Photograph by Todd Feeback (Kansas City Star)

About the Author

George Sarris enlisted in the United States Air Force in the spring of 1977 as a tactical fighter aircraft mechanic. In 1985, he was awarded a Bachelor of Science degree from Embry-Riddle Aeronautical University with a major in Professional Aeronautics. Following completion of the required curriculum, the FAA granted Mr. Sarris an airframe and powerplant license.

In 1986, Mr. Sarris gained employment as a dual-status technician for the Air National Guard. Over the next sixteen years, he maintained the pneudraulic systems of the RF4-C and the KC-135 aircraft. He volunteered for no-notice deployments, taking part in the Kosovo Campaign as well as Operation Enduring Freedom.

Mr. Sarris transferred to the Federal Civil Service in 2002, where he became the senior mechanic maintaining variants of the RC-135 aircraft at Offutt AFB, Nebraska. During this same period, he transitioned to a traditional status in the Air National Guard and provided training to mechanics converting to the KC-135 airframe. Mr. Sarris retired from the Air National Guard in 2005 after serving for twenty-eight years. He continued to work as a civilian mechanic for the Air Force on the RC-135 aircraft maintenance program until he blew the whistle on the 55th Wing for utilizing aircraft that were not airworthy.

In 2012, Mr. Sarris became the vice president of AFGE Local 1486, representing the Wage Grade employees of Offutt AFB, including the civilian mechanics of the aircraft maintenance squadron. Mr. Sarris retired from the Federal Civil Service in 2014.

Synopsis

I revealed to Congress in 2008 that the United States Air Force was operating a fleet of reconnaissance aircraft (RC-135s) that were not airworthy. To divert attention away from the maintenance issues that I had reported, the agency retaliated with an immediate attack on my character. The diversion included a trip through the Pentagon, Congress, and the Nebraska State Court system. Eventually, government investigations substantiated the non-airworthy conditions that I had reported, but not before the United States had secured a 1.3 billion-dollar foreign military sale to the United Kingdom for the same type of aircraft.

The agency suspended my security clearance and refused to provide me with the derogatory information it had compiled against me. After 17 months, I conducted a one-man, lawful and peaceful protest at the off-base residence of Lt. Col. Dana C. McCown, the Aircraft Maintenance Squadron Commander of the 55th Wing. My protest broke the stalemate when McCown petitioned the Sarpy County District Court for a harassment protection order against me. Through civil court actions, I was able to prove that McCown and her partner (Ms. Dawn A. Tanner) lied to local law enforcement officials and federal investigators, which paved my way to a global settlement in April 2011. (Click here for May 2011 press release)

My security clearance was adjudicated in April 2012. Although a federal administrative law judge recommended the reinstatement of my security clearance, the Personnel Security Appeals Board (PSAB) chose to disregard his recommendation.

Through these events, I stumbled upon a breach of national security involving two major commands spanning several decades. When I reported this security breach to senior defense officials, a "be on the lookout" (BOLO) was issued against me by the 55th Wing security forces. The BOLO violated the terms of the settlement and challenged my authority to act as a union officer of AFGE Local 1486.

Congress and the U.S. Justice Department clearly demonstrated an unwillingness to protect me from prohibited personnel practices (5 U.S.C. § 2302).

Now that I have retired, I provide this information to demonstrate the manner in which government agencies employ the use of harassment, intimidation, and reprisals to control the federal workforce when managers fear that they have been caught doing something unethical or illegal.