

Beyond



Business jet accident shows the value of exceeding regulatory requirements for flight attendants.

BY WAYNE ROSENKRANS

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Some operators of corporate, charter and private flights in business jets use flight attendants to perform safety and service duties when this is not required by aviation regulations.¹ Other operators say that a flight attendant would not be appropriate in the context of their overall safety strategy — and they instead train passengers to cope with cabin emergencies or depend entirely on the flight crew. Making someone responsible only for service-related duties in the cabin, however, falls short of the best safety practices currently recommended.

Circumstances of the February 2005 runway overrun at Teterboro, New Jersey, U.S., by a chartered Bombardier Challenger 600 brought

into sharp focus the value of a flight attendant in corporate/charter operations (*ASW*, 3/07, p. 30).² The aircraft was destroyed by crash forces and postcrash fire after colliding with vehicles on a freeway and a warehouse. The flight crew received serious injuries. The nine passengers, including one “cabin aide” — a customer service representative provided by the operator — received minor injuries.

One of the U.S. National Transportation Safety Board (NTSB) findings said, “The cabin aide did not perform a seat belt compliance check before the accident flight, which resulted in two passengers being unrestrained during the accident sequence.” Another said, “The cabin aide’s training

Passenger Service

did not adequately prepare her to perform the duties with which she was tasked, including opening the main cabin door during emergencies.” One of the accident report’s four safety recommendations focused on the risk of passenger confusion about any cabin employee’s role and qualifications.³

Several passengers — because of differences compared with flying on their own company’s Challenger — were surprised to be greeted by a person who the NTSB found was “dressed in a crewmember-appearing uniform,” served them beverages and occupied the cockpit jump seat for takeoff but did not conduct a pre-takeoff safety briefing.⁴ The passengers assumed that the cabin aide was a flight attendant trained to conduct an evacuation, but — after the airplane stopped moving — they initially could not find her, they heard no evacuation commands, and they heard no answer when they asked her how to open the main cabin door. A separate survival factors report also cited the cabin aide’s departure from the aircraft and accident scene before accounting for everyone on board.⁵

“We were concerned when we heard that passengers were thrown out of their seats and were unable to locate seat belts on the divan. We asked our regional investigators to notify us if they find those problems in future accidents because we would like to investigate and document that type of information,” said Nora Marshall, chief, NTSB Survival Factors Division. “If there is someone on board the aircraft who could be perceived as a trained crewmember, that person should have proper training. The NTSB did not ask for cabin attendants to be required; it said that if on board, they should be trained and effective for emergencies.”

“When there is a cabin aide on board, flight crews may be tempted to delegate some of their safety-related responsibilities — such as the safety briefing — to this ‘crewmember’ when, in fact, he or she may only be a caterer or server with

absolutely no safety training,” said Jason Fedok, the NTSB survival factors investigator for this accident. The NTSB has watched the airline industry, over a period of decades, shift the balance of in-flight service from cabin crews focusing too much on passenger comfort issues to currently putting safety first as safety professionals. “The same evolution needs to happen in the corporate/charter world,” Marshall said.

Not As Expected

Flight Safety Foundation safety auditors discourage the use of cabin aides for one main reason. “You cannot tell passengers that the person serving them is less than fully qualified — that would only confuse them,” says Darol Holsman, FSF manager, safety audits. The same principle applies to substituting in this role any pilot or maintenance technician who has not been cross-trained as a flight attendant.

Holsman said that he has been disappointed lately by some corporations’ reluctance — in spite of FSF awareness efforts — to voluntarily integrate a flight attendant into the crew complement of the larger business jets for the sake of passenger safety. Corporate/charter operators typically consider a flight attendant only if they fly something like a Challenger 600, 601, 604 or Global Express; a Gulfstream GIV/4 or GV/450/550; or a Dassault Falcon 50, 2000 or 900, he said.

The FSF audit team has promoted

Defense of crewmembers, passengers or the aircraft against unexpected threats may require training tailored to confined spaces.



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Confidence gained boarding a life raft from the water extends to other aspects of coping with a ditching.

hands-on cabin emergency training for frequent-flier corporate executives especially when a flight attendant cannot be assigned. “But what is lacking then is any guarantee that those who receive training have the discipline in an emergency to get people off the airplane in a hurry,” Holsman said. “More than 90 percent of pilots we interview have a high level of confidence that the flight attendant could evacuate the passengers if something happened to the flight crew.”

At the global level, a voluntary code of best practices, the International Standard for Business Aircraft Operations (IS-BAO), positively influences operators’ attitudes about the voluntary use of flight attendants, according to Peter Ingleton, director, International Civil Aviation Organization liaison, of the International Business Aviation Council. The IS-BAO says, “The minimum number of cabin crewmembers shall be in accordance with national requirements” and operators “shall ensure that each cabin crewmember has fulfilled the requirement of the operator’s ground and flight training program [with initial and annual training covering aircraft type training, safety procedures training, emergency procedures training

initially and every two years, first aid training and aircraft-surface contamination training].”

Flight attendant training already is a major part of the U.S. National Business Aviation Association (NBAA) Standards of Excellence in Business Aviation (SEBA) program, which encourages continuing education within the business aviation community. It establishes a set of common expectations between flight attendants and aviation department pilot-managers, says Jay Evans, director, operations, and staff committee liaison to the NBAA Flight Attendants Committee.

The NBAA has promoted the voluntary use of flight attendants by awarding them a total of 261 scholarships since 2000, identifying training organizations and attracting flight attendants to business aviation. Flight attendants also have been strongly encouraged to complete the NBAA certified aviation manager program, Evans said.

Endorsement of professional training of flight attendants has permeated NBAA activities, he said. “The NBAA *Management Guide* also emphasizes that a flight attendant is aboard for safety — ensuring that the flight crew is briefed properly, exits are managed properly, emergency equipment is prepared, and the passengers briefed and ready to go,” Evans said. “In so many instances, we know that a properly trained flight attendant responded properly and saved lives. Being there and handling the situation made a difference.”

One Person’s Commitment

Voluntarily implementing a three-person crew in a business jet can begin with just one manager’s commitment to the value of having a flight attendant, says Doug Schwartz, manager, Global Aviation Services at ConocoPhillips. His company takes the position that within the logistical confines of the size of the airplane, the minimum crew for a business jet with a flat floor and wide cabin is two pilots and a flight attendant. Logistics come into play because in some airplane types, there is no room in a full cabin for a flight attendant to walk back and forth or even to stand up, he said.



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Hands-on experience using the canopy and other life-raft equipment saves time and reduces risks in actual events.

This commitment also implies a mindset that, just like the pilots, the flight attendant is a necessity, regardless of regulations. “If cabin safety is going to be an integral part of flight operations, the interactions between the flight attendant and pilots need to be just as well scripted as between the flight crewmembers,” Schwartz said.

An aviation department manager typically must be able to explain to senior corporate executives why the company should use flight attendants and how the new function will be managed. This means being ready with answers to many questions. “If you use flight attendants, how do you recruit them?” he said. “What characteristics and qualifications are required? Do you network or outsource? Full-time or part-time people? Do you have different qualifications for full-time and part-time people? In any case, if you use a flight attendant, how does the flight attendant fit into the crew? Is he/she just an additional person in the back of the airplane or an integral part of the crew? Procedurally, how do the pilots and flight attendant communicate and interrelate? What kind of briefing do [the pilots] conduct for the flight attendant?”

Judith Reif, president and contract flight attendant for JR Flight Services and a member of the NBAA Flight Attendants Committee, argues that business aviation operators’ crewing decisions should be based on safety issues, not arbitrary factors. “Flying domestically, some operators feel that a flight attendant is not needed and that the pilots can attend to the passenger needs,” Reif said. “Anything could go wrong at any moment, however. We are an asset to the pilots, and we can be their eyes and ears in the cabin.”

Except for breaks on long flights, pilots need to be in the cockpit. “Once a pilot steps out of the cockpit, the flight is a single-pilot operation, which becomes a safety issue,” Reif said.

Empowering Decision Makers

Because few regulatory requirements govern the training of most flight attendants in business aviation, some training organizations aim to empower them with more aviation education than

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in the past, says Colette Hilliary, program manager for cabin safety and flight attendant training, FlightSafety International. A strong focus on crew resource management, understanding dynamic variables and informed decision making under the stress of an emergency situation or outside the normal scope of responsibility constitute the new model.

Examples include sufficient understanding of fire extinguishers to knowledgeably override simple rules for extinguishing different classes of fire; familiarization with the general operation of aircraft radios; how to use a quick-donning oxygen mask; jump seat adjustment and harness release for extrication of an incapacitated pilot from the cockpit; and vigilance looking for hazards outside the airplane during ground operations, especially while taxiing and while in the hangar.

Some operators train corporate flight attendants to shut down the aircraft engines and/or auxiliary power unit in an emergency. Medically approved mixed-gas training equipment — an alternative to the hyperbaric chamber —

Harmless simulation of smoke in a full-motion cabin trainer adds realism to evacuations managed by one flight attendant; photos show an August 2007 course conducted by FACTS Training International.

Today’s drills on fighting cabin fires in business jets cover informed decision making for unfamiliar scenarios.

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also has been installed inside the cabin trainer to provide corporate flight attendants an optional training enhancement to experience their individual symptoms of hypoxia. This training has been highly effective, Hilliary said.

Increasingly, corporate flight attendant trainees already have earned a U.S. Federal Aviation Administration (FAA) certificate of demonstrated proficiency through airline training or U.S. Federal Aviation Regulations (FARs) Part 135, commuter and on-demand, operator training.⁶ About half of the trainees in FlightSafety International corporate flight attendant courses have the certificate, and many of them work concurrently for airlines and business aircraft operators.

Because of increased FAA surveillance of the operational control of charter flights, such as under FAA Notice 8000.355, *Inspector Guidance for Part 142 Training Centers*, operator responsibility for ensuring training — including Part 135 flight attendant training — has come to the forefront in 2007 and operators are expected to be more diligent in identifying all personnel who need training before flying charter trips, Hilliary said.

The current standard in business jet flight operations is flight attendant training specifically designed for corporate/charter flights, says Doug Mykol, president and CEO of AirCare Solutions Group, which includes FACTS Training. The solution has become advanced full-motion simulators for flight attendants with representative galleys, actual exit-opening mechanisms, standard emergency equipment, smoke and fire simulation, and realistic sounds, Mykol said.

Training organizations also have been advocates for wider use of flight attendants in business aviation. “My estimate is that 60 to 70 percent of the cabin-class

business jets have a third crewmember on every flight,” Mykol said. “Our position is that any time operators have a stand-up cabin — whether six or 14 passengers — they really should have a trained third crewmember.”

In her experience, most passengers flying on corporate/charter aircraft have shown respect for the duties and responsibilities of the flight attendant, said Mary Lou Gallagher, owner of Beyond & Above Corporate Flight Attendant Training. Since the Challenger overrun at Teterboro, a greater number of cabin aides have completed the company’s corporate flight attendant course — typically at their own expense as freelance contractors. The comprehensiveness and demands of this training often were not appreciated beforehand by the cabin aides or their employers. “By the end, we will have put them through a ditching in which they had to put on a life vest, jump in the water, inflate the life raft and get into the raft,” Gallagher said. “They are excited then because they feel very confident about using all the equipment on board.”

Demand for wider voluntary use of flight attendants could depend somewhat on passenger awareness, however. “Because there has been an explosion of people buying their own aircraft, and other people managing these aircraft, I do not think the people sitting in the back are as educated as they should be about who actually is in the cabin and their credentials,” she said. They are still assuming they know, Gallagher said. ●

For an enhanced version of this article, see www.flightsafety.org/asw/oct07/cabinaide.html.

Notes

1. FARs Part 135.107 — similar to regulations in many countries — requires that an airplane with a passenger seating

configuration of more than 19 passengers have a flight attendant in commuter and on-demand operations. There is no equivalent for corporate or private aircraft that operate under Part 91. Relatively few operators are believed to have a flight attendant aboard smaller jets and turboprop airplanes.

2. NTSB. *Runway Overrun and Collision, Platinum Jet Management, LLC, Bombardier Challenger CL-600-1A11, N370V, Teterboro, New Jersey, February 2, 2005*. Accident Report NTSB/AAR-06/04, Oct. 31, 2006.
3. Safety recommendation A-06-69 says, “Require that any cabin personnel on board ... Part 135 flights who could be perceived by passengers as equivalent to a qualified flight attendant receive basic [FAA-]approved safety training in at least the following areas: preflight safety briefing and safety checks; emergency exit operation; and emergency equipment usage. This training should be documented and recorded by the Part 135 certificate holder.” In January 2007, the FAA said, “The FAA is reviewing all current regulations and the recommendations of the Part 125/135 Aviation Rulemaking Committee (ARC) to identify possible method(s) of requiring that cabin personnel provided by the certificate holder, who could be perceived by passengers as equivalent to a qualified flight attendant, are appropriately trained in the identified safety areas.” Initial plans to address the issue with a Safety Alert for Operators and a notice to FAA personnel were revised, and in September 2007, the NTSB recommended that such guidance await revisions to Part 135, called the FAA’s efforts “responsive” and classified these steps as an “open acceptable” response.
4. FSF Editorial Staff. “Assigning Seats to Flight Attendants Requires Care in Business Aircraft.” *Cabin Crew Safety* Volume 38 (May–June 2003).
5. NTSB. “Survival Factors Group Chairman’s Factual Report.” Accident no. DCA05MA031. Aug. 26, 2005.
6. FAA. “Flight Attendant Certification.” *Flight Standards Information Bulletin for Air Transportation* no. FSAT 04-07, Dec. 10, 2004.