

National Transportation Safety Board

Washington, D.C. 20594

Safety Recommendation

Date: December 4, 2006

In reply refer to: A-06-77

Honorable Marion C. Blakey Administrator Federal Aviation Administration Washington, D.C. 20591

On November 27, 2004, about 0820 Afghanistan time, ¹ a Construcciones Aeronauticas Sociedad Anonima C-212-CC (CASA 212) twin-engine, turboprop airplane, N960BW, operated by Presidential Airways, Inc., of Melbourne, Florida, was destroyed when it collided with mountainous terrain near Bamiyan, Afghanistan. ² The captain, the first officer, and the four passengers were killed; ³ one passenger survived for at least 8 hours, but he died before help arrived. The flight was operated under a Department of Defense (DoD) Air Mobility Command contract ⁴ under the provisions of 14 *Code of Federal Regulations* (CFR) Part 135. Daylight visual meteorological conditions prevailed. The flight was en route from Bagram, Afghanistan, to Farah, Afghanistan, on the first leg of a mission that was to end with the airplane's return to Bagram. ⁵ The operator was unaware the airplane was missing until about 6 hours after it crashed. ⁶

¹ Afghanistan time is coordinated universal time plus 4 hours 30 minutes. All times are reported in Afghanistan time, unless otherwise indicated.

² At the request of the Transitional Islamic Government of Afghanistan, Ministry of Civil Aviation & Tourism, the National Transportation Safety Board accepted delegation of the accident investigation in accordance with paragraph 5.1 of Annex 13 to the Convention on International Civil Aviation.

³ All personnel on board the airplane were U.S. citizens. One passenger was mechanic-certificated and was employed by the contractor; the other three passengers were active-duty U.S. Army soldiers.

⁴ Under contract FA4428-04-D-0036, dated September 20, 2004, Presidential Airways was to provide ondemand air transportation services for U.S. military personnel and cargo to remote sites within Afghanistan, Uzbekistan, and Pakistan. Per the contract, all flights were to be performed in accordance with 14 *Code of Federal Regulations* Part 135.

⁵ The flight's entire mission was to fly from Bagram to Farah, then to Shindand, Afghanistan, and then return to Bagram. The flight crew had planned to divert to Kandahar, Afghanistan, if they were unable to land at Shindand due to potential reduced visibilities because of blowing dust.

⁶ At the time the operator was notified that the airplane was missing, the airplane was more than 4 hours overdue for its expected arrival at Farah, its first destination.

The National Transportation Safety Board determined that the probable cause of the accident was the captain's inappropriate decision to fly a nonstandard route and his failure to maintain adequate terrain clearance, which resulted in the inflight collision with mountainous terrain. Factors were the operator's failure to require its flight crews to file and to fly a defined route of flight, the operator's failure to ensure that the flight crews adhered to company policies and Federal Aviation Administration (FAA) and DoD Federal safety regulations, and the lack of in-country oversight by the FAA and the DoD of the operator. Contributing to the death of one of the passengers was the operator's lack of flight-locating procedures and its failure to adequately mitigate the limited communications capability at remote sites.

The unpressurized airplane collided with mountainous terrain at an elevation of 14,650 feet as the captain attempted to reverse the airplane's course at the end of a box canyon. The flight crewmembers' discussions captured by the cockpit voice recorder (CVR) indicated they chose to fly a nonstandard route through a valley, they used a global positioning system (GPS) to navigate, and they deliberately flew the airplane at low altitude through the valley for "fun."

The Safety Board noted numerous deficiencies in the flight crewmembers' performance: they did not adequately plan for the flight; they did not initiate a climb in sufficient time to clear the terrain; they subsequently did not execute a timely course reversal even though the mechanic-certificated passenger⁸ prompted them to take action; and they failed to use supplemental oxygen as required by Federal regulations for the altitudes at which the flight was operating. The captain and the first officer were both experienced in mountain flying, and the CVR recording of their discussions indicated that they were aware the airplane was approaching the terminus of the box canyon more than 15 minutes before the crash, yet they did not take appropriate action to prevent the collision.

The Safety Board also noted numerous deficiencies in Presidential Airways' Part 135 operations⁹ in Afghanistan: the dispatch procedures were inadequate in that the operator did not ensure that specific routes of flight were defined and flown; the flight-locating procedures were inadequate in that the operator did not consistently track flight arrivals at each remote location in a timely manner; and the operator did not adequately mitigate the limited communications capability at some remote sites. This lack of a specific route structure, flight-locating procedures, and adequate communications contributed to the death of the one passenger who initially survived the crash. Further, the operator did not provide sufficient oversight of and guidance to its flight crews and did not ensure that its operations in Afghanistan were conducted in compliance with Part 135 regulations.

While the Safety Board recognizes that the operator is fully responsible for operating in accordance with the Part 135 regulations, the FAA and the DoD are responsible to provide

⁷ The brief about this accident, IAD05FA023, can be found on the Safety Board's Web site at http://wwww.ntsb.gov>.

⁸ According to the operating specifications for the CASA 212 airplane, a mechanic is not a required crewmember. During the accident flight, the mechanic-certificated passenger was seated in the cockpit jumpseat.

⁹ Presidential Airways held a Part 135 operating certificate and also conducted operations in the United States.

oversight of such operations, and there are FAA and DoD regulations that pertain specifically to many of the areas of deficiency noted in this accident. By allowing such deficiencies to remain uncorrected, neither the FAA nor the DoD provided adequate oversight of Presidential Airways' operations in Afghanistan. The Safety Board is concerned that the remoteness of such operations presents unique oversight challenges that have not been adequately addressed for civilian contractors that provide air transportation services to the U.S. military overseas.

The DoD attempted to compel safe operations by issuing a contract that required the operator to hold a Part 135 operating certificate and to conduct flights in accordance with Part 135 regulations. In the year before the accident, FAA inspectors had performed routine oversight by visiting Presidential Airways' base of operations in Florida more than 100 times and found no major discrepancies with the operator's U.S. operations. Although the FAA had also approved Presidential Airways to conduct Part 135 operations in Afghanistan, it did not provide, and was not required to provide, personnel who could directly oversee the operations there. As a result, the operational deficiencies noted with the accident flight were not evident in Presidential Airways' U.S. operations but were present in its Afghanistan operations.

FAA Order 1800.56G, "National Flight Standards Work Program Guidelines," outlines the FAA's policy regarding required surveillance of Part 135 on-demand operators. While the Safety Board recognizes that the FAA may have performed the required surveillance items on Presidential Airways' facilities, aircraft, and flight crews in the United States, thus rendering the FAA oversight of the operator, as a whole, in accordance with its standard guidelines, there is no evidence that such oversight occurred in Afghanistan. The Safety Board concludes that, without being present on site, the FAA cannot provide adequate oversight of civilian contractors that provide air transportation services in remote locations overseas.

Moreover, FAA Order 8400.10, "Air Transportation Operations Inspector's Handbook," states, "en route inspections are one of the most effective methods for accomplishing surveillance objectives and responsibilities," and the primary objective of these inspections is to evaluate in-flight operations, including, but not limited to, crew coordination, cockpit procedures, and crewmember proficiency. Although FAA Order 1800.56G requires inspectors to conduct en route inspections for Part 121 operations and Part 135 scheduled operations, it does not require en route inspections for Part 135 on-demand charter operations, such as the accident flight.

Operators often suggest that the need for privacy for their charter clients and the unscheduled nature of their operations make it difficult for FAA inspectors to be available for on-demand flights. However, many of the Presidential Airways flights in Afghanistan departed within known time slots, were repeated daily, and were based out of a single location, thus making in-flight observations feasible for those operations. While pilots may be on their "best behavior" when an inspector is on board the aircraft, en route surveillance provides inspectors the opportunity to observe operations as they take place on a day-to-day basis and to detect deficiencies before they progress into accident factors. In the case of this operation, an on-site FAA inspector may have observed route deviations, noted that the flights could not always check in with the operations center, or surmised that the pilots were flying without supplemental oxygen during some higher altitude flights.

In addition to the FAA requirements, Presidential Airways, under contract to AMC, was required to adhere to the provisions of 32 CFR Part 861 regarding flight crew training, qualifications, and proficiency. Title 32 CFR Part 861 also requires that the DoD approve and monitor contract operators for compliance with contract provisions, including safety provisions. Such monitoring should entail initial and recurring on-site safety surveys and evaluation, and the DoD oversight requirements are intended to complement the FAA requirements. According to 32 CFR 861.4(c)(3), a consideration in the DoD's evaluation process is that an "air taxi operator is expected to demonstrate some type of effective flight following capability." While the DoD had quality assurance personnel in Afghanistan who were tasked to ensure that Presidential Airways complied with the contract, the Safety Board found no evidence to suggest that DoD personnel ensured that the operator demonstrated some type of effective flight-following capability or ensured any oversight. While the Safety Board recognizes that the DoD relies on the FAA to ensure Part 135 oversight, the DoD's adherence to its own regulations that compel it also to conduct operator oversight and to ensure FAA oversight is even more critical in remote locations where the FAA has no on-site personnel.

The oversight provisions in 32 CFR Part 861 and FAA Orders 1800.56G and 8400.10, if performed, provide valuable information on the safety performance of a carrier. While FAA oversight occurred at Presidential Airways' base of operations in Florida, this was not sufficient to detect the discrepancies that existed within Presidential Airways' Afghanistan operations at the time of the accident. The Board concludes that there is a strong probability that, had the FAA or the DoD conducted direct, in-country oversight of the DoD contract operations, the FAA or the DoD would have detected the deficiencies in the operator's flight-locating and other procedures and prevented the manner in which the accident flight was conducted.

Moreover, because of the uncontrolled airspace and additional risks associated with remote overseas locations, it is critical that the FAA and the DoD ensure that operators comply with the safety regulations so that passengers are transported by the safest possible means. The Safety Board concludes that, had the FAA and the DoD coordinated their oversight responsibilities to ensure that effective oversight of civilian operations in Afghanistan was performed, many of the deficiencies noted during this investigation could have been eliminated.

Therefore, the National Transportation Safety Board recommends that the Federal Aviation Administration:

Coordinate with the Department of Defense to ensure oversight, including periodic en route inspections, is provided at all contractor bases of operation for civilian contractors that provide aviation transportation to the U.S. military overseas under 14 *Code of Federal Regulations* Part 121 or Part 135. (A-06-77)

The Safety Board also issued recommendations to the DoD and one recommendation to the Islamic Republic of Afghanistan. In your response to this letter, please refer to Safety Recommendation A-06-77. If you need additional information, you may call (571) 223-3925.

¹⁰ The requirements are outlined in 32 CFR 861.4(a) and (e).

Chairman ROSENKER, Vice Chairman SUMWALT, and Members HERSMAN and HIGGINS concurred with this recommendation. Member Hersman filed a concurring statement.

[Original Signed]

By: Mark V. Rosenker Chairman

Member Hersman, Concurring:

This accident presented a rather unique set of circumstances for the Safety Board to consider. We were asked to investigate a civilian accident that occurred in a theater of war while the operator was conducting operations on behalf of the Department of Defense. In analyzing the facts of this accident and in devising safety recommendations to address the problems that surfaced in the accident, the Safety Board has had some difficulty in determining whether recommendations should go to the FAA, as the Federal agency with safety oversight over civilian air operations, or to DoD, as the agency that had more actual control over the nature and conduct of this particular flight. Staff's recommendation for a solution to this dilemma is to issue recommendations to both agencies and then further recommend that DoD and FAA in the future articulate between themselves to what extent each agency has safety oversight in similar circumstances. Given the large number of these types of flights, it is perplexing that DoD and FAA have not executed a Memorandum of Understanding to memorialize the nature of their relationship with regard to these flights.

At first glance, the solution proposed by staff seems to be the best response for a third party Federal agency, like the NTSB, to take in this politically delicate situation. However, on a second look, it becomes apparent that it leaves open too many questions about control and responsibility and provides no real roadmap for dealing with the next atypical military contract/civilian air operation that ends in a crash.

Furthermore, the proposed recommendations in this report leave open the expectation that FAA can and does have oversight responsibility in a war theater halfway around the world, even though FAA does not have any oversight personnel assigned there. Our recommendations to FAA would imply that the Safety Board believes that FAA should have personnel assigned to oversee operations in Afghanistan, Iraq, and presumably any other military or intelligence theater, simply because DoD or other government entities have chosen to contract flights to civilian operators. This is an uncomfortable position for this Board member, given the fact that FAA resources are already stretched thin to effectively perform their safety oversight responsibilities for civilian air operations based in the U.S.

This position is even more difficult to defend given the fact that the NTSB, whose investigative authority also is limited to civilian air operations, did not have a presence in Afghanistan. In fact, the Safety Board's policy, with which I do not disagree, is to *not* send its investigators to war theaters or other scenes of hostile military activities. In the case of this accident, the Safety Board's analysis and report are based on facts and evidence gathered by DoD, because Safety Board investigators did not go to the scene. If this accident was the result of a civilian operation over which the FAA should have exercised its oversight authority, then it should have been considered a civilian accident in which the Safety Board should have exercised its investigative authority. This is not to suggest that the Safety Board should change its policy about deploying investigators to hostile military environments. Rather, this suggests that if the Safety Board did not consider the environment surrounding this accident safe enough in which to conduct a civilian accident investigation, it may not be appropriate to conclude that the FAA was wrong to have delegated its civilian safety oversight functions to the DoD in the same environment.

While I am signing this report as written, I continue to have reservations about the appropriateness of citing FAA in the probable cause for this accident when it is clear that this was a dangerous environment for their inspectors and clearly a military operation subject to DoD control. I believe that it would have been more fitting simply to address recommendations to the FAA so that this situation can be clarified and corrected in the future. The Safety Board, for example, could have recommended that FAA refuse to list countries on an operator's Ops Specs if there is no established mechanism for in-country oversight comparable to the FAA's domestic oversight.

I understand and appreciate the sensitivity of this accident investigation and the difficulty it presented the Safety Board in concluding a probable cause and making recommendations to address it. On the other hand, it is not unreasonable, given DoD's current inclination to contract many of its operations to civilians, that this situation will arise again.

[Original Signed]

Deborah A. P. Hersman