

Docket No. SA-531

Exhibit No. 2-RR

NATIONAL TRANSPORTATION SAFETY BOARD

Washington, D.C.

Operations Group Chairman
FAA Response to NTSB Recommendation A-07-01 to A-07-11
April 13, 2007

(5 Pages)



U.S. Department
of Transportation
**Federal Aviation
Administration**

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NOT 276958
Office of the Administrator 800 Independence Ave., S.W.
Washington, D.C. 20591

APR 13 2007

The Honorable Mark V. Rosenker
Chairman, National Transportation
Safety Board
490 L'Enfant Plaza East, SW.
Washington, DC 20594

Dear Mr. Rosenker:

This is in response to Safety Recommendations A-07-1 through -11 issued by the Board on January 23, 2007. These safety recommendations were issued as a result of an accident that occurred on October 14, 2004 involving a Bombardier CL-600-2B19, N8396A. Pinnacle Airlines flight 3701 (doing business as Northwest Airlink), crashed into a residential area about 2.5 miles south of Jefferson City Memorial Airport (JEF), Jefferson City, Missouri. The airplane was on a repositioning flight from Little Rock National Airport, Little Rock, Arkansas, to Minneapolis-St. Paul International Airport, Minneapolis, Minnesota. The captain and the first officer were killed, and the airplane was destroyed. No one on the ground was injured. The flight was operating under the provisions of 14 CFR Part 91 on an instrument flight rules flight plan. Visual meteorological conditions prevailed at the time of the accident.

A-07-1. Work with members of the aviation industry to enhance the training syllabuses for pilots conducting high altitude operations in regional jet airplanes. The syllabuses should include methods to ensure that these pilots possess a thorough understanding of the airplanes' performance capabilities, limitations, and high altitude aerodynamics.

A-07-2. Determine whether the changes to be made to the high altitude training syllabuses for regional jet airplanes, as requested in Safety Recommendation A-07-1, would also enhance the high altitude training syllabuses for all other transport-category jet airplanes and, if so, require that these changes be incorporated into the syllabuses for those airplanes.

A-07-4. Convene a multidisciplinary panel of operational, training, and human factors specialists to study and submit a report on methods to improve flight crew familiarity with and response to stick pusher systems and, if warranted, establish training requirements for stick pusher-equipped airplanes based on the findings of this panel.

FAA Comment. The Federal Aviation Administration will ask the government-industry working group that developed the *Airplane Upset Recovery Training Aid* to reconvene. That group consisted of experts from many industry and government aviation organizations, including Bombardier Aerospace Training Center (Regional Jet Training Center), the



National Transportation Safety Board, and the FAA. We will ask the working group to develop material addressing high altitude performance issues and high altitude stall prevention and recovery, including discussion of stick-pushers. We will also ask the group to distinguish, as necessary, between material applying to regional jet airplanes and material applying to all other transport category jet airplanes. Once the materials are developed, we will strongly encourage airline managers, trainers, and pilots to include that specific material in the training programs and operating manuals used by pilots.

I will keep the Board informed of the FAA's progress on these safety recommendations.

A-07-3. Require that air carriers provide their pilots with opportunities to practice high altitude stall recovery techniques in the simulator during which time the pilots demonstrate their ability to identify and execute the appropriate recovery technique.

FAA Comment. Once the materials are developed in response to safety recommendation A-07-1, the FAA will then be able to recommend ground training. We are now conducting research to develop data for use in simulators for flight training beyond the normal flight envelope. If such data becomes available, the FAA will then be able to promote its use in pertinent simulator training.

A-07-5. Verify that all Canadair regional jet operators incorporate guidance in their double engine failure checklist that clearly states the airspeeds required during the procedure and require the operators to provide pilots with simulator training on executing this checklist.

FAA Comment. The FAA is working with Transport Canada and Bombardier to develop revised procedures for the Canadair regional jet Airplane Flight Manual (AFM) and flight crew operations manual. These revised procedures will be used to support revisions to the operator's double engine failure checklist, as needed. As a result of any changes, the FAA will provide a plan for expectations and implementation of necessary pilot training.

I will keep the Board informed of the FAA's progress on these safety recommendations.

A-07-6. Require regional air carriers operating under 14 Code of Federal Regulations Part 121 to provide specific guidance on expectations for professional conduct to pilots who operate nonrevenue flights.

FAA Comment. We propose to respond to the safety issue identified in this recommendation through the issuance of an Information for Operators (InFO), which will discuss the circumstances of this accident, and possibly other accidents or data relating to positioning or nonrevenue flights, and emphasize the need for the same high standards of professionalism as are expected on revenue flights. We will provide this InFO to FAA Principal Inspectors and Certificate holders for inclusion in the Crew Resource Management (CRM) training required for all pilots under part 121. The objective of CRM training currently required is to instill professional conduct and promote safety of flight.

All InFOs as well as the applicable order can be found under the Safety tab on the faa.gov Web site.

We anticipate issuing the InFO within the next 120 days and will provide the Board a copy when it is issued.

A-07-7. For those regional air carriers operating under 14 Code of Federal Regulations Part 121 that have the capability to review flight data recorder (FDR) data, require that the air carriers review FDR data from nonrevenue flights to verify that the flights are being conducted according to standard operating procedures.

FAA Comment. The FAA shares the Board's desire to ensure safety in nonrevenue flights. As an alternative, the Flight Standards Service will issue a Safety Alert for Operators (SAFO) that recommends that the regional airlines voluntarily comply with the Board's recommendation. The SAFO will be issued by June 1, 2007.

I will provide the Board with a copy of the SAFO as soon as it is issued.

A-07-8. Work with pilot associations to develop a specific program of education for air carrier pilots that addresses professional standards and their role in ensuring safety of flight. The program should include associated guidance information and references to recent accidents involving pilots acting unprofessionally or not following standard operating procedures.

FAA Comment. The FAA meets routinely with groups such as the Airline Pilots Association (ALPA) training committee, as well as with representatives from non-affiliated pilot groups. Further, we meet at least quarterly with industry groups including the Airline Transport Association (ATA) training committee and the Regional Airline Association (RAA) training committee. In future meetings with these groups we will provide the InFO issued in response to recommendation A-07-06, and discuss this recommendation as well in an effort to agree on an effective approach to addressing the underlying safety issues.

Further, we note that crew resource management training is required for all pilots under Part 121. Enhancing crew performance is the objective of CRM, and professional standards and their role in ensuring safety of flight is central in the CRM training message. Recent accidents and failures to follow standard operating procedures are two of the most persistent sources of content in CRM training practiced today.

I believe that the FAA has satisfactorily responded to this safety recommendation, and I look forward to your response.

A-07-9. Require that all 14 Code of Federal Regulations Part 121 operators incorporate into their oversight programs periodic Line Operations Safety Audit observations and methods to address and correct findings resulting from these observations.

FAA Comment. The FAA encourages operators to conduct Line Operations Safety Audits (LOSAs) on a voluntary basis, and has published detailed guidance for operators in Advisory Circular (AC) 120-90 on the steps, resources, and procedures for doing so. A number of U.S. air carriers have implemented LOSA.

LOSA is one way, but is not necessarily the only way, in which an operator can accomplish oversight of the safety of its operations. For example, participants in the Advanced Qualification Program, which includes all major operators except Southwest Airlines, may conduct no-notice, multi-leg, random line checks on full crews. Such no-notice line checks offer many of the same advantages of LOSA with regard to the information gained.

We believe that the most effective approach to the underlying safety issues in this recommendation is the effective implementation of Safety Management Systems (SMS), which include safety audits as a key element. The FAA has initiated a rulemaking project on SMS, as discussed below in response to recommendation A-07-10, and has recently issued an Advisory Circular on SMS, as discussed below in response to recommendation A-07-11.

I believe that the FAA has satisfactorily responded to this safety recommendation, and I look forward to your response.

A-07-10. Require that all 14 Code of Federal Regulations Part 121 operators establish Safety Management System programs.

FAA Comment. The FAA concurs with this recommendation, which is in consonance with a recent amendment to International Civil Aviation Organization (ICAO) Annex 6. The FAA has begun a rulemaking project to meet the ICAO deadline of January 1, 2009 for SMS requirements. At present, our intent is to impose SMS requirements on air operators certificated in accordance with 14 CFR parts 121 and 135 and repair stations certificated in accordance with 14 CFR part 145. In order to better address issues related to implementation of the SMS concept, a set of pilot project trials involving a variety of sizes and types of service providers is scheduled to begin in 2007.

I will keep the Board informed of the FAA's progress on this safety recommendation.

A-07-11. Strongly encourage and assist all regional air carriers operating under 14 Code of Federal Regulations Part 121 to implement an approved Aviation Safety Action Program and an approved Flight Operational Quality Assurance program.

FAA Comment. The FAA concurs with this recommendation. We encourage all airlines operating under part 121 to voluntarily implement an Aviation Safety Action Program (ASAP) and a Flight Operational Quality Assurance Program (FOQA), while acknowledging that few regional operators participate in FOQA. As indicated on the FAA Web site for ASAP, there is already significant participation in ASAP by regional airlines. However, the FAA agrees that further participation in ASAP should be encouraged and assisted. The FAA is engaged in initiatives towards that end.

First, the FAA will make available at no cost to any regional airline that desires to participate, a comprehensive Web-based ASAP report submission and database management system. The FAA will provide this ASAP Web-based system to be housed on the airline's premises, or, alternatively, to be hosted by an FAA contractor at a secure Web-accessible

central location, at the preference of the airline. The FAA will make this ASAP database system available to any U.S. ASAP participating airline, effective immediately.

The FAA will also coordinate with RAA by participating in RAA-sponsored conferences and seminars in order to increase awareness of ASAP and FOQA in the regional airline community. The FAA will participate for that purpose in RAA-sponsored activities available during the remainder of Fiscal Year (FY) 2007 and throughout FY 2008.

The FAA has recently published AC 120-92 on SMS and is presently engaged in rulemaking that would mandate such a safety oversight approach by airlines in the future. The SMS AC identifies FOQA as one of the recommended tools that can contribute to the safety assurance function required of an SMS. The FAA believes that awareness by industry of this coming SMS requirement, coupled with the fact that there is already a high level of industry buy-in to the SMS philosophy, may offer an increased incentive for participation in FOQA by regional airlines, and a concomitantly increased opportunity for the FAA to encourage such participation.

I believe that the FAA has satisfactorily responded to this safety recommendation, and I look forward to your response.

Sincerely,

A handwritten signature in black ink, appearing to read "Marion", written in a cursive style.

Marion C. Blakey
Administrator