



National Transportation Safety Board

Washington, D.C. 20594

Safety Recommendation

Date: September 28, 1990

In reply refer to: A-90-132

Dr. Elbert W. Friday
 Assistant Administrator
 for Weather Services
 National Weather Service
 1325 East West Highway
 Silver Spring, Maryland 20910

On September 8, 1989, N283AU, a Boeing 737-200 operated as USAir flight 105 was a regularly scheduled revenue passenger flight conducted under 14 Code of Federal Regulations Part 121 from Pittsburgh (PIT), Pennsylvania, to Wichita, Kansas, with an en route stop in Kansas City, Missouri (MCI). Fifty-eight passengers, two flight crewmembers and four flight attendants were onboard. A Federal Aviation Administration inspector who was performing an en route inspection occupied the cockpit observer's seat. The flight from Pittsburgh to the Kansas City area was uneventful.¹

The captain was the pilot flying and the first officer was performing the communications with air traffic control. USAir 105 was cleared to execute the localizer back course approach to runway 27 at 2129:41. At 2134:23, the local controller told USAir 105 "I can't tell for sure but it appears we have lost the lighting on the south side of the airport." The flightcrew later described seeing a bright flash about this time. Subsequent inspection revealed that the airplane struck and severed four electronic transmission cables, located about 75 feet above the ground, approximately 7,000 feet east of the runway 27 threshold. The flightcrew executed a missed approach and landed uneventfully in Salina, Kansas. None of the passengers or crew was injured, but the airplane sustained minor damage in the incident.

The Safety Board's investigation of the accident revealed that inadequate procedures existed for the transmission of weather information between the National Weather Service (NWS) and the air traffic control system.

¹For more detailed information, read Aircraft Incident Report--USAir, Inc. flight 105, Boeing 737-200, N283AU, Kansas City, Missouri, September 8, 1989 (NTSB/AAR-90/04).

In this incident, conversations between NWS personnel and FAA ATC personnel in MCI took place over an unrecorded telephone line. Subsequently, the exact nature of the transmission of the weather information, such as the time of transmission and whether the information was properly sent and received, were in dispute.

Following the incident, the NWS and the MCI ATC facility enhanced their procedures for acknowledging the transmission and receipt of weather information at MCI. However, the procedures do not contain a formal acknowledgement of the transmission of weather information, despite the fact that both FAA and NWS procedures encourage such requirements.

The Safety Board believes that the acknowledgement of the transmission of weather information is critical to assuring that such data is received and acted upon. With acknowledgment of receipt of a message, the sender is informed that the information has been received, there is a record of receipt for future reference, and there is some assurance that the message will be acted upon. Therefore, the Safety Board believes that the FAA should require acknowledgement of the transmission and receipt of all weather messages exchanged between an FAA ATC facility and the NWS at airports where weather information is regularly exchanged between the two entities, to include the time of receipt and the identity of the person receiving the information. Further, the exchange of such weather messages should occur over recorded telephone lines or recorded electronic transmission means, and the recordings should be retained for a reasonable amount of time.

Therefore, the National Transportation Safety Board recommends that the National Weather Service:

Require the acknowledgement of the transmission and receipt of all weather messages exchanged between an FAA air traffic control facility and the National Weather Service at airports where weather information is regularly exchanged between the two entities, to include the time of receipt and the identity of the person receiving the information. Further, the exchange of such weather messages should occur over recorded telephone lines or recorded electronic transmission means, with the recordings retained for a reasonable amount of time. (Class II, Priority Action) (A-90-132)

Also, as a result of its investigation, the Safety Board issued safety recommendations to the Federal Aviation Administration.

The National Transportation Safety Board is an independent federal agency with the statutory responsibility "...to promote transportation safety by conducting independent accident investigations and by formulating safety improvement recommendations" (Public Law 93-633). The Safety Board is vitally interested in any actions taken as a result of its safety recommendations and would appreciate a response from you regarding action taken or contemplated with respect to the recommendation in this letter. Please refer to Safety Recommendation A-90-132 in your reply.

KOLSTAD, Chairman, COUGHLIN, Vice Chairman, LAUBER, BURNETT, and HART, Members, concurred in this recommendation.

A handwritten signature in black ink, appearing to read "James L. Kolstad". The signature is written in a cursive, somewhat stylized font.

By: James L. Kolstad
Chairman

