

226. AIR CARRIER OPERATIONS BULLETIN NO. 1-94-25

EMPHASIS ON TIME MANAGEMENT AND CREW COORDINATION IN PREPARATION OF CABIN FOR IMPENDING EMERGENCY LANDING

(Formerly Air Carrier Operations Bulletin No. 1-91-1 and includes
NTSB SAFETY RECOMMENDATION A-90-173).

- a. The investigation of the United Airlines, Inc., Flight 232, accident which occurred on July 19, 1989, at Sioux City, Iowa, revealed a delay in cabin preparation for the emergency landing.
- b. At the time of the accident, United utilized two types of cabin preparation: Full Cabin Preparation (over 10 minutes) and Short Notice Emergency Landing Preparation (under 10 minutes). Both preparations require the senior flight attendant to determine how much time is available prior to landing. The senior flight attendant testified that she did not ask the captain for the amount of time available for cabin preparation because she thought the flightcrew was too busy. She also testified that she wanted to keep things normal in the cabin as long as possible and delayed the passenger emergency briefing. Survivors stated that the captain's announcement to the passengers, minutes before the crash, implied that the flight attendants had conducted a "brace-for-impact" position briefing; in actuality, passengers had not received a formal briefing. Flight attendants had earlier briefed passenger informally on the bracing position.
- c. Two other issued air carrier operations bulletins (ACOB) addressed similar issues: ACOB No. 1-76-19, now ACOB No. 1-94-15, addressed flight and cabin crewmember coordination, communication, and safety during potentially hazardous conditions of flight; ACOB No. 9-90-2 addressed the importance of sound crew resource management (CRM) techniques in emergency situations for which there are no "book answers." The guidance in both ACOB's is relevant to this type of accident.
- d. Principal operations inspectors (POI) should ensure that their assigned operator's training department reviews the accident scenario of United Airlines, Inc., Flight 232, and the applicable ACOB's. Emphasis should be on time management and crew coordination/communication in emergency cabin preparation. "Lessons learned" in this accident may be very useful for developing air carrier's training curriculums. In any case, each emergency training program should provide flight attendants, who may be required to act in rapidly changing emergency conditions, with a knowledge of the operator's policies and procedures. CRM training, with practice and feedback sessions, is recommended for building communication, situational awareness, problem solving, and stress management skills.