## 223. AIR CARRIER OPERATIONS BULLETIN NO. 1-94-22

## FLIGHT ATTENDANT TRAINING ON CONDITIONS OF AIRCRAFT FOLLOWING AN ACCIDENT

(NTSB SAFETY RECOMMENDATION A-92-69 and formerly Air Carrier Operations Bulletin No. 1-76-12, Flight Attendant Training Lower Lobe Galleys).

- a. As the result of recent accident interviews with flight attendants, the National Transportation Safety Board (NTSB) concluded that flight attendant training courses need to emphasize the conditions of the aircraft following an impact. While most flight attendant training curriculums contain information about this subject, the NTSB believes the training topics regarding the aircraft cabin environment, possibility of fire, debris, toxic fumes, and low probability of explosion following a crash should be emphasized.
- b. Flight attendants could be shown visual presentations of aircraft cabins following the crash. Emphasis should be placed on the possibility of cabin floor and aircraft fuselage distortions and breaks. For example, in one accident, part of the cabin was upside down while another fuselage section was relatively level. The level fuselage section's floor had a large break. In addition, debris in the form of carry-on baggage, galley supplies, and other items may dislodge and clutter the aisles. Survivors of accidents have reported climbing over debris and standing on "something" in order to climb out the top of the fuselage.
- c. Training courses should also address the presence of fire and toxic fumes during and following a crash. Training curriculum should address fire dynamics including flash overs and other heat patterns associated with super heated air while at the same time addressing the probability of explosion. There is also the problem of toxic fumes. Research and accident histories indicate that when toxic fumes and/or smoke are present, the "quality air" is about arm rest level. Most airlines use a diminished light environment coupled with simulated smoke when conducting evacuation drills, this a good method for bringing crewmembers' attention to the crash environment. This is especially true when it is followed by a discussion of accidents and incidents.
- d. Principal operations inspectors (POI) should bring this bulletin to the attention of their assigned certificate holders. The POI should also review their assigned certificate holder's flight attendant training programs to ensure these subjects are addressed and emphasized.