

8-85-1 -- CREWMEMBER PROCEDURES AND RESPONSIBILITIES DURING GROUND OPERATIONS IN ALL WEATHER CONDITIONS.

a. As a result of ground operation of aircraft in restricted visibility conditions, a series of accidents has occurred, often involving the collision of two aircraft. This situation was highlighted by the ground collision on December 23, 1983, of a South-central Air Piper PA-31-350 and a KAL DC-10-30 operating in such conditions. Both aircraft were destroyed by impact and post-impact fire, and numerous injuries occurred.

b. In its analysis of the accident, the NTSB concluded that the KAL captain failed to recognize that his familiarity with the airport would not compensate for the limitations in other sources of information he would have used ordinarily to confirm the aircraft's position. As a result of this accident and similar errors in air carrier ground operating procedures resulting in ground collision accidents at airports during restricted visibility conditions, the Board expressed concern that there may be a lack of flightcrew training in conducting these operations.

c. In two separate incidents on January 10, 1989, and on March 23, 1989, respectively, aircraft operated by Eastern Airlines and American Airlines struck barricades on rotation during takeoff roll on runway 17 at the William P. Hobby Airport (Hobby) Houston, Texas.

d. In its analysis of these incidents, the NTSB determined that both flightcrews had been cleared to take off on Hobby airport runway 12R, but they inadvertently took off on runway 17. The NTSB concluded that both incidents at Hobby airport could have been prevented had the flightcrews compared their heading indicators to the runway heading as they aligned their airplanes to the runway centerline. The NTSB maintains that this procedure, if used, would have alerted the flightcrews that the airplanes were on the wrong runway.

e. Accordingly, principal operations inspectors should ensure that the operator has established appropriate procedures regarding ground operation of aircraft in all weather conditions and has included the following in its initial and recurrent training programs:

(1) A review of the ground cockpit operating procedures to ensure that such procedures in no way derogate outside - cockpit vigilance during operations in restricted ground visibility conditions.

(2) Emphasis on the importance of, and for FAR Part 121 operations, the requirement for pilot-in-command familiarity with the physical layout in the terminal area of each airport in which the pilot will operate.

(3) An increased emphasis on the importance of ensuring that the correct taxiways and runways are being used during taxi and takeoff operations by both pilots cross-checking the heading indicators at their respective pilot positions and comparing

the heading indicated to the runway heading when the aircraft is aligned with the runway centerline for takeoff.

(4) Emphasis on assuring that flight crewmembers have a basic familiarity with FAR Part 139 (airport certification requirements), i.e., understanding that significant differences in runway-taxiway guidance at various airports may exist and still meet airport certification requirements.