NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

ISSUED: October 8,1974

Forwarded to:

Honorable Alexander P. Butterfield Administrator Federal Aviation Administration Washington, D. C. 20591

SAFETY RECOMMENDATION(S)

A-74-85 & 86

On September 27, 1973, Texas International Airlines Flight 655, a Convair 600, crashed into the north slope of Black Fork Mountain, Ouachita Mountain Range, Arkansas, while on a flight from El Dorado to Texarkana, Arkansas. The crew elected to operate under visual flight rules (VFR) because of frontal activity and associated thunderstorms. The aircraft deviated north of the course between El Dorado and Texarkana and crashed about 80 miles off course.

Conversations between the captain and the copilot, recorded by the cockpit voice recorder, indicated that the crew did not know their position when they initiated a descent from 3,000 feet. About 12 minutes before impact, the copilot stated, "I sure wish I know where ... we were." A few minutes later, he said, "Painting ridges and everything else boss, and I'm not familiar with the terrain." The aircraft descended to about 2,000 feet m.s.l., at the captain's request, while the copilot continued to express his doubts about terrain clearance; "...man, I wish I knew where we were so we'd have some idea of the general terrain around this... place." The captain replied that the highest point in the area was 1,200 feet. Just before impact, the copilot had located the aircraft's approximate position, and as he was saying, "The minimum en route altitude here is forty-four hun ...," the aircraft crashed. It struck the mountain 600 feet below the ridgeline at an altitude of about 2,000 feet m.s.l.

The actions of the crew in not using good navigational techniques and their descent when the position of the aircraft was not known must be considered unprofessional conduct.

Similar factors have occurred in other accidents, which appear to have been the direct result of unprofessional performance. Investigations have revealed that crew behavior ranges from the casual acceptance of the flight environment to flagrant disregard for prescribed procedures and safe operating practices. The case in point exhibits a casual acceptance of the flight environment as do accidents in which the lack of altitude awareness during approaches in poor meteorological conditions, results in descent below the minimum descent altitude and contact with trees, ground, or water. (See Enclosure I.)

Preliminary factual information obtained from the investigation of the tragic Eastern Air Lines, Inc., DC-9 accident at Charlotte, North Carolina, on September 11, 1974, reflects once again serious lapses in expected professional conduct.

Other investigations have revealed intentional descents below minimum descent altitude and unprofessionalism during which the basics in safe operating practices were totally disregarded. (Enclosure II.) Yet, the records of the pilots involved show that they conducted themselves properly when being observed by check airmen or FAA air carrier inspectors. To determine what motivates a pilot to disregard prescribed operating procedures is difficult; therefore, a solution to the problem is not readily apparent. Usually, human error has been reduced through increased training, standardization, and restrictive regulations. History has proved that neither increased flight checks nor new regulations, alone, will improve safety; nor will these actions ensure professional performance. Yet, professionalism is fundamental to safe operations in civil aviation.

The high standard of professionalism possessed by most pilots must be instilled in all pilots. Professional standards committees should be able to assist substantially in this regard. Accordingly, the National Transportation Safety Board recommends that the Federal Aviation Administration:

- 1. Initiate a movement among the pilots associations to form new professional standards committees and to regenerate old ones. These committees should:
 - Monitor their ranks for any unprofessional performance.
 - b. Alert those pilots who exhibit unprofessionalism to its dangers and try, by example and constructive criticism of performance required, to instill in them the high standards of the pilot group.

Honorable Alexander P. Butterfield (3)

- c. Strengthen the copilot's sense of responsibility in adhering to prescribed procedures and safe practices.
- d. Circulate the pertinent information contained in accident reports to pilots through professional publications so that members can learn from the experience of others.
- 2. Develop an air carrier pilot program, similar to the General Aviation Accident Prevention Program (FAA Order 8000.8A), that will emphasize the dangers of unprofessional performance in all phases of flight. The program could be presented in seminar form, using audio/visual teaching aids, to call to the pilots' attention all facets of the problem.

REED, Chairman, McADAMS, THAYER, BURGESS, and HALEY, Members, concurred in the above recommendations.

By: John H. Reed

Enclosures (2)