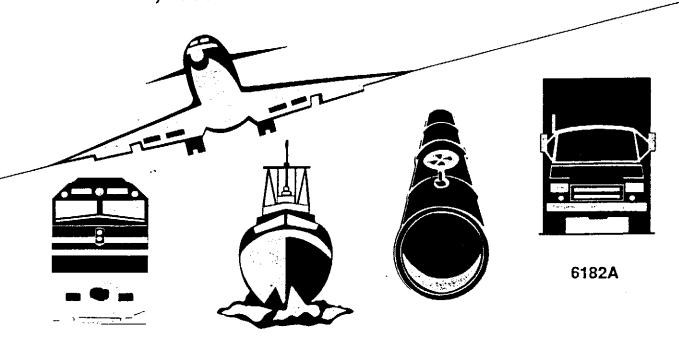
PB94-910406 NTSB/AAR-94/04

NATIONAL TRANSPORTATION SAFETY BOARD

WASHINGTON, D.C. 20594

AIRCRAFT ACCIDENT REPORT

UNCONTROLLED COLLISION WITH TERRAIN AMERICAN INTERNATIONAL AIRWAYS FLIGHT 808 DOUGLAS DC-8-61, N814CK U.S. NAVAL AIR STATION GUANTANAMO BAY, CUBA AUGUST 18, 1993



EXECUTIVE SUMMARY

On August 18, 1993, at 1656 eastern daylight time, a Douglas DC-8-61 freighter, N814CK, registered to American International Airways, Inc., doing business as Connie Kalitta Services, Inc., and operating as AIA flight 808, collided with level terrain approximately 1/4 mile from the approach end of runway 10, after the captain lost control of the airplane while approaching the Leeward Point Airfield at the U.S. Naval Air Station, Guantanamo Bay, Cuba. The airplane was destroyed by impact forces and a postaccident fire, and the three flight crewmembers sustained serious injuries. Visual meteorological conditions prevailed, and an instrument flight rules flight plan had been filed. The flight was conducted under 14 Code of Federal Regulations, Part 121, Supplemental Air Carriers, as an international, nonscheduled, military contract flight.

The National Transportation Safety Board determines that the probable causes of this accident were the impaired judgment, decision-making, and flying abilities of the captain and flightcrew due to the effects of fatigue; the captain's failure to properly assess the conditions for landing and maintaining vigilant situational awareness of the airplane while maneuvering onto final approach; his failure to prevent the loss of airspeed and avoid a stall while in the steep bank turn; and his failure to execute immediate action to recover from a stall.

Additional factors contributing to the cause were the inadequacy of the flight and duty time regulations applied to 14 CFR, Part 121, Supplemental Air Carrier, international operations, and the circumstances that resulted in the extended flight/duty hours and fatigue of the flightcrew members. Also contributing were the inadequate crew resource management training and the inadequate training and guidance by American International Airways, Inc., to the flightcrew for operations at special airports, such as Guantanamo Bay; and the Navy's failure to provide a system that would assure that the local tower controller was aware of the inoperative strobe light so as to provide the flightcrew with such information.

Safety issues discussed in the report focused on crew scheduling by American International Airways, Inc., the effects of fatigue on flightcrew performance, training on special airports by American International Airways, Inc., and the lack of dissemination of information about special airports by the Department of Defense. Safety recommendations concerning these issues were made to the Federal Aviation Administration, American International Airways, Inc., and the Department of Defense.

3.2 Probable Cause

The National Transportation Safety Board determines that the probable causes of this accident were the impaired judgment, decision-making, and flying abilities of the captain and flightcrew due to the effects of fatigue; the captain's failure to properly assess the conditions for landing and maintaining vigilant situational awareness of the airplane while maneuvering onto final approach; his failure to prevent the loss of airspeed and avoid a stall while in the steep bank turn; and his failure to execute immediate action to recover from a stall.

Additional factors contributing to the cause were the inadequacy of the flight and duty time regulations applied to 14 CFR, Part 121, Supplemental Air Carrier, international operations, and the circumstances that resulted in the extended flight/duty hours and fatigue of the flightcrew members. Also contributing were the inadequate crew resource management training and the inadequate training and guidance by American International Airways, Inc., to the flightcrew for operations at special airports, such as Guantanamo Bay; and the Navy's failure to provide a system that would assure that the local tower controller was aware of the inoperative strobe light so as to provide the flightcrew with such information.

4. RECOMMENDATIONS

As a result of the investigation of this accident, the National Transportation Safety Board makes the following recommendations:

-to the Federal Aviation Administration:

Revise the applicable subpart of 14 CFR, Part 121, to require that flight time accumulated in noncommercial "tail end" ferry flights conducted under 14 CFR, Part 91, as a result of 14 CFR, Part 121, revenue flights, be included in the flight crewmember's total flight and duty time accrued during those revenue operations. (Class II, Priority Action) (A-94-105)

Expedite the review and upgrade of Flight/Duty Time Limitations of the Federal Aviation Regulations to ensure that they incorporate the results of the latest research on fatigue and sleep issues. (Class II, Priority Action) (A-94-106)

Revise 14 CFR, Section 121.445, to eliminate subparagraph (c), and require that all flight crewmembers meet the requirements for operation to or from a special airport, either by operating experience or pictorial means. (Class II, Priority Action) (A-94-107)

-to American International Airways, Inc. (AIA):

Revise the AIA training program to ensure that all pilots receive crew resource management (CRM) training that conforms to the guidelines set forth in FAA Advisory Circular 120-51A. (Class II, - Priority Action) (A-94-108)

Review and revise the AIA special airports training program to require, in addition to flightcrew members, flight engineers to participate in the AIA special airports training program. The revised program should ensure that all flightcrew members who operate airplanes with high approach speeds are aware and understand the effects of high bank angles and increased load factors, adverse wind conditions, and required flightpath profiles

necessary to perform the approach. (Class II, Priority Action) (A-94-109)

-- to the Department of Defense:

Provide to all civilian contract operators and flightcrew members either verbal and/or written airfield briefing information regarding normal and emergency operations and flight restrictions pertaining to those airfields classified as "special airports." The briefing information would contain special considerations for airplanes with high approach speeds and emphasize the effects of high bank angles and increased load factors, adverse wind conditions, and required flightpath profiles necessary to perform the approach. This information would be provided in addition to the regularly published notices to airmen (NOTAMs). (Class II, Priority Action) (A-94-110)

In addition, the Safety Board reiterates the following safety recommendations to the Federal Aviation Administration:

A-94-2

Require U.S. air carriers operating under 14 CFR, Part 121, to provide for flightcrews not covered by the Advanced Qualifications Program, a comprehensive crew resource management (CRM) program as described in Advisory Circular 120-51A.

<u>A-94-5</u>

Require U.S. air carriers operating under 14 CFR, Part 121, to include, as part of pilot training, a program to educate pilots about the detrimental effects of fatigue, and strategies for avoiding fatigue and countering its effects.