



National Transportation Safety Board Aviation Accident Final Report

Location:	Lubbock, TX	Accident Number:	CEN09MA142
Date & Time:	01/27/2009, 0437 CST	Registration:	N902FX
Aircraft:	AEROSPATIALE ALENIA ATR 42-320	Aircraft Damage:	Substantial
Defining Event:	Aerodynamic stall/spin	Injuries:	N/A
Flight Conducted Under:	Part 121: Air Carrier - Non-scheduled		

Analysis

The Safety Board's full report is available at http://www.nts.gov/Publictn/A_Acc1.htm. The Aircraft Accident Report number is NTSB/AAR-11/02.

On January 27, 2009, about 0437 central standard time, an Avions de Transport Régional Aerospatiale Alenia ATR 42 320, N902FX, operating as Empire Airlines flight 8284, was on an instrument approach when it crashed short of the runway at Lubbock Preston Smith International Airport, Lubbock, Texas. The captain sustained serious injuries, and the first officer sustained minor injuries. The airplane was substantially damaged. The airplane was registered to Federal Express Corporation and operated by Empire Airlines, Inc., as a 14 Code of Federal Regulations Part 121 supplemental cargo flight. The flight departed from Fort Worth Alliance Airport, Fort Worth, Texas, about 0313. Instrument meteorological conditions prevailed, and an instrument flight rules flight plan was filed.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The flight crew's failure to monitor and maintain a minimum safe airspeed while executing an instrument approach in icing conditions, which resulted in an aerodynamic stall at low altitude. Contributing to the accident were 1) the flight crew's failure to follow published standard operating procedures in response to a flap anomaly, 2) the captain's decision to continue with the unstabilized approach, 3) the flight crew's poor crew resource management, and 4) fatigue due to the time of day in which the accident occurred and a cumulative sleep debt, which likely impaired the captain's performance.

Findings

Aircraft

Personnel issues

Environmental issues

Factual Information

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History of Flight

Approach-IFR final approach	Collision with terr/obj (non-CFIT)
Approach-IFR initial approach	Aerodynamic stall/spin (Defining event)

Aircraft and Owner/Operator Information

Aircraft Make:	AEROSPATIALE ALENIA	Registration:	N902FX
Model/Series:	ATR 42-320	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	325
Landing Gear Type:	Retractable - Tricycle	Seats:	
Date/Type of Last Inspection:	01/09/2009, Continuous Airworthiness	Certified Max Gross Wt.:	37258 lbs
Time Since Last Inspection:		Engines:	2 Turbo Prop
Airframe Total Time:	29767.9 Hours at time of accident	Engine Manufacturer:	Pratt and Whitney Canada
ELT:	Installed, not activated	Engine Model/Series:	PW 121
Registered Owner:	FEDERAL EXPRESS CORP/ATTN VP SUPPLEMENTAL AIR OPS	Rated Power:	1950 hp
Operator:	Empire Airlines	Operating Certificate(s) Held:	Supplemental
Operator Does Business As:		Operator Designator Code:	COEA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	LBB, 3282 ft msl	Distance from Accident Site:	
Observation Time:	0415 CST	Direction from Accident Site:	
Lowest Cloud Condition:		Visibility	2 Miles
Lowest Ceiling:	Overcast / 500 ft agl	Visibility (RVR):	6000 ft
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	350°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.22 inches Hg	Temperature/Dew Point:	8° C / 9° C
Precipitation and Obscuration:	Light - Freezing - Drizzle; Mist		
Departure Point:	Fort Worth, TX (AFW)	Type of Flight Plan Filed:	IFR
Destination:	Lubbock, TX (LBB)	Type of Clearance:	IFR
Departure Time:	0319 CST	Type of Airspace:	Class D

Airport Information

Airport:	Lubbock Preston Smith (LBB)	Runway Surface Type:	Concrete
Airport Elevation:	3282 ft	Runway Surface Condition:	Ice; Wet
Runway Used:	17R	IFR Approach:	ILS
Runway Length/Width:	11500 ft / 150 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	N/A	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	On-Ground
Total Injuries:	N/A	Latitude, Longitude:	33.658056, -101.820278 (est)

Administrative Information

Investigator In Charge (IIC): Leah D Yeager **Adopted Date:** 04/26/2011

Additional Participating Persons: Marc Roy; Federal Express; Memphis, TN
Richard Mills; Empire Airlines; Hayden, ID
Carl Mason; Pratt and Whitney; Dallas, TX
John Melnick; Aerospatiale Alenia (ATR); Dulles, VA
Guilhem Nicolas; Bureau d'Enquetes; France,
Victoria Anderson; Federal Aviation Administration; Washington, DC

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Investigation Docket: NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov, or at 800-877-6799. Dockets released after this date are available at <http://dms.nts.gov/pubdms/>.

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