

National Transportation Safety Board Aviation Accident Final Report

Location: Milwaukee, WI Accident Number: CHI07MA160

Date & Time: 06/04/2007, 1600 CDT Registration: N550BP

Aircraft: Cessna 550 Aircraft Damage: Destroyed

Defining Event: Injuries: 6 Fatal

Flight Conducted Under: Part 135: Air Taxi & Commuter - Non-scheduled - Air Medical (Organ Transport)

Analysis

The Safety Board's full report is available at http://www.ntsb.gov/publictn/A_Acc1.htm. The Aircraft Accident Report number is NTSB/AAR-09/06.

On June 4, 2007, about 1600 central daylight time, a Cessna Citation 550, N550BP, impacted Lake Michigan shortly after departure from General Mitchell International Airport, Milwaukee, Wisconsin (MKE). The two pilots and four passengers were killed, and the airplane was destroyed. The airplane was being operated by Marlin Air under the provisions of 14 Code of Federal Regulations Part 135 and departed MKE about 1557 with an intended destination of Willow Run Airport, near Ypsilanti, Michigan. At the time of the accident flight, marginal visual meteorological conditions prevailed at the surface, and instrument meteorological conditions prevailed aloft; the flight operated on an instrument flight rules flight plan.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The National Transportation Safety Board determines that the probable cause of this accident was the pilots' mismanagement of an abnormal flight control situation through improper actions, including failing to control airspeed and to prioritize control of the airplane, and lack of crew coordination. Contributing to the accident were Marlin Air's operational safety deficiencies, including the inadequate checkrides administered by Marlin Air's chief pilot/check airman, and the Federal Aviation Administration's failure to detect and correct those deficiencies, which placed a pilot who inadequately emphasized safety in the position of company chief pilot and designated check airman and placed an ill-prepared pilot in the first officer's seat.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION

Phase of Operation: CLIMB

Findings

1. (F) AUTOPILOT/FLIGHT DIRECTOR, TRANSMITTER (AUTOPILOT) - DISENGAGED

Occurrence #2: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: CRUISE

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

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Factual Information

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Pilot Information

Certificate:	Airline Transport; Flight Instructor; Private	Age:	59, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane	Toxicology Performed:	Yes
Medical Certification:	Class 1 With Waivers/Limitations	Last FAA Medical Exam:	03/01/2007
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	04/01/2007
Flight Time:	14000 hours (Total, all aircraft)		

Co-Pilot Information

Age:
Seat Occupied:
Restraint Used:
Second Pilot Present: Yes
Toxicology Performed:
Last FAA Medical Exam:
Last Flight Review or Equivalent:

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Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N550BP
Model/Series:	550	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Transport	Serial Number:	550-0246
Landing Gear Type:	Retractable - Tricycle	Seats:	10
Date/Type of Last Inspection:	03/01/2007, Continuous Airworthiness	Certified Max Gross Wt.:	13300 lbs
Time Since Last Inspection:	90 Hours	Engines:	2 Turbo Fan
Airframe Total Time:	4402 Hours at time of accident	Engine Manufacturer:	Pratt & Whitney
ELT:		Engine Model/Series:	JT15D-4
Registered Owner:	TOY AIR INC	Rated Power:	2500 lbs
Operator:	MARLIN AIR INC	Operating Certificate(s) Held:	On-demand Air Taxi (135)
Operator Does Business As:		Operator Designator Code:	DJQA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	MKE, 723 ft msl	Distance from Accident Site:	5 Nautical Miles
Observation Time:	1552 CDT	Direction from Accident Site:	180°
Lowest Cloud Condition:	Clear	Visibility	9 Miles
Lowest Ceiling:	Broken / 3000 ft agl	Visibility (RVR):	
Wind Speed/Gusts:	10 knots / 19 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	340°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.53 inches Hg	Temperature/Dew Point:	17°C / 15°C
Precipitation and Obscuration:	Light - Rain		
Departure Point:	MILWAUKEE, WI (MKE)	Type of Flight Plan Filed:	IFR
Destination:	DETROIT, MI (YIP)	Type of Clearance:	IFR
Departure Time:	1557 CDT	Type of Airspace:	

Airport Information

Airport:	GENERAL MITCHELL INTERNATIONAL (MKE)	Runway Surface Type:	
Airport Elevation:	723 ft	Runway Surface Condition:	
Runway Used:	N/A	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

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Wreckage and Impact Information

Crew Injuries:	2 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	4 Fatal	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	6 Fatal	Latitude, Longitude:	43.036667, -87.856389

Administrative Information

Investigator In Charge (IIC):	John M Brannen	Report Date:	11/17/2009
Additional Participating Persons:	Eric West; FAA; Washington, DC Henry Soderlund; Cessna Aircraft; Wichita, KS Stuart Dingman; Marlin Air, Inc.; Belleville, M Tom Berthe; Pratt and Whitney; Longueuil, C William Gill; Honeywell; Olathe, KS	I	
Publish Date:	11/17/2009		
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 publing@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.ntsb.gov/pubdms/ .		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available here.

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