

National Transportation Safety Board Aviation Accident Final Report

Location: PLEASANTON, CA Accident Number: LAX95FA077

Date & Time: 01/12/1995, 1747 PST Registration: N754FE

Aircraft: CESSNA 208B Aircraft Damage: Destroyed

Defining Event: Injuries: 1 Fatal

Flight Conducted Under: Part 135: Air Taxi & Commuter - Non-scheduled

Analysis

A CESSNA 208B STRUCK A RIDGE LINE ABOUT 14 MILES FROM THE DESTINATION AIRPORT. THE PILOT REPORTED TO ATC HE HAD THE AIRPORT IN SIGHT FROM 7,000 FEET MSL MORE THAN 30 MILES AWAY. A WEATHER REPORTING STATION LOCATED 5 MILES EAST OF THE ACCIDENT SITE WAS REPORTING TWO CLOUD LAYERS; A SCATTERED LAYER AT 1,500 FEET AGL, AND A BROKEN LAYER AT 5,000 FEET AGL. THE AIRPLANE WAS DESCENDING AFTER THE PILOT WAS CLEARED FOR A VISUAL APPROACH. THE AIRPLANE COLLIDED WITH A TREE AND THE GROUND IN A WINGS LEVEL ATTITUDE AT AN ELEVATION OF 1,500 FEET MSL. THERE WAS NO EVIDENCE OF MECHANICAL FAILURE OR MALFUNCTION FOUND WITH THE AIRPLANE.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: failure of the pilot-in-command to maintain visual contact with terrain and sufficient altitude for terrain clearance. Factors in the accident were the pilot's decision to initiate a descent 14 miles from the airport, and weather, specifically cloud conditions and darkness.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: DESCENT - NORMAL

Findings

- 1. TERRAIN CONDITION HIGH TERRAIN
- 2. (F) DESCENT INITIATED PILOT IN COMMAND
- 3. (F) WEATHER CONDITION CLOUDS
- 4. (C) ALTITUDE NOT MAINTAINED PILOT IN COMMAND
- 5. (F) LIGHT CONDITION DARK NIGHT
- 6. FLIGHT INTO ADVERSE WEATHER PERFORMED PILOT IN COMMAND
- 7. (C) VFR PROCEDURES NOT FOLLOWED PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Page 2 of 7 LAX95FA077

Factual Information

On January 12, 1995, at 1747 hours Pacific standard time, a Cessna 208B, N754FE, collided with terrain 4 miles west of Pleasanton, California, while approaching the Metropolitan Oakland International Airport (OAK), Oakland, California. The airplane was destroyed. The airline transport pilot received fatal injuries. The airplane was operated by West Air, Inc., Fresno, California, as a on-demand air cargo flight under 14 CFR Part 135. The flight originated in Visalia, California, at 1638 hours. Night visual meteorological conditions prevailed at the time and an IFR flight plan was filed.

At 1738 hours, the pilot contacted Bay Approach Control, reported the airplane's altitude of 7,000 feet, and requested runway 27. The Bay Approach radar sector controller informed the pilot the VOR 9R approach was in use at the time; he could get a visual approach once the airport was in sight; and to fly a 300-degree heading and maintain 7,000 feet. According to the transcript of communications, 12 seconds later the pilot indicated he had the airport in sight. According to radar data, the airplane was more than 30 miles from the airport at the time of the pilot's radio transmission.

At 1745 hours, the pilot was cleared for a visual approach to runway 27 at Oakland, and was instructed to stay north of the localizer approach course. At 1747 hours, the sector controller requested the pilot maintain "maximum speed on approach," and the pilot acknowledged.

This was the last recorded radio transmission from the pilot. Radar and radio contact was lost with the airplane at a position 14 miles east of the airport at an altitude of 1,800 feet above mean sea level (msl). The aircraft wreckage was located about .4 nautical miles west of the last radar contact on the east slope of a ridge line at an elevation about 1,500 feet msl.

Pilot Information

The pilot held an airline transport pilot certificate which was issued on December 15, 1959. The most recent first-class medical certificate was issued to the pilot on April 11, 1994, and contained the limitation that correcting lenses be worn while exercising the privileges of his airman certificate.

No personal flight records were located for the pilot, and the aeronautical experience listed on this report was obtained from information supplied from the airplane operator's accident report and a review of the pilot's resume.

According to the operator, the pilot's total aeronautical experience consists of about 25,500 hours, of which 516 were accrued in the Cessna 208. In the preceding 90 and 30 days before the accident, the operator listed a total of 151.9 and 61 hours, respectively, flown in the Cessna 208B. The pilot also completed a 14 CFR Part 135 Airman Competency Check on December 29, 1994, in a Cessna 208B.

Meteorological Information

The closest official weather observation station is Livermore Municipal Airport, Livermore, California, which is located 5 nautical miles northeast of the accident site. The elevation of the weather observation station is 397 feet above sea level.

At 1646 hours, a record scheduled surface observation was reporting in part: sky condition and ceiling 1,500 scattered, estimated 5,000 broken; visibility 7 statute miles; winds calm;

Page 3 of 7 LAX95FA077

altimeter 30.06 Hg.

Wreckage and Impact Information

The initial impact point was with trees located on the east slope of Sunol Ridge at 37-38.94 degrees north latitude and 121-56.71 degrees west longitude, at an elevation approximately 1,500 feet msl. The left wing topped two trees and left 6-foot of the left wing tip in a third tree. The airplane then struck the ground leaving gouges from the main landing gear and a crater 10 feet in diameter and about 1-foot deep. The crater and main landing gear gouges were found holding water at the time of arrival of the investigative team.

The wreckage path progressed up a 20-degree slope on a 240-degree magnetic bearing for about 90 feet to the tail of the airplane. The wreckage came to rest at the base of a tree. The engine and the right wing, along with the cockpit roof, separated from the fuselage and were found several feet up slope under the tree branches. The fuselage, along with the remainder of the left wing, was separated from the tail and came to rest inverted with the main landing gear up. The vertical stabilizer and rudder, and the horizontal stabilizers and elevator remained attached to the fuselage by means of the control cables and was under the fuselage. The control cables were traced to the cockpit area and found to be continuous.

The fuselage was also split circumferentially aft of the pilot's seat. The cockpit was twisted about 30 degrees left, and the firewall was crushed aft to the instrument panel.

All three propeller blades were found separated from the engine. Two blades were found up slope of the engine and a third was found in the crater still attached to a fractured piece of the hub. All three blades were twisted, exhibited forward bending at the tips, leading edge nicks and gouges, and chordwise scoring.

The crater was excavated further to reveal portions of the cargo pod with tie downs, wheel chocks, engine cowling plugs, pitot tube cover, and the nose gear. Examination of the nose gear revealed the oleo strut was bent aft parallel to the wheel axle.

Another ground scar was noted protruding about 20 feet, about 90 degrees to the wreckage path from the ground crater. The right aileron was found lying next to the scar with its longitudinal axis parallel to the axis of the ground scar.

The airplane's cargo was ejected from the fuselage and found up slope under the branches of trees. Most of the cargo was packed in cardboard containers. The cardboard was found wet.

Medical and Pathological Information

A post mortem examination was conducted by the Alameda County Coroner's Office on January 15, 1995, with specimens retained for toxicological examination. No preexisting conditions were noted during the post mortem examination which would have adversely affected the decedents abilities to pilot an airplane. The results of the toxicological analysis revealed negative results for routine drug and alcohol screens. Propranolol was detected in the liver by gas chromatography and was quantitated at 2.2 mg/kg.

Tests and Research

Engine Exam

The engine was examined on February 14, 1995, at an aircraft salvage yard in Sacramento, California. The engine was partially disassembled to view the internal compressor and turbine

Page 4 of 7 LAX95FA077

components. Circumferential rubs were present in the compressor and the turbine. According to the engine manufacturer, the rubs were a result of radial contact with the stationary shrouds or baffles inside the engine during the impact sequence. There was no evidence found during the engine exam that would have contributed to a loss of engine power.

Additional Information

Wreckage Release

The wreckage was released to the owner's representatives on February 14, 1995.

Pilot Information

Certificate:	Airline Transport; Commercial	Age:	63, 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:	No
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane	Toxicology Performed:	Yes
Medical Certification:	Class 1 Valid Medicalw/waivers/lim.	Last FAA Medical Exam:	04/11/1994
Occupational Pilot:	Last Flight Review or Equivalent:		
Flight Time:	25500 hours (Total, all aircraft), 516 hours (Total, this make and model), 20508 hours (Pilot In Command, all aircraft), 151 hours (Last 90 days, all aircraft), 61 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Page 5 of 7 LAX95FA077

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N754FE
Model/Series:	208B 208B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Provisional; Normal	Serial Number:	0249
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	01/11/1995, AAIP	Certified Max Gross Wt.:	8750 lbs
Time Since Last Inspection:	4 Hours	Engines:	1 Turbo Prop
Airframe Total Time:	2073 Hours	Engine Manufacturer:	P&W
ELT:	Installed, activated, aided in locating accident	Engine Model/Series:	PT6A-114A
Registered Owner:	FEDERAL EXPRESS CORPORATION	Rated Power:	675 hp
Operator:	WEST AIR, INC.	Operating Certificate(s) Held:	On-demand Air Taxi (135)
Operator Does Business As:	FEDERAL EXPRESS	Operator Designator Code:	AWHA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Unknown	Condition of Light:	Night/Dark
Observation Facility, Elevation:	LVK, 397 ft msl	Distance from Accident Site:	5 Nautical Miles
Observation Time:	1646 PST	Direction from Accident Site:	53°
Lowest Cloud Condition:	Scattered / 1500 ft agl	Visibility	7 Miles
Lowest Ceiling:	Overcast / 5000 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	Calm /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	
Precipitation and Obscuration:			
Departure Point:	VISALIA, CA (VIS)	Type of Flight Plan Filed:	IFR
Destination:	OAKLAND, CA (OAK)	Type of Clearance:	IFR
Departure Time:	1633 PST	Type of Airspace:	Class E

Airport Information

Airport:	OAKLAND INTERNATIONAL ARP (OAK)	Runway Surface Type:	Asphalt
Airport Elevation:	6 ft	Runway Surface Condition:	
Runway Used:	27R	IFR Approach:	Visual
Runway Length/Width:	5453 ft / 150 ft	VFR Approach/Landing:	Full Stop; Straight-in

Page 6 of 7 LAX95FA077

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC): THOMAS H WILCOX Report Date: 12/19/1995 **Additional Participating Persons:** ROBERT R CORBIN; MEMPHIS, TN DON TRIPLETT; FRESNO, CA ANDREW L HALL; WICHITA, KS MARK E FEENEY; LONGUEIL, OF **Publish Date: 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 pubing@ntsb.gov, or at 800-877-6799. Dockets released after this date are available at http://dms.ntsb.gov/pubdms/.

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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.

Page 7 of 7 LAX95FA077