



Aviation Investigation Final Report

Location: Denton, Texas Accident Number: FTW02LA203

Date & Time: July 8, 2002, 12:02 Local Registration: N7550X

Aircraft: Cessna 172B Aircraft Damage: Substantial

Defining Event: 1 Fatal, 1 Minor

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

The pilot reported that during the approach for landing, he was distracted by an aircraft taking off on the same runway. The pilot stated that he was high and fast and with flaps extended the aircraft was floating down the runway. Touch down was made toward the end of the runway. The aircraft was still traveling at a high speed when it ran off the end of the runway and collided with the localizer antenna located approximately 300 feet from the end of the runway edge. The aircraft came to rest approximately 108 feet beyond the antenna. Tire marks were noted on the runway about 271 feet from the end of the runway pavement. Tire tracks through the grass indicated a slight left turn just prior to the aircraft colliding nearly centered through the localizer antenna length. During the post accident examination, no evidence of a mechanical failure or malfunction was noted.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's misjudgment of distance and altitude. Contributing factors were the pilot's diverted attention and the runway localizer antenna.

Findings

Occurrence #1: OVERRUN

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (C) DISTANCE/ALTITUDE - NOT ATTAINED - PILOT IN COMMAND

2. (F) DIVERTED ATTENTION - PILOT IN COMMAND

Occurrence #2: ON GROUND/WATER COLLISION WITH OBJECT

Phase of Operation: LANDING - ROLL

Findings

3. (F) OBJECT - AIRPORT FACILITY

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Factual Information

On July 8, 2002, at 1202 central daylight time, a Cessna 172B single-engine airplane, N7550X, sustained substantial damage when it collided with the localizer antenna after overrunning the runway at the Denton Municipal Airport, Denton, Texas. The private pilot received minor injuries, and the sole passenger received fatal injuries. Visual meteorological conditionals prevailed for the 14 Code of Federal Regulations Part 91 local personal flight, and no flight plan was filed. The flight originated from Denton Municipal at 1100.

During a telephone interview and subsequent written statement, the pilot reported that after completing the local flight, he returned to the airport. Two low passes were made over runway 17, but no landings were made because an aircraft was on the runway. The pilot reported that he was making radio transmissions over the local frequency while in the pattern. While setting up for the third approach, another aircraft advised the pilot that his transmissions were garbled and hard to understand. The pilot continued the approach to runway 17 as the aircraft on the runway began its takeoff roll. The pilot stated that he knew that he was high and fast, and with the flaps extended, the aircraft was floating down the runway. The pilot reported that he was distracted by the other aircraft taking off and thought that he touched down with about 1,500 feet of remaining runway. After touch down, the pilot stated that he was going too fast and ran off the end of runway 17.

The aircraft subsequently collided with the localizer antenna located approximately 300 feet off the end of runway 17. The aircraft continued approximately 108 feet beyond the antenna before coming to rest.

Law enforcement personnel reported that three sets of tire marks were located on the runway beginning at approximately 271 feet from the end of the runway pavement, indicating the aircraft had initially touched down and bounced twice. Tire tracks through the grass indicated a slight left turn just prior to the aircraft colliding nearly centered through the localizer antenna length.

A witness located in a business hangar located between taxiways A5 and A6, stated that he observed the aircraft centered over runway 17 at about 100 feet above ground level. The witness stated that "the aircraft was in a fairly steep angle of descent and appeared to have a fairly high airspeed." The aircraft touched down in a level attitude near the end of the runway and traveled off the end and through the localizer antenna.

Post accident documentation of the aircraft noted that both propeller blades were bent, and the nose gear was separated. The left wing lift strut was observed bent at approximately a 45 degree angle, the left and right wing leading edges were damaged, and the entire windscreen was broken. Pieces of the antenna penetrated the cabin.

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The left and right main landing gear remained attached to the fuselage. The nose gear steering tube assemblies remained attached to the rudder pedal and brake assembly. Continuity was established between the steering rods and the rudder pedals. Both the right and left side tires rotated freely. Flat spots were noted on both tires. The flat spot on the left tire was more pronounced than on the right. Both brake discs were inspected prior to a functional test. The brakes were applied in the cockpit and the left and right wheels would not turn.

Runway 17/35 is a 5,999 foot long and 150 foot wide asphalt surface. The runway elevation is 642 feet. The localizer antenna is located at the approach end of runway 35 in the critical area.

At the time of the accident the weather conditions reported at the airport were a clear sky with visibility at nine statute miles. The temperature was 33 degrees Celsius and the winds were variable at four knots.

Pilot Information

Certificate:	Commercial	Age:	81,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	August 22, 2001
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	November 15, 2001
Flight Time:	1800 hours (Total, all aircraft), 30 ho aircraft)	ours (Last 90 days, all aircraft), 10 hou	rs (Last 30 days, all

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Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N7550X
Model/Series:	172B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	17248050
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	September 25, 2001 Annual	Certified Max Gross Wt.:	2200 lbs
Time Since Last Inspection:	63 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	5842 Hrs at time of accident	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	O-300-D
Registered Owner:	Maurice H. Lundy	Rated Power:	145 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	DTO,642 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	11:53 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	9 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	4 knots / None	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.18 inches Hg	Temperature/Dew Point:	33°C / 24°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	Denton, TX (DTO)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	11:00 Local	Type of Airspace:	Class E

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Airport Information

Airport:	Denton Municipal Airport DTO	Runway Surface Type:	Asphalt
Airport Elevation:	642 ft msl	Runway Surface Condition:	Dry
Runway Used:	17	IFR Approach:	None
Runway Length/Width:	5999 ft / 150 ft	VFR Approach/Landing:	Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Fatal	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal, 1 Minor	Latitude, Longitude:	33.194721,-97.198059

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Administrative Information

Investigator In Charge (IIC):

Additional Participating
Persons:

Haskell Wells; FAA-FSDO; Fort Worth, TX
Tom Teplik; Cessna Aircraft Company; Wichita, KS
John T Kent; Teledyne Continental Motors; Seagoville, TX

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Investigation Class:

Class

Note:

Investigation Docket:

https://data.ntsb.gov/Docket?ProjectID=55167

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 Code of Federal Regulations section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 United States Code section 1154(b)). A factual report that may be admissible under 49 United States Code section 1154(b) is available here.

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