



Aviation Investigation Final Report

Location:	PEORIA, Arizona	Accident Number:	LAX94LA082
Date & Time:	December 26, 1993, 14:03 Local	Registration:	N6623E
Aircraft:	CESSNA 175	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	2 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

Witnesses reported observing the pilot taxi onto the 2,000-foot long runway from an intersection which afforded him between 1,200 and 1,400 feet of usable runway. Nothing unusual was noted during the airplane's ground roll and lift-off, and the airplane began climbing. After the airplane gained between 30 and 60 feet, its pitch attitude lowered, and no additional altitude was gained. The airplane's landing gear collided with a perimeter chainlink fence and cactus, and the airplane came to rest about 1/4 mile from the airstrip. The airplane was recovered from the accident site and was examined. No mechanical discrepancies were found with any airplane system or with the engine.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's failure to attain sufficient altitude following takeoff. A factor in the accident was the pilot's failure to use all available runway for takeoff.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. OBJECT - FENCE

2. (C) ALTITUDE - NOT ATTAINED - PILOT IN COMMAND
3. (F) ALL AVAILABLE RUNWAY - NOT USED - PILOT IN COMMAND

Factual Information

HISTORY OF FLIGHT

On December 26, 1993, at 1403 mountain standard time, a Cessna 175, N6623E, operated by the pilot, collided with a fence and terrain after taking off from the Pleasant Valley (uncontrolled) Airstrip, Peoria, Arizona. Visual meteorological conditions prevailed at the time of the personal flight. The airplane was destroyed, and the commercial pilot and passenger were fatally injured. The flight was originating at the time of the mishap.

A witness reported hearing the airplane's engine start, and nothing unusual was noted. Thereafter, the pilot taxied for takeoff. No engine run-up was heard performed. The pilot was observed to takeoff from a location on the runway customarily used by glider pilots, and from that location between 1,200 and 1,400 feet of runway was available for use. According to the witness, had the pilot "back-taxed" on the runway, the pilot's available runway would have increased to a total length of about 2,000 feet.

The witness further reported that nothing unusual was noted during the airplane's ground roll or lift-off. The witness stated that the airplane appeared to lift-off normally and from a location which seemed appropriate for that size airplane. The airplane's pitch attitude also seemed normal and nothing unusual was noted. The airplane climbed between 50 and 60 feet above the runway's surface, and then the airplane's nose was slightly lowered.

A second witness similarly reported that the airplane's ground roll and initial climb had initially appeared normal. This witness reported that the airplane appeared to have only climbed 30 feet above the runway's surface before it stopped climbing.

Two other witnesses, who were located on a dirt road approximately 60 feet southwest of the runway, reported seeing the airplane flying an estimated 10 to 20 feet above the ground. These witnesses indicated that after the airplane passed their position they stopped their motorcycles, turned around, and observed a cloud of dust. They subsequently found the crashed airplane about 100 feet from the road.

The responding Federal Aviation Administration (FAA) coordinator and the Peoria Police Department reported finding evidence of the airplane's landing gear having impacted the top rail area of the west perimeter chainlink fence. Thereafter, evidence was found of the airplane having collided with saguaro cactus. The airplane came to rest in an inverted attitude an estimated 1/4 mile from the runway's end.

AIRCRAFT INFORMATION

The FAA coordinator further reported that about 2 months prior to the accident the airplane had been modified. In pertinent part, the modification involved installation of a tail wheel assembly, a Lycoming engine, and a Hartzell propeller.

WRECKAGE AND IMPACT INFORMATION

Information received from the FAA, the Peoria Police Department, witnesses, and from airplane recovery personnel indicated that the male occupant was found secured by a seatbelt in the left front seat which had remained on its seat track rails. The propeller blades were found with leading edge gouges and chordwise scratches, and they were torsionally twisted. Fuel was observed in the vicinity of the broken wing tanks. Oil was observed on the ground in the vicinity of the impact damaged propeller hub assembly. There was no evidence of fire.

Under the direction of the National Transportation Safety Board and supervision of the FAA, on December 28, 1993, the recovered airplane was examined while in storage at Air Transport, Phoenix, Arizona.

According to the participant from the Cessna Aircraft Company, during the examination of the structure continuity was established between all flight control surfaces and the cockpit controls. No evidence of preimpact discrepancies were found with any airframe or aircraft system.

According to the participant from Textron-Lycoming Engines, all engine controls were found connected. During movement of the carburetor's throttle assembly, fuel discharged from the port. The fuel screen was found free of obstructions. The continuity of the valve and gear train was established during 360-degree rotation of the crankshaft. Spark was observed from ignition leads upon rotation of both magnetos' drive shafts. All spark plugs exhibited normal electrode wear. No evidence was found of any preimpact mechanical failure of any rotating or reciprocating component.

MEDICAL AND PATHOLOGICAL INFORMATION

An autopsy was performed on the pilot by the Maricopa County Medical Examiner's office, Phoenix, Arizona. The autopsy did not disclose evidence of physical incapacitation or impairment that would have adversely affected the pilot's ability to operate the airplane. The FAA's Toxicology and Accident Research Laboratory reported finding no evidence of drugs or ethanol.

ADDITIONAL INFORMATION

At the completion of the participants' examination of the wreckage, it was verbally released to the owner's assigned insurance adjuster from AVEMCO. No records or parts have been retained by the Safety Board.

Pilot Information

Certificate:	Commercial	Age:	50, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 3 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	March 2, 1992
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	3400 hours (Total, all aircraft), 40 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N6623E
Model/Series:	175 175	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	56123
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	November 1, 1993 Annual	Certified Max Gross Wt.:	2350 lbs
Time Since Last Inspection:	24 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2252 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-360-A1A
Registered Owner:	BETTY AND HOYT PHELPS	Rated Power:	180 Horsepower
Operator:	HOYT A. PHELPS	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Thin Overcast / 20000 ft AGL	Visibility	30 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	21°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	14:02 Local	Type of Airspace:	Class G

Airport Information

Airport:	PLEASANT VALLEY AZ05	Runway Surface Type:	Asphalt
Airport Elevation:	1580 ft msl	Runway Surface Condition:	Dry
Runway Used:	23	IFR Approach:	
Runway Length/Width:	2000 ft / 100 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	1 Fatal	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Fatal	Latitude, Longitude:	33.649959,-112.239753(est)

Administrative Information

Investigator In Charge (IIC):	Pollack, Wayne
Additional Participating Persons:	ARLAN ALLEN; SCOTTSDALE , AZ JOHN ELLER; SCOTTSDALE , AZ DAVID RYAN; WICHITA , KS CHARLES LITTLE; CHINO , CA
Original Publish Date:	October 20, 1994
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=28628

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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](#).