



Aviation Investigation Final Report

Location:	PAYSON, Arizona	Accident Number:	LAX95LA235
Date & Time:	July 1, 1995, 14:35 Local	Registration:	N2820Z
Aircraft:	PIPER PA-22-160	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE AIRCRAFT LOST ENGINE POWER DURING THE TAKEOFF INITIAL CLIMB AND COLLIDED WITH TREES DURING A FORCED LANDING. THE PILOT REPORTED THAT HE PURCHASED 20 GALLONS OF FUEL FROM THE AIRPORT PRIOR TO DEPARTURE. RESPONDING FIRE DEPARTMENT PERSONNEL STATED THAT THEY TURNED OFF THE FUEL VALVE TO CONTROL A FUEL LINE LEAK AFTER THE ACCIDENT. AN FAA INSPECTOR EXAMINED THE AIRCRAFT AND REPORTED FINDING NO DISCREPANCIES. FUEL SAMPLES FROM THE AIRCRAFT TANKS AND CARBURETOR, AND FROM THE AIRPORT FUEL TRUCK USED TO REFUEL THE AIRCRAFT, WERE TAKEN FOR LABORATORY ANALYSIS. ACCORDING TO THE LABORATORY REPORT, THE FUEL SAMPLES TESTED WERE CONSISTENT WITH AVIATION GASOLINE. NO SIGNIFICANT WATER OR OTHER CONTAMINANTS WERE FOUND.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: a loss of power for undetermined reasons.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (C) REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2: FORCED LANDING

Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

Occurrence #3: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: EMERGENCY DESCENT/LANDING

Findings

2. OBJECT - TREE(S)

Factual Information

On July 1, 1995, at 1435 hours mountain standard time, a Piper PA-22-160, N2820Z, collided with trees during a forced landing following takeoff at Payson, Arizona. The forced landing was precipitated by a loss of engine power in the takeoff initial climb. The aircraft was owned and operated by the pilot, and was beginning a personal cross-country flight to Glendale, Arizona. Visual meteorological conditions prevailed at the time. The aircraft sustained substantial damage. The certificated private pilot and his one passenger sustained minor injuries. The flight was originating at the time of the accident.

The pilot reported that he purchased 20 gallons of fuel from the airport prior to departure. Responding fire department personnel stated that they turned off the fuel valve to control a fuel line leak after the accident.

An FAA inspector from the Scottsdale, Arizona, Flight Standards District Office examined the aircraft and reported finding no discrepancies. Fuel samples from the aircraft tanks and carburetor, and from the airport fuel truck used to refuel the aircraft, were taken for laboratory analysis. According to the laboratory report, the fuel samples tested were consistent with aviation gasoline. No significant water or other contaminants were found.

Pilot Information

Certificate:	Private	Age:	49, 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:	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	November 21, 1994
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	2000 hours (Total, all aircraft), 600 hours (Total, this make and model), 2000 hours (Pilot In Command, all aircraft), 80 hours (Last 90 days, all aircraft), 25 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N2820Z
Model/Series:	PA-22-160 PA-22-160	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	22-6813
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	2000 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	LYCOMING
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-320-B2B
Registered Owner:	STEVE K. BEATTY	Rated Power:	160 Horsepower
Operator:		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:	E69 ,5157 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	13:05 Local	Direction from Accident Site:	60°
Lowest Cloud Condition:	Unknown	Visibility	30 miles
Lowest Ceiling:	Broken / 6000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	13 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	220°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	28°C / 10°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(E69)	Type of Flight Plan Filed:	None
Destination:	GLENDALE , AZ (GEU)	Type of Clearance:	None
Departure Time:	00:00 Local	Type of Airspace:	Class E

Airport Information

Airport:	PAYSON E69	Runway Surface Type:	Asphalt
Airport Elevation:	5157 ft msl	Runway Surface Condition:	Dry
Runway Used:	24	IFR Approach:	None
Runway Length/Width:	5504 ft / 75 ft	VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor	Latitude, Longitude:	34.189083,-111.169219(est)

Administrative Information

Investigator In Charge (IIC):	Rich, Jeff
Additional Participating Persons:	BRUCE SMITH; SCOTTSDALE , AZ
Original Publish Date:	January 29, 1996
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=29136

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](#).