



Aviation Investigation Final Report

Location:	APPLE VALLEY, California	Accident Number:	LAX97LA042
Date & Time:	November 15, 1996, 14:05 Local	Registration:	N961T
Aircraft:	Beech 35-33	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Serious
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that while he was descending toward the Apple Valley Airport, the engine began to run rough, then it lost power. He was using the left auxiliary fuel cell at the time, and further reported that he immediately switched to the right main tank, which was the fullest. He was unable to obtain a restart, even by positioning the fuel selector to other tanks. As the aircraft neared the ground, the pilot attempted to land on a dirt road, but had insufficient altitude and landed in rough terrain. The aircraft collided with a berm during the landing sequence. Aircraft recovery personnel found about 23 gallons of fuel in the right main tank and 10 gallons in the left auxiliary. Both tanks were leaking fuel at the time. The fuel selector was found positioned to the right main tank. Postcrash inspection of the engine revealed no discrepancies. Inspection of the fuel system revealed that the left auxiliary fuel cell vent lines were plugged by insects and mud at two different internal locations.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: fuel starvation, due to plugged fuel system vent lines, which resulted in loss of engine power.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: CRUISE - NORMAL

Findings

1. (C) FUEL SYSTEM, VENT - BLOCKED(TOTAL)
2. (C) FLUID, FUEL - STARVATION

Occurrence #2: FORCED LANDING

Phase of Operation: EMERGENCY DESCENT/LANDING

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: EMERGENCY LANDING

Findings

3. TERRAIN CONDITION - BERM

Factual Information

On November 15, 1996, at 1405 hours Pacific standard time, a Beech 35-33, N961T, collided with a berm during an attempted forced landing near Apple Valley, California. The forced landing was precipitated by a loss of engine power during cruise flight. The aircraft was operated by the pilot, and was on a personal cross-country from Lake Havasu, Arizona, to Apple Valley, California. Visual meteorological conditions prevailed at the time and no flight plan was filed. The aircraft incurred substantial damage. The certificated private pilot, the sole occupant, sustained serious injuries. The flight originated from Lake Havasu at 1230 hours mountain standard time on the day of the accident.

The pilot reported that while he was descending toward the Apple Valley airport the engine began to run rough, then quit. He was utilizing the left auxiliary fuel cell at the time, and further reported that he immediately switched to the right main tank, which was the fullest. He was unable to obtain a restart, even by positioning the fuel selector to other tanks. As the aircraft neared the ground he attempted to land on a dirt road, but had insufficient altitude and landed in rough terrain. The aircraft collided with a berm during the landing sequence.

Aircraft recovery personnel found about 23 gallons of fuel in the right main tank and 10 in the left auxiliary. Both tanks were leaking fuel at the time. The fuel selector was positioned to the right main tank.

A postcrash inspection of the engine and fuel system was conducted by the Safety Board. No discrepancies were noted with the engine. Inspection of the fuel system revealed that the left auxiliary fuel cell vent lines were plugged by insects and mud at two different internal locations.

Pilot Information

Certificate:	Private	Age:	70, 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-w/ waivers/lim	Last FAA Medical Exam:	April 10, 1996
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	1535 hours (Total, all aircraft), 200 hours (Total, this make and model), 3 hours (Last 90 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N961T
Model/Series:	35-33 35-33	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	CD-157
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	August 10, 1996 Annual	Certified Max Gross Wt.:	2900 lbs
Time Since Last Inspection:	8 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	3878 Hrs	Engine Manufacturer:	Continental
ELT:	Installed	Engine Model/Series:	IO-470-J
Registered Owner:	KENNETH E. NISSEN	Rated Power:	225 Horsepower
Operator:	NORMAN E. NISSEN	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:	DAG ,1927 ft msl	Distance from Accident Site:	30 Nautical Miles
Observation Time:	13:52 Local	Direction from Accident Site:	25°
Lowest Cloud Condition:	Scattered / 2000 ft AGL	Visibility	30 miles
Lowest Ceiling:	Broken / 2500 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	35 knots / 40 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	250°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	16°C / 4°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	LAKE HAVASU , AZ (HII)	Type of Flight Plan Filed:	None
Destination:	(APV)	Type of Clearance:	None
Departure Time:	12:00 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	34.419166,-117.139442(est)

Administrative Information

Investigator In Charge (IIC):	Rich, Jeff
Additional Participating Persons:	SCOTT BURTON; RIVERSIDE , CA MICHAEL J GRIMES; MOBILE , AL
Original Publish Date:	September 30, 1997
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=29685

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](#).