



Aviation Investigation Final Report

Location:	GLENDALE, Arizona	Accident Number:	LAX96LA311
Date & Time:	August 17, 1996, 16:28 Local	Registration:	N3LV
Aircraft:	Atkinson VARIEZE	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that after departure he headed toward a nearby USAF base to make a low approach to their runway. After receiving a clearance to enter the base airspace the pilot turned toward the airbase and applied full throttle. Shortly after that, the engine suddenly quit, restarted briefly, then quit altogether. The pilot said he set up for a forced landing in a vacant field and was just able to make the field but the aircraft landed hard. The landing gear broke and separated from the aircraft, then it cartwheeled. The engine and airframe were inspected by an FAA airworthiness inspector who reported that he found the mixture cable housing broken where it entered the securing bracket to the carburetor. The cable would pull the mixture lever to the idle cutoff position but would not push the lever toward the rich position. The inspector further noted that the cable, which appeared to be a bicycle or motorcycle part, was too short for the application.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The fracture and separation of the mixture control cable housing from the carburetor mounting bracket, which resulted in fuel starvation due to an overlean condition, and the pilot's failure to maintain an adequate airspeed while stretching the glide to the field which resulted in an inadvertent stall/mush and a hard landing.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF
Phase of Operation: CRUISE

Findings

1. (C) MIXTURE CONTROL,CABLE - SEPARATION

Occurrence #2: FORCED LANDING
Phase of Operation: EMERGENCY DESCENT/LANDING

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

2. (C) AIRSPEED(VREF) - NOT MAINTAINED - PILOT IN COMMAND
3. (C) STALL/MUSH - INADVERTENT - PILOT IN COMMAND

Factual Information

On August 17, 1996, at 1628 mountain standard time, a homebuilt experimental Atkinson Varieze airplane, N3LV, collided with the ground in a vacant field near the Glendale, Arizona, airport while attempting a forced landing. The forced landing was precipitated by a complete loss of engine power during cruise. The aircraft was owned and operated by the pilot. Visual meteorological conditions prevailed at the time and no flight plan was filed for the local area personal flight. The aircraft incurred substantial damage and the certificated private pilot, the sole occupant, was not injured. The flight originated at the Deer Valley Airport, Phoenix, Arizona, on the day of the accident at 1600.

The pilot reported that after departure he headed toward a nearby USAF base to make a low approach to their runway. After receiving a clearance to enter the base airspace the pilot turned toward the airbase and applied full throttle. Shortly after that, the engine suddenly quit, restarted briefly, then quit altogether. The pilot said he set up for a forced landing in a vacant field and was just able to make the field but the aircraft landed hard. The landing gear broke and separated from the aircraft, then it cartwheeled.

The engine and airframe were inspected by an FAA airworthiness inspector from the Scottsdale, Arizona, Flight Standards District Office. The inspector reported that he found the mixture cable housing broken where it entered the securing bracket to the carburetor. The cable would pull the mixture lever to the idle cutoff position but would not push the lever toward the rich position. The inspector further reported that the cable, which appeared to be a bicycle or motorcycle part, was too short for the application.

Pilot Information

Certificate:	Private	Age:	38, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Front
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 22, 1994
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	196 hours (Total, all aircraft), 66 hours (Total, this make and model), 122 hours (Pilot In Command, all aircraft), 18 hours (Last 90 days, all aircraft), 13 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Atkinson	Registration:	N3LV
Model/Series:	VARIEZE VARIEZE	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	1
Landing Gear Type:	Retractable - Tricycle	Seats:	2
Date/Type of Last Inspection:	October 25, 1995 Annual	Certified Max Gross Wt.:	1250 lbs
Time Since Last Inspection:	67 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	627 Hrs	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-235-L2C
Registered Owner:	STEVEN L. WORNE	Rated Power:	108 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:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 15000 ft AGL	Visibility	7 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	14 knots / 21 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	200°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	41°C / 14°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	PHOENIX , AZ (DVT)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	16:00 Local	Type of Airspace:	Class E

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	
Runway Length/Width:		VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	33.530475,-112.179969(est)

Administrative Information

Investigator In Charge (IIC):	Rich, Jeff
Additional Participating Persons:	JOHN NOEL; SCOTTSDALE , AZ
Original Publish Date:	December 16, 1996
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=29539

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](#).