



Aviation Investigation Final Report

Location:	MESA, Arizona	Accident Number:	LAX98LA181
Date & Time:	May 9, 1998, 10:45 Local	Registration:	N7447H
Aircraft:	Piper J3C-65	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The airplane, which the pilot owned and operated, experienced a total loss of engine power while descending for a practice forced landing. The pilot indicated that no adequate landing site was available within gliding distance, so he landed in the rough terrain of a dry wash shearing off both main landing gear. The airplane was recovered and examined. A clamp that had been welded onto a bracket which was secured to the engine case was found broken. The clamp/bracket assembly supported the throttle cable. When the weld broke subsequent movement of the cockpit throttle control had no effect upon the engine's rpm. The pilot described the weld as having been 'bad,' and it was not a Piper manufactured component.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: Failure of a weld in the engine's throttle control support assembly due to inadequate maintenance which was the ultimate responsibility of the owner-pilot. Contributing factors were the presence of rough terrain, the lack of a suitable forced landing site, and the pilot's inadequate in-flight planning.

Findings

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

Findings

1. (C) THROTTLE/POWER LEVER, LINKAGE - DISCONNECTED
2. (C) THROTTLE/POWER LEVER, LINKAGE - FAILURE
3. (F) MAINTENANCE - INADEQUATE - PILOT IN COMMAND

Occurrence #2: FORCED LANDING

Phase of Operation: EMERGENCY DESCENT/LANDING

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

4. (F) TERRAIN CONDITION - NONE SUITABLE
5. (F) IN-FLIGHT PLANNING/DECISION - INADEQUATE - PILOT IN COMMAND
6. (F) TERRAIN CONDITION - ROUGH/UNEVEN

Factual Information

On May 9, 1998, at 1045 hours mountain standard time, a Piper J3C-65, N7447H, owned and operated by the pilot, experienced a total loss of engine power while descending. The private pilot made a forced landing on rough terrain, and the airplane was substantially damaged. Neither the private pilot nor the passenger was injured. Visual meteorological conditions prevailed during the personal flight which originated from Mesa, Arizona, about 1030.

According to the pilot, the mishap occurred while he was practicing a simulated forced landing over desert terrain. When he pushed the throttle forward to restore engine power, the engine did not respond. No adequate landing sites existed within gliding distance, so he landed in a dry wash. During rollout, both main landing gear were sheared off.

The pilot initially reported that damage to his airplane was minor. The Federal Aviation Administration coordinator subsequently examined the airplane and observed that the airplane's fuselage was buckled aft of the wings.

Additional examination of the airplane revealed that a clamp, which had been welded onto an engine case mounted bracket, was broken at its attachment weld. The clamp was identified as Continental Engine Part number 70801-00. The clamp/bracket assembly supported the throttle cable. The pilot indicated that evidently, when the weld broke, alignment of the throttle cable with the carburetor was lost. Subsequent movement of the cockpit throttle control produced no corresponding effect upon the engine's rpm, which was thereby reduced to idle. The pilot further indicated that the malfunction had resulted from the "bad weld" which was not a Piper component.

Pilot Information

Certificate:	Private	Age:	51, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Rear
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:	May 14, 1997
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	1200 hours (Total, all aircraft), 417 hours (Total, this make and model), 1050 hours (Pilot In Command, all aircraft), 22 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N7447H
Model/Series:	J3C-65 J3C-65	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	20712
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	July 15, 1997 Annual	Certified Max Gross Wt.:	1220 lbs
Time Since Last Inspection:	100 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	5800 Hrs	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	C85-12
Registered Owner:	JAMES D. BULLARD	Rated Power:	85 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:	Clear	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:	FALCON FIELD , AZ (FFZ)	Type of Flight Plan Filed:	None
Destination:	TUCSON , AZ (E14)	Type of Clearance:	None
Departure Time:	10:30 Local	Type of Airspace:	Class G

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:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	33.340412,-110.890304(est)

Administrative Information

Investigator In Charge (IIC):	Pollack, Wayne
Additional Participating Persons:	GARY MARTIN; SCOTTSDALE , AZ
Original Publish Date:	August 3, 1999
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=30106

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