



Aviation Investigation Final Report

Location: ENGLEWOOD, Colorado Accident Number: FTW95LA312

Date & Time: July 22, 1995, 12:02 Local Registration: N5985V

Aircraft: PIPER J3C Aircraft Damage: Substantial

Defining Event: 1 None

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

DURING CLIMB TO CRUISE, A PARTIAL LOSS OF POWER OCCURRED. THE PILOT SELECTED WHAT APPEARED TO BE A SUITABLE SITE FOR A FORCED LANDING. DURING LANDING ROLL, THE LANDING GEAR COLLAPSED IN ROUGH TERRAIN. EXAMINATION OF THE ENGINE PROVIDED EVIDENCE OF A STUCK NUMBER FOUR EXHAUST VALVE.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A PARTIAL POWER LOSS DUE TO A STUCK NUMBER FOUR EXHAUST VALVE. A FACTOR WAS THE LACK OF SUITABLE TERRAIN FOR A FORCED LANDING.

Findings

Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - MECH FAILURE/MALF

Phase of Operation: CLIMB - TO CRUISE

Findings

1. (C) ENGINE ASSEMBLY, VALVE, EXHAUST - SEIZED

Occurrence #2: FORCED LANDING

Phase of Operation: EMERGENCY DESCENT/LANDING

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

Phase of Operation: EMERGENCY DESCENT/LANDING

- Findings
 2. TERRAIN CONDITION ROUGH/UNEVEN
- 3. TERRAIN CONDITION NONE SUITABLE

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Factual Information

On July 22, 1995, at 1202 mountain daylight time, a Piper J3C-65, N5985V, sustained substantial damage during a forced landing approximately 1 mile from Centennial Airport, Englewood, Colorado. The pilot was not injured. Visual meteorological conditions prevailed for this local area personal flight and no flight plan was filed.

According to the pilot, when he reduced power following initial climb, the engine decelerated to about 1,500 rpm and began to produce black exhaust smoke. He could not achieve any more power so he said he shut down the engine and selected what appeared to be a suitable off airport landing site. During landing roll, the left main landing gear collapsed. The left lower longeron, propeller, belly skins, and landing gear sustained damage. The pilot said the terrain was rougher than it appeared.

The engine was examined by Jensen Aircraft, Salida, Colorado. According to the person who conducted the examination, he found the number four exhaust valve stuck in the open position. His statement is attached.

Pilot Information

Certificate:	Private	Age:	48,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 Medicalw/ waivers/lim	Last FAA Medical Exam:	December 1, 1994
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	803 hours (Total, all aircraft), 498 hours (Total, this make and model), 21 hours (Last 90 days, all aircraft), 14 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N5985V
Model/Series:	J3C J3C	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	13460
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	1300 lbs
Time Since Last Inspection:	79 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	3628 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, not activated	Engine Model/Series:	C-85-12F
Registered Owner:	DONALD L. BREHM	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:	APA ,5800 ft msl	Distance from Accident Site:	2 Nautical Miles
Observation Time:	12:05 Local	Direction from Accident Site:	280°
Lowest Cloud Condition:	Scattered / 6000 ft AGL	Visibility	50 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	5°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	26°C / 5°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	(APA)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	00:00 Local	Type of Airspace:	Class D

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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 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	39.619983,-105.070732(est)

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Administrative Information

Investigator In Charge (IIC):	Wiemeyer, Norman	
Additional Participating Persons:	BOB LOFLIN; DENVER , CO	
Original Publish Date:	September 24, 1995	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=19509	

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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.

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