



Aviation Investigation Final Report

Location: BEAUMONT, Pennsylvania Accident Number: NYC00LA129

Date & Time: May 6, 2000, 13:30 Local Registration: N2842N

Aircraft: Cessna 120 Aircraft Damage: Substantial

Defining Event: 2 None

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

While in cruise flight, the pilot experienced a partial power loss and performed a precautionary landing. During the landing to uneven terrain, the airplane came to rest inverted. Examination of the engine revealed a 2 to 3 inch crack in the vicinity of the 'number one' cylinder. At the time of the accident, the engine was approximately 53 years old, with 1,778 hours of operation since its last overhaul in 1961.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A crack in the crankcase which resulted in a partial power loss.

Findings

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

Phase of Operation: CRUISE

Findings

1. (C) ENGINE ASSEMBLY, CRANKCASE - CRACKED

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Factual Information

On May 6, 2000, about 1330 Eastern Daylight Time, a Cessna 120, N2842N, was substantially damaged during a precautionary landing near Beaumont, Pennsylvania. The certificated private pilot and passenger were not injured. Visual meteorological conditions prevailed, and no flight plan was filed for the personal flight conducted under 14 CFR Part 91. The flight departed Bloomsburg Municipal Airport, Bloomsburg, Pennsylvania, about 1300; and was destined for Skyhaven Airport, Tunkhannock, Pennsylvania.

The pilot stated that he was in cruise flight, about 3,300 feet above mean-sea-level. He observed a decrease in oil pressure, followed by an increase in oil temperature. The engine began to run rough, and the pilot performed a precautionary landing to a field. During the landing, the airplane struck uneven terrain, and came to rest inverted. The propeller, cowling, firewall, and horizontal stabilizer sustained substantial damage.

The pilot further stated that the engine was originally manufactured in 1947. It had an overhaul after approximately 950 hours of operation, in 1961. The pilot added that the overhaul occurred before he purchased the airplane, and the reason for the overhaul was not documented in the airplane logbooks. At the time of the accident, the engine had accumulated approximately 1,778 hours of operation since the overhaul in 1961.

Examination of the wreckage by a Federal Aviation Administration Inspector revealed oil inside the cowling. The Inspector was not able to determine the source of the oil leak. The pilot planned to have a mechanic further examine the engine.

About 1 month after the accident, a mechanic observed a 2 to 3 inch crack in the crankcase. The crack was in the vicinity of the "number one" cylinder. The mechanic said the he could not be positive the crack occurred before the impact, but that it would explain the loss of oil pressure, gain in oil temperature, and partial power loss.

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Pilot Information

Certificate:	Private	Age:	52,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 Medicalw/ waivers/lim	Last FAA Medical Exam:	April 14, 2000
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	1046 hours (Total, all aircraft), 851 hours (Total, this make and model), 986 hours (Pilot In Command, all aircraft), 18 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N2842N
Model/Series:	120 120	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	13103
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	December 14, 1999 Annual	Certified Max Gross Wt.:	1450 lbs
Time Since Last Inspection:	26 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2674 Hrs	Engine Manufacturer:	Continental
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	C-85-12
Registered Owner:	ROGER J. MORTON	Rated Power:	85 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

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Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	AVP,963 ft msl	Distance from Accident Site:	10 Nautical Miles
Observation Time:	13:54 Local	Direction from Accident Site:	110°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	260°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	29°C / 15°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ition	
Departure Point:	BLOOMSBURG , PA (N13)	Type of Flight Plan Filed:	None
Destination:	TUNKHANNOCK , PA (76N)	Type of Clearance:	None
Departure Time:	12:45 Local	Type of Airspace:	Class G

Airport Information

Airport:	SKYHAVEN AIRPORT 76N	Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Precautionary 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:	41.370697,-76.020088(est)

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Administrative Information

Investigator In Charge (IIC): Gretz, Robert

Additional Participating Persons: ROBERT A FERENCE; ALLENTOWN , PA

Original Publish Date: November 29, 2000

Last Revision Date: Investigation Class: Class

Note: https://data.ntsb.gov/Docket?ProjectID=51276

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.

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