



Aviation Investigation Final Report

Location:	BELLWOOD, Pennsylvania	Accident Number:	NYC97LA128
Date & Time:	June 24, 1997, 18:40 Local	Registration:	N6756N
Aircraft:	Mooney M20C	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot was in cruise flight at 4,000 feet when he heard a 'pop', experienced a loss of engine power, and encountered smoke in the cockpit. The pilot was in contact with ATC and received vectors for landing at the nearest airport. During the descent, the oil pressure went to 'zero', and the engine stopped producing power. The pilot's vision was obscured out the windscreen and he felt unable to complete a landing to the airport. He selected an open hay field through a side window and performed a forced landing. A fire in the engine compartment was extinguished after landing. Examination of the engine revealed a hole in the engine crankcase below the number one cylinder. Further examination revealed failure of the connecting rods on the number one and number two cylinders.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the total loss of engine power due to failed connecting rods.

Findings

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

Findings

1. (C) ENGINE ASSEMBLY,CONNECTING ROD - FAILURE

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

Factual Information

On 24 June, 1997, at 1840 eastern daylight time, a Mooney M20C, N6756N, was substantially damaged during a forced landing to a hay field near Bellwood, Pennsylvania. The certificated private pilot and passenger received minor injuries. Visual meteorological conditions prevailed for the personal flight that originated at Williamsport, Pennsylvania, about 1730, destined for Fort Wayne, Indiana. An IFR flight plan was filed for the flight conducted under 14 CFR Part 91.

In a telephone interview, the pilot reported that he was in cruise flight at 4,000 feet when he heard a "pop", experienced a loss of engine power, and encountered smoke in the cockpit. The pilot stated that the airplane descended at 200-300 feet per minute after the power loss. He said that he made no power adjustments because he feared inducing a total loss of power.

The pilot was in contact with the Cleveland Air Traffic Control Center, and requested vectors for landing at the nearest airport. The center controller provided vectors for the Altoona-Blair County Airport (AOO). During the descent, the oil pressure went to "zero", and the engine stopped producing power. The pilot reported that his vision was obscured out the windshield and that he felt he would be unable to complete a landing at AOO. He selected an open hay field through a side window and performed the forced landing. A fire in the engine compartment was extinguished after landing.

Examination of the engine by a Federal Aviation Administration Inspector revealed the following:

"A hole was noted in the engine crankcase below the number one cylinder. ...The number one cylinder was then removed. A visual inspection was made. A connecting rod failure was noted on the number one and number two cylinders."

Pilot Information

Certificate:	Private	Age:	67, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	April 8, 1996
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	6100 hours (Total, all aircraft), 4500 hours (Total, this make and model), 6100 hours (Pilot In Command, all aircraft), 30 hours (Last 90 days, all aircraft), 7 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Mooney	Registration:	N6756N
Model/Series:	M20C M20C	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	680070
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	November 30, 1996 Annual	Certified Max Gross Wt.:	2575 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	2400 Hrs	Engine Manufacturer:	Lycoming
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-360-A1A
Registered Owner:	MORRIS J. RINGENBERG	Rated Power:	180 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:	AOO ,1504 ft msl	Distance from Accident Site:	5 Nautical Miles
Observation Time:	16:50 Local	Direction from Accident Site:	190°
Lowest Cloud Condition:	Scattered / 6000 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	330°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	32°C / 17°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	WILLIAMSPORT , PA (IPT)	Type of Flight Plan Filed:	IFR
Destination:	FORT WAYNE , IN (FWA)	Type of Clearance:	IFR
Departure Time:	17:30 Local	Type of Airspace:	Class E

Airport Information

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

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor	Latitude, Longitude:	40.600509,-78.330581(est)

Administrative Information

Investigator In Charge (IIC):	Rayner, Brian
Additional Participating Persons:	RON HORACK; WEST MIFFLIN , PA
Original Publish Date:	April 24, 1998
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=39387

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