



Aviation Investigation Final Report

Location: Palmyra, Pennsylvania Accident Number: GAA18CA258

Date & Time: May 3, 2018, 15:56 Local Registration: N914BB

Aircraft: BERGER BERNARD M PULSAR Aircraft Damage: Substantial

SERIES III

Defining Event: Abnormal runway contact **Injuries:** 1 None

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

The pilot reported that, during the preflight inspection, he observed no discrepancies and noted that the oil level was "inside the lower bound of normal oil capacity." He reported that en route, the oil pressure "was in the 30s [pounds per square inch] and trending downward" but still within the normal engine oil pressure limits. He decided to divert to a nearby airport as a precaution.

The pilot reported that, while maneuvering to the alternate airport, the engine instruments appeared normal. However, during left base for the runway, he observed "a few seconds of white smoke" coming from the engine over the left wing. He reduced power, added flaps, and noticed that the airplane's approach speed was too fast. He decided he would not attempt a go-around due to the smoke and shut the engine off "thinking of the possibility of an engine fire." Subsequently, the airplane bounced during the initial touchdown and landed near the runway's halfway point. The pilot applied brakes, but the airplane overran the runway into a dirt field, and the nose landing gear collapsed.

The airplane sustained substantial damage to the fuselage.

The pilot reported that there were no preaccident mechanical failures or malfunctions with the airplane that would have precluded normal operation.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's failure to maintain an appropriate approach speed, which resulted in a bounced landing and a runway overrun.

Findings

Aircraft	Airspeed - Not attained/maintained
AllClait	All speed - Not attained/maintained

Personnel issues Aircraft control - Pilot

Aircraft Oil - Related operating info

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Factual Information

History of Flight

Enroute-cruise	Miscellaneous/other
Landing	Off-field or emergency landing
Landing-flare/touchdown	Abnormal runway contact (Defining event)
Landing	Runway excursion
Landing	Landing gear collapse

Pilot Information

Certificate:	Commercial; Military; Private	Age:	49,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	4-point
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	September 28, 2017
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	September 29, 2016
Flight Time:	(Estimated) 1413.5 hours (Total, all aircraft), 91 hours (Total, this make and model), 790.2 hours (Pilot In Command, all aircraft), 7.8 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	BERGER BERNARD M	Registration:	N914BB
Model/Series:	PULSAR SERIES III NO SERIES	Aircraft Category:	Airplane
Year of Manufacture:	2002	Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	P9802-0550
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	July 9, 2017 Annual	Certified Max Gross Wt.:	1325 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	771.6 Hrs at time of accident	Engine Manufacturer:	Rotax
ELT:	C91A installed, activated, did not aid in locating accident	Engine Model/Series:	914UL
Registered Owner:	On file	Rated Power:	100 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KMUI,488 ft msl	Distance from Accident Site:	9 Nautical Miles
Observation Time:	19:56 Local	Direction from Accident Site:	4°
Lowest Cloud Condition:	Few / 8000 ft AGL	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	13 knots / 20 knots	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	220°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	29.93 inches Hg	Temperature/Dew Point:	33°C / 14°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	CARLISLE, PA (N94)	Type of Flight Plan Filed:	None
Destination:	CARLISLE, PA (N94)	Type of Clearance:	VFR flight following
Departure Time:	14:57 Local	Type of Airspace:	Class G

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Airport Information

Airport:	REIGLE FIELD 58N	Runway Surface Type:	Asphalt
Airport Elevation:	489 ft msl	Runway Surface Condition:	Dry
Runway Used:	31	IFR Approach:	None
Runway Length/Width:	1955 ft / 40 ft	VFR Approach/Landing:	Precautionary landing;Traffic pattern

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:	40.287776,-76.580001

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Administrative Information

Investigator In Charge (IIC):	Benhoff, Kathryn
Additional Participating Persons:	Henry H Tscha; FAA; Harrisburg, PA
Original Publish Date:	October 24, 2018
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=97188

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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