



Aviation Investigation Final Report

Location:	Saint Martin Island, Michigan	Accident Number:	CEN15LA346
Date & Time:	July 18, 2015, 19:10 Local	Registration:	CFGGS
Aircraft:	Ercoupe 415	Aircraft Damage:	Substantial
Defining Event:	Loss of engine power (total)	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that he was conducting a cross-country flight in a single-engine airplane when the engine lost oil pressure. Shortly after, the engine lost power and seized. The pilot then made a forced landing on a beach. Examination of the engine revealed that the No. 1 connecting rod bearing had failed and that the camshaft had seized and was broken. The camshaft seizure was consistent with a loss of oil pressure due to the No. 1 connecting rod bearing failure.

Probable Cause and Findings

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

The failure of a connecting rod bearing, which resulted in a loss of engine power.

Findings

Aircraft	Recip eng oil sys - Failure
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Factual Information

History of Flight

Enroute	Powerplant sys/comp malf/fail
Enroute	Loss of engine power (total) (Defining event)
Emergency descent	Off-field or emergency landing

On July 18, 2015, about 1910 eastern daylight time, an Ercoupe 415 airplane, Canadian registration C-FGGS, lost engine power during cruise flight near Saint Martin Island, Michigan. The airline transport rated pilot was not injured and the airplane was substantially damaged during the forced landing. The airplane was registered to and operated by a private individual under the provisions of 14 Code of Federal Regulations Part 91 as a cross-country flight. Visual meteorological conditions prevailed at the time. The airplane departed Newberry, Michigan, at 1800, and was destined for Manitowoc, Wisconsin.

According to the pilot, while in cruise flight, the engine lost oil pressure. Shortly after losing oil pressure, the engine lost power and seized. The pilot then selected a beach for the forced landing. During the landing, the nose gear collapsed, and the left wing and fuselage were substantially damaged.

The wreckage was recovered for further examination. An engine maintenance facility examined the engine and reported that the number one connecting rod bearing had failed and the camshaft was broken. The facility added that the camshaft seizure was consistent with a loss of oil pressure due to the number one connecting rod bearing failure.

Pilot Information

Certificate:	Airline transport; Foreign	Age:	70
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land; Multi-engine sea	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Lap only
Instrument Rating(s):	Airplane	Second Pilot Present:	
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	February 23, 2015
Occupational Pilot:	No	Last Flight Review or Equivalent:	January 27, 2015
Flight Time:	38800 hours (Total, all aircraft), 98 hours (Total, this make and model), 27700 hours (Pilot In Command, all aircraft), 82 hours (Last 90 days, all aircraft), 25 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Ercoupe	Registration:	CFGGS
Model/Series:	415	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	3646
Landing Gear Type:	Tricycle	Seats:	
Date/Type of Last Inspection:	May 12, 2015 100 hour	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	2582.3 Hrs at time of accident	Engine Manufacturer:	Continental
ELT:	C126 installed, activated, did not aid in locating accident	Engine Model/Series:	C85
Registered Owner:	On file	Rated Power:	
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:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	25 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	210°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.75 inches Hg	Temperature/Dew Point:	29°C / 24°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Newberry, MI (KERY)	Type of Flight Plan Filed:	VFR
Destination:	Manitowoc, WI (KMTW)	Type of Clearance:	None
Departure Time:	18:00 Local	Type of Airspace:	

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:	45.605278,-87.156944(est)

Administrative Information

Investigator In Charge (IIC):	Hatch, Craig
Additional Participating Persons:	Steve Betzer; FAA FSDO; Grand Rapids, MI
Original Publish Date:	November 5, 2015
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=91751

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](#).