



Aviation Investigation Final Report

Location: Punta Gorda, Florida Accident Number: ERA18LA110

Date & Time: March 17, 2018, 14:24 Local Registration: N27265

Aircraft: BESARICK SKYBOLT Aircraft Damage: Destroyed

Defining Event: Loss of engine power (partial) **Injuries:** 1 Minor

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

The commercial pilot was flying the airplane on the first flight of a 10-hour break-in period after an engine overhaul. The preflight inspection and ground operations were normal, with no signs of oil leaks. About 35 minutes into the flight, oil appeared on both windscreens, blocking the pilot's forward visibility; the windscreens eventually became completely covered with oil. The pilot contacted tower personnel, who cleared him to land. The engine then lost partial power. Tower personnel reported smoke coming from the engine. Unable to make the runway, the pilot chose to land the airplane in a field. After landing, the airplane collided with a ditch and came to rest. The engine caught fire, and the pilot egressed the airplane. A postcrash fire consumed most of the wreckage.

Examination of the engine revealed a large hole in the top of the engine case adjacent to the No. 2 cylinder. The No. 2 connecting rod was fractured at the crankshaft. The connecting rod failure was likely the result of oil starvation to the crankshaft. Extensive postcrash fire damage to the engine, hoses, and accessories prevented investigators from determining the source of the oil leak.

Probable Cause and Findings

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

A substantial oil leak, which resulted in a partial loss of engine power and failure of the No. 2 connecting rod.

Findings

Aircraft Oil - Fluid level

Aircraft Recip eng oil sys - Malfunction

Aircraft Recip engine power section - Failure

Environmental issues (general) - Contributed to outcome

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Factual Information

History of Flight

Enroute-cruise Loss of engine power (partial) (Defining event)

Emergency descent Off-field or emergency landing

Landing-landing roll Collision with terr/obj (non-CFIT)

On March 17, 2018, about 1424 eastern daylight time, an experimental amateur-built Skybolt, N27265, was destroyed following a forced landing near Punta Gorda, Florida. The commercial pilot had minor injuries. The airplane was owned and operated by the pilot under the provisions of 14 *Code of Federal Regulations* part 91 as a personal flight. Day, visual meteorological conditions prevailed, and no flight plan was filed for local flight that originated at Punta Gorda Airport (PGD), Punta Gorda, Florida, about 1330.

The pilot reported that the Lycoming O-360 series engine that was installed on the aerobatic biplane had just been overhauled and he was flying in the local area as part of a 10-hr break-in period. This was the first flight following the overhaul. The preflight inspection and ground operations were normal. There were no signs of oil leaks during the preflight inspection. About 35 minutes into the flight, oil appeared on both windscreens, blocking forward visibility. The windscreens eventually became completely covered with oil. He called tower personnel, alerting them to the problem and was cleared to land on runway 22. The engine lost power; however, it continued to run under partial power. Tower personnel reported smoke coming from the engine. Unable to make runway 22, he elected to land the airplane in a field. After landing, the airplane collided with a ditch and came to a stop. The engine caught fire and the pilot egressed the airplane.

An inspector with the Federal Aviation Administration responded to the accident site and examined the wreckage. Fire consumed the entire airframe except for the outboard sections of the right wings. The engine was examined and a hole was observed in the top of the crankcase, adjacent to the no. 2 cylinder.

Following the recovery of the wreckage, the engine was examined by an NTSB air safety investigator. The engine remained attached to the engine mount, and the engine mount was attached to the firewall. All sections and components of the engine were exposed to postcrash heat and fire. The oil filter was secure and the safety wire was installed and in place. All accessories on the aft section of the engine were fire-damaged. All surfaces were dry and no residual oil was present. All lines and hoses were burned or melted. The carburetor was separated from impact forces.

A rectangular-shaped hole was evident on the top of the engine case, adjacent to the no. 2 cylinder. The area around the hole was dry and there was no residual oil observed. Visual examination inside the case hole revealed the no. 2 connecting rod was fractured at the crankshaft. There was no residual oil on the components; however, the entire area was exposed to postcrash heat and fire. The other connecting rods were attached to the crankshaft.

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Pilot Information

Certificate:	Commercial; Flight instructor	Age:	76,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Rear
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	October 2, 2017
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	March 13, 2017
Flight Time:	3935 hours (Total, all aircraft), 399 hours (Total, this make and model), 3200 hours (Pilot In Command, all aircraft), 10 hours (Last 90 days, all aircraft), 6 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BESARICK	Registration:	N27265
Model/Series:	SKYBOLT NO SERIES	Aircraft Category:	Airplane
Year of Manufacture:	1981	Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	WHB-2
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	February 20, 2018 Annual	Certified Max Gross Wt.:	1400 lbs
Time Since Last Inspection:	1 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2361 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	C91 installed, activated, did not aid in locating accident	Engine Model/Series:	O-360-A4A
Registered Owner:	On file	Rated Power:	180 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Visual (VMC)	Condition of Light:	Day
PGD,25 ft msl	Distance from Accident Site:	4 Nautical Miles
14:53 Local	Direction from Accident Site:	210°
Clear	Visibility	10 miles
None	Visibility (RVR):	
13 knots / 19 knots	Turbulence Type Forecast/Actual:	/ None
240°	Turbulence Severity Forecast/Actual:	/ N/A
30.05 inches Hg	Temperature/Dew Point:	27°C / 9°C
No Obscuration; No Precipita	ition	
Punta Gorda, FL (PGD)	Type of Flight Plan Filed:	None
Punta Gorda, FL (PGD)	Type of Clearance:	None
13:30 Local	Type of Airspace:	Class E
	PGD,25 ft msl 14:53 Local Clear None 13 knots / 19 knots 240° 30.05 inches Hg No Obscuration; No Precipital Punta Gorda, FL (PGD) Punta Gorda, FL (PGD)	PGD,25 ft msl Distance from Accident Site: 14:53 Local Direction from Accident Site: Clear Visibility None Visibility (RVR): 13 knots / 19 knots Turbulence Type Forecast/Actual: 240° Turbulence Severity Forecast/Actual: 30.05 inches Hg Temperature/Dew Point: No Obscuration; No Precipitation Punta Gorda, FL (PGD) Type of Flight Plan Filed: Punta Gorda, FL (PGD) Type of Clearance:

Airport Information

Airport:	Punta Gorda Airport PGD	Runway Surface Type:	Asphalt
Airport Elevation:	25 ft msl	Runway Surface Condition:	Unknown
Runway Used:	22	IFR Approach:	None
Runway Length/Width:	7193 ft / 150 ft	VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	26.971111,-81.96083(est)

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Administrative Information

Investigator In Charge (IIC): Hicks, Ralph

Additional Participating Persons: Gregory Joy; FAA/FSDO; Tampa, FL

Original Publish Date: May 29, 2019

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=96895

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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