



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

# Aviation Investigation Final Report

<b>Location:</b>	Punta Gorda, Florida	<b>Accident Number:</b>	ERA18LA110
<b>Date &amp; Time:</b>	March 17, 2018, 14:24 Local	<b>Registration:</b>	N27265
<b>Aircraft:</b>	BESARICK SKYBOLT	<b>Aircraft Damage:</b>	Destroyed
<b>Defining Event:</b>	Loss of engine power (partial)	<b>Injuries:</b>	1 Minor
<b>Flight Conducted Under:</b>	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

<b>Aircraft</b>	Oil - Fluid level
<b>Aircraft</b>	Recip eng oil sys - Malfunction
<b>Aircraft</b>	Recip engine power section - Failure
<b>Environmental issues</b>	(general) - Contributed to outcome

# 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.

## Pilot Information

<b>Certificate:</b>	Commercial; Flight instructor	<b>Age:</b>	76, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Rear
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	4-point
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Airplane single-engine; Instrument airplane	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 With waivers/limitations	<b>Last FAA Medical Exam:</b>	October 2, 2017
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	March 13, 2017
<b>Flight Time:</b>	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

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

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	PGD,25 ft msl	<b>Distance from Accident Site:</b>	4 Nautical Miles
<b>Observation Time:</b>	14:53 Local	<b>Direction from Accident Site:</b>	210°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	13 knots / 19 knots	<b>Turbulence Type Forecast/Actual:</b>	/ None
<b>Wind Direction:</b>	240°	<b>Turbulence Severity Forecast/Actual:</b>	/ N/A
<b>Altimeter Setting:</b>	30.05 inches Hg	<b>Temperature/Dew Point:</b>	27°C / 9°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Punta Gorda, FL (PGD )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Punta Gorda, FL (PGD )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	13:30 Local	<b>Type of Airspace:</b>	Class E

## Airport Information

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

## Wreckage and Impact Information

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

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Hicks, Ralph
<b>Additional Participating Persons:</b>	Gregory Joy; FAA/FSDO; Tampa, FL
<b>Original Publish Date:</b>	May 29, 2019
<b>Note:</b>	The NTSB did not travel to the scene of this accident.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=96895">https://data.nts.gov/Docket?ProjectID=96895</a>

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).