



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

# Aviation Investigation Final Report

<b>Location:</b>	Daytona Beach Shores, Florida	<b>Accident Number:</b>	ERA19LA018
<b>Date &amp; Time:</b>	October 16, 2018, 14:30 Local	<b>Registration:</b>	N207Y
<b>Aircraft:</b>	Jabiru 250	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of engine power (total)	<b>Injuries:</b>	1 Minor
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot departed on the 300-nautical mile, 3-hour cross-country flight with 5 ½ hours of fuel onboard. About 7 miles from the destination airport at an altitude of 1,000 ft mean sea level, the engine sputtered, then lost total power. The propeller continued to windmill as the pilot attempted to troubleshoot and restart the engine utilizing the fuel boost pump, but he was unsuccessful. The pilot performed a forced landing into the ocean about 100 yards from shore, and then extricated himself and was rescued.

The airplane remained submerged in the ocean for 18 hours before it was recovered. During recovery, 5 gallons of aviation fuel was removed from the fuel tanks. The engine and components were corroded due to the saltwater immersion, which precluded testing of the engine. The reported weather conditions were not conducive to the development of carburetor icing. The reason for the loss of engine power could not be determined based on the available information.

## Probable Cause and Findings

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

A total loss of engine power for reasons that could not be determined based on the available information.

## Findings

Not determined	(general) - Unknown/Not determined
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# Factual Information

## History of Flight

<b>Maneuvering</b>	Loss of engine power (total) (Defining event)
<b>Landing-flare/touchdown</b>	Ditching

On October 16, 2018, about 1430 eastern daylight time, an experimental, amateur-built Jabiru 250, N207Y, was substantially damaged when it was involved in an accident near Daytona Beach Shores, Florida. The private pilot sustained minor injuries. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

The pilot reported that he landed at Jim Hamilton Owens Airport (CUB), Columbia, South Carolina, about 1100 for fuel. He added 12.9 gallons for a total of 34 gallons, which would have provided an endurance of about 5 1/2 hours. The following flight leg from CUB to Spruce Creek Airport (7FL6), Daytona Beach, Florida, was planned for about 3 hours. While approaching 7FL6 from the northeast at 1,000 ft mean sea level (msl), the engine sputtered, then stopped. The propeller continued to windmill as the pilot attempted to troubleshoot and restart the engine utilizing the fuel boost pump, but he was unsuccessful. The pilot performed a forced landing in the ocean close to shore, about 7 miles northeast of 7FL6. The airplane landed upright, then flipped to the right and sank. He reported that all engine indications and performance appeared normal during the entire flight.

Several witnesses on the beach reported that they saw the airplane on approach. They did not hear the engine operating and the propeller was not spinning when the airplane landed in the water.

Examination of the airplane by a Federal Aviation Administration (FAA) inspector revealed substantial damage to the right wing, which was fractured mid-span. The airplane had been submerged in the ocean about 100 yards offshore and was recovered about 18 hours after the accident. During the recovery, about 5 gallons of aviation fuel was removed from the fuel tanks. The engine and components, which had been exposed to the salt water for an extended period of time, were corroded. Subsequent testing of the engine and components was not possible due to the corrosion.

The reported weather conditions at the time of the accident were not conducive to the development of carburetor icing, as the temperature and dewpoint were outside of the icing envelope. The engine was equipped with a pressure-type carburetor and had been operated at a cruise power setting for about 3 hours before the loss of engine power.

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	75,Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	3-point
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	BasicMed With waivers/limitations	<b>Last FAA Medical Exam:</b>	July 18, 2013
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	August 23, 2017
<b>Flight Time:</b>	(Estimated) 3500 hours (Total, all aircraft), 20 hours (Total, this make and model), 3500 hours (Pilot In Command, all aircraft), 4.5 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Jabiru	<b>Registration:</b>	N207Y
<b>Model/Series:</b>	250	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	2005	<b>Amateur Built:</b>	Yes
<b>Airworthiness Certificate:</b>	Experimental (Special)	<b>Serial Number:</b>	149
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	October 1, 2017 Condition	<b>Certified Max Gross Wt.:</b>	1320 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	460 Hrs as of last inspection	<b>Engine Manufacturer:</b>	Jabiru
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	3300
<b>Registered Owner:</b>		<b>Rated Power:</b>	120 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>	DAB,41 ft msl	<b>Distance from Accident Site:</b>	4 Nautical Miles
<b>Observation Time:</b>	14:53 Local	<b>Direction from Accident Site:</b>	279°
<b>Lowest Cloud Condition:</b>	Few / 3400 ft AGL	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>		<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	12 knots /	<b>Turbulence Type Forecast/Actual:</b>	None / None
<b>Wind Direction:</b>	80°	<b>Turbulence Severity Forecast/Actual:</b>	N/A / N/A
<b>Altimeter Setting:</b>	30.06 inches Hg	<b>Temperature/Dew Point:</b>	31°C / 26°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Columbia, SC (CUB )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Daytona Beach, FL (7FL6)	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	11:25 Local	<b>Type of Airspace:</b>	Class G

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Minor	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>		<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Minor	<b>Latitude, Longitude:</b>	29.17361,-80.978332(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Mccarter, Lawrence		
<b>Additional Participating Persons:</b>	Cheryl King; FAA FSDO; Orlando, FL		
<b>Original Publish Date:</b>	March 16, 2022	<b>Investigation Class:</b>	3
<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=98505">https://data.nts.gov/Docket?ProjectID=98505</a>		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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](#).