



# Aviation Investigation Final Report

<b>Location:</b>	West Palm Beach, Atlantic Ocean	<b>Accident Number:</b>	ERA19TA111
<b>Date &amp; Time:</b>	February 28, 2019, 13:52 Local	<b>Registration:</b>	N1563X
<b>Aircraft:</b>	Piper PA32	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of engine power (total)	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot departed on the personal flight after topping off the airplane's fuel tanks. He reported that, about 15 minutes after leveling off at 3,500 ft mean sea level, he initiated a climb to 7,500 ft, and the engine immediately started to "sputter"; the airplane was about 20 miles off the coast of Florida over the Atlantic Ocean. He turned on the fuel boost pump, switched fuel tanks, and applied carburetor heat, to no avail. The engine lost total power shortly thereafter. The pilot subsequently ditched the airplane into the ocean, egressed, and was rescued. The airplane was not recovered, which precluded a postaccident examination.

## 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 evidence, which resulted in a ditched landing in the ocean.

## Findings

<b>Not determined</b>	(general) - Unknown/Not determined
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## Factual Information

### History of Flight

<b>Enroute-change of cruise level</b>	Loss of engine power (partial)
<b>Enroute-change of cruise level</b>	Loss of engine power (total) (Defining event)
<b>Enroute</b>	Attempted remediation/recovery
<b>Emergency descent</b>	Off-field or emergency landing
<b>Landing</b>	Ditching

On February 28, 2019, at 1352 eastern standard time, a privately owned and operated Piper PA32-260, N1563X, was ditched into the Atlantic Ocean about 25 nautical miles east of West Palm Beach, Florida. The private pilot was uninjured. The airplane was not recovered and presumed substantially damaged. The flight was operated under the provisions of Title 14 *Code of Federal Regulations* Part 91. Visual meteorological conditions prevailed, and no flight plan was filed for the personal flight, which departed Treasure Coast International Airport (FPR), Fort Pierce, Florida, around 1330 and was destined for Great Harbour Cay Airport (MYBG), Bullocks Harbour, Bahamas.

According to the pilot, he topped off all fuel tanks in FPR, and was flying with visual flight rules flight following to the Bahamas. About 15 minutes after leveling off at 3,500 ft mean sea level, the engine started to "sputter" immediately after the pilot initiated a climb to 7,500 ft. He turned on the fuel boost pump, observed that the fuel pressure was adequate, but noted no improvement in engine performance. He then switched fuel tanks and applied carburetor heat but was unable to diagnose the problem, and the engine lost all power shortly thereafter. He turned into the wind, extended full flaps to reduce the airplane's ground speed, and advised air traffic control that he would be ditching. After landing in the water, the pilot egressed without incident onto the airplane's wing and deployed a life raft; the airplane subsequently sank and was not recovered. The pilot activated a personal emergency position-indicating radio beacon and was rescued.

According to Federal Aviation Administration (FAA) records, the pilot held a private pilot certificate with ratings for airplane single-engine and multi-engine land instrument airplane. A review of the pilot's logbook revealed 6,918.9 total hours of flight experience of which 810 hours were in the accident airplane make and model. The pilot's last flight review was logged February 8, 2018.

According to FAA records, the airplane was manufactured in 1975 and was powered by a 260-hp Lycoming O-540-E485 reciprocating engine. The airplane's most recent annual inspection was completed March 19, 2018, at a recorded tachometer reading of 898.2 hours and an airframe total time of 6,461.2 hours. The engine had accumulated 1,807.5 hours since major overhaul. The pilot reported 84 gallons of fuel onboard at the time of takeoff.

At 1353, the weather reported at Palm Beach International Airport (PBI), about 25 miles west of the accident site, included winds from 080° at 8 knots, visibility 10 miles, scattered clouds at 3,600 ft, temperature 24° C, dew point 17° C, and an altimeter setting of 30.05 inches of mercury. Review of a

Carburetor Icing Probability Chart for the given temperature and dew point revealed that the conditions were conducive to moderate icing at cruise power.

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	67, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Front
<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>	Class 3 With waivers/limitations	<b>Last FAA Medical Exam:</b>	January 2, 2018
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	February 8, 2018
<b>Flight Time:</b>	(Estimated) 6507 hours (Total, all aircraft), 810 hours (Total, this make and model)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Piper	<b>Registration:</b>	N1563X
<b>Model/Series:</b>	PA32 260	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1975	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	32-7500037
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	6
<b>Date/Type of Last Inspection:</b>	March 19, 2018 Annual	<b>Certified Max Gross Wt.:</b>	3400 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	6461 Hrs as of last inspection	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	O-540 E485
<b>Registered Owner:</b>		<b>Rated Power:</b>	260 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>	PBI, 19 ft msl	<b>Distance from Accident Site:</b>	25 Nautical Miles
<b>Observation Time:</b>	13:53 Local	<b>Direction from Accident Site:</b>	270°
<b>Lowest Cloud Condition:</b>	Scattered / 3600 ft AGL	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>		<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	8 knots /	<b>Turbulence Type Forecast/Actual:</b>	Unknown / None
<b>Wind Direction:</b>	80°	<b>Turbulence Severity Forecast/Actual:</b>	N/A / N/A
<b>Altimeter Setting:</b>	30.04 inches Hg	<b>Temperature/Dew Point:</b>	24°C / 17°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Fort Pierce, FL (KFPR)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Bullocks Harbou (MYBG)	<b>Type of Clearance:</b>	VFR; VFR flight following
<b>Departure Time:</b>	13:30 Local	<b>Type of Airspace:</b>	Unknown

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 None	<b>Latitude, Longitude:</b>	26.659444, -79.688056(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Spencer, Lynn
<b>Additional Participating Persons:</b>	Charles McKinley; FAA IFO; Miramar, FL
<b>Original Publish Date:</b>	August 10, 2020
<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=99039">https://data.nts.gov/Docket?ProjectID=99039</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](#).