



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	Miami, FL	<b>Accident Number:</b>	ERA16LA103
<b>Date &amp; Time:</b>	02/02/2016, 1134 EST	<b>Registration:</b>	N8466G
<b>Aircraft:</b>	PIPER PA 28-161	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of engine power (partial)	<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

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## Analysis

The private pilot was flying over the ocean and just off the coast when an air traffic controller asked him to descend to 500 ft. The pilot reduced engine power and applied carburetor heat until he reached the assigned altitude, and he then attempted to increase engine power and level off; however, even with the throttle full forward, the engine power remained at its previous setting. The pilot attempted to resolve the situation, but he was unable to maintain altitude and ditched the airplane in the ocean. Although weather conditions were conducive to serious icing at glide power, the pilot had applied carburetor heat during the descent which should have melted any carburetor ice during the descent. A postaccident examination of the airframe and engine revealed no evidence of mechanical malfunctions or failures that would have precluded normal operation. The cause for the partial loss of engine power could not be determined.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A partial loss of engine power for reasons that could not be determined because postaccident examination of the airplane revealed no mechanical anomalies that would have contributed to the power loss.

## Findings

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

On February 2, 2016, at 1134 eastern standard time, a Piper PA-28-161, N8466G, ditched in the Atlantic Ocean off the coast of Miami, Florida, after a partial loss of engine power. The private pilot and the pilot-rated passenger were not injured. The airplane sustained substantial damage to the wings and the fuselage. The airplane was registered to a private company and operated by Airborne Career Academy, Fort Lauderdale, Florida, as a Title 14 Code of Federal Regulations Part 91 personal flight. Visual meteorological conditions were reported at the time of the accident, and no flight plan was filed for the flight that departed the Florida Keys Marathon Airport (MTH), Marathon, Florida, about 1100, and was destined for the Fort Lauderdale Executive Airport (FXE), Fort Lauderdale, Florida.

The flight originated at FXE earlier that day. The pilot stated that when he performed the engine run-up before departure, he noted that the right magneto had a higher drop in rpm than normal. He leaned the mixture and let the engine run for about a minute before he tested the magneto again. This time the magneto had the normal drop and the pilot subsequently departed for MTH. The flight was uneventful. The pilot said that on the flight back to FXE, air traffic control instructed him to descend 500 ft, so he reduced power and turned the carburetor heat on. When he reached 500 ft, the pilot tried to increase engine RPM, but there was no response even when full throttle was applied. He switched fuel tanks and "jockeyed" the throttle a few times, but to no avail. The pilot was unable to maintain altitude and made a forced landing in the ocean about 100 ft offshore in about 15 ft of saltwater.

The airplane was towed to a boat ramp and recovered. Examination of the airplane revealed it had sustained substantial damage to the fuselage and both wings. The ignition key was found in the "both" position, the fuel selector was set to the "right" tank, the throttle and mixture were full forward, and the carburetor-heat control was in the full "on" position. The left and right wing fuel tanks were contaminated with salt water and a fuel total for each tank could not be determined. The pilot reported there was about 17 gallons of fuel in each tank when they departed MTH.

The engine remained attached to the airframe. The two-bladed propeller appeared undamaged and the engine was free to rotate. When the propeller was rotated, compression and valve train continuity were established to each cylinder. Engine timing was established on the left magneto, but not on the right magneto due to damage. Both magnetos were removed and disassembled. Each was filled with sand and had some salt water corrosion. Once the corrosion was removed from the right magneto's points, they opened and closed normally. No pre-accident mechanical anomalies were noted that would have precluded normal operation of the engine.

Weather at Miami-Opa Locka Executive Airport (OPF), Opa Locka, Florida, about 20 miles west of the accident site, at 1125, was reported as wind from 120 degrees at 15 knots, visibility 10 miles, few clouds at 2,100 ft, overcast 3,100 ft, temperature 81 degrees F, dewpoint 66 degrees F, and a barometric pressure setting of 30.11 inches Hg. A Federal Aviation Administration-published Carburetor Icing Chart revealed a potential for serious icing at glide engine power settings, given the reported temperature and dew point conditions.

The pilot held a private pilot certificate with a rating for airplane single-engine land. His last

FAA second-class medical certificate was issued on July 31, 2015, with no limitations. The pilot reported a total of 86 flight hours, of which all 86 hours were in the same make/model as the accident airplane.

## History of Flight

Enroute	Loss of engine power (partial) (Defining event)
Emergency descent	Ditching

## Pilot Information

Certificate:	Private	Age:	20, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 None	Last Medical Exam:	07/31/2015
Occupational Pilot:	No	Last Flight Review or Equivalent:	01/25/2016
Flight Time:	86 hours (Total, all aircraft), 86 hours (Total, this make and model), 30 hours (Pilot In Command, all aircraft), 84 hours (Last 90 days, all aircraft), 48 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

## Pilot-Rated Passenger Information

Certificate:	Private	Age:	24, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 None	Last Medical Exam:	10/14/2015
Occupational Pilot:	No	Last Flight Review or Equivalent:	01/19/2016
Flight Time:	175 hours (Total, all aircraft), 96 hours (Total, this make and model), 137 hours (Pilot In Command, all aircraft), 71 hours (Last 90 days, all aircraft), 56 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

Aircraft Manufacturer:	PIPER	Registration:	N8466G
Model/Series:	PA 28-161 161	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	28-8216064
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	10/29/2015, 100 Hour	Certified Max Gross Wt.:	2325 lbs
Time Since Last Inspection:	31 Hours	Engines:	1 Reciprocating
Airframe Total Time:	19483 Hours	Engine Manufacturer:	LYCOMING
ELT:	C91 installed, not activated	Engine Model/Series:	O-320
Registered Owner:	GROWL AIRCRAFT INC	Rated Power:	160 hp
Operator:	Airborne Career Academy	Air Carrier Operating Certificate:	Pilot School (141)

## Meteorological Information and Flight Plan

Observation Facility, Elevation:	OPF, 8 ft msl	Observation Time:	1125 EDT
Distance from Accident Site:	20 Nautical Miles	Condition of Light:	Day
Direction from Accident Site:	270°	Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Few / 2100 ft agl	Temperature/Dew Point:	27° C / 19° C
Lowest Ceiling:	Overcast / 3100 ft agl	Visibility	10 Miles
Wind Speed/Gusts, Direction:	15 knots, 120°	Visibility (RVR):	
Altimeter Setting:	30.11 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Marathon, FL (MTH)	Type of Flight Plan Filed:	None
Destination:	Ft. Lauderdale, FL (FXE)	Type of Clearance:	VFR Flight Following
Departure Time:	1100 EST	Type of Airspace:	Class B

## Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None		

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Leah D Read	<b>Adopted Date:</b>	09/01/2016
<b>Additional Participating Persons:</b>	Juan Garcia; FAA/FSDO; Miami, FL		
<b>Publish Date:</b>	09/01/2016		
<b>Note:</b>	The NTSB did not travel to the scene of this accident.		
<b>Investigation Docket:</b>	<a href="http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=92683">http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=92683</a>		

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