



National Transportation Safety Board Aviation Accident Preliminary Report

Location:	Atlantic Ocean, AO	Accident Number:	ERA19LA026
Date & Time:	10/25/2018, 1119 EDT	Registration:	N555PM
Aircraft:	Piper PA31T	Injuries:	5 Fatal
Flight Conducted Under:	Part 91: General Aviation - Personal		

On October 25, 2018, at about 1119 eastern daylight time, and about 100 miles south east of Charleston, South Carolina (CHS), radar contact was lost with a Piper PA-31T, N555PM. The airplane was presumed to have impacted the Atlantic Ocean. The commercial pilot and four passengers were not found and presumed fatally injured. Day visual meteorological conditions prevailed, and an instrument flight rules flight plan was filed for the flight, which departed from a private airport in Andrews, South Carolina about 1047, bound for Governor's Harbor airport, Bahamas (MYEM). The personal flight was conducted under the provisions of Title 14 Code of Federal Regulations Part 91.

The pilot's family reported that the airplane departed from its home base, a private runway in Andrews, South Carolina. Preliminary radar and air traffic control data from the Federal Aviation Administration (FAA) showed the airplane departed the area toward the southeast about, 1047. The airplane crossed over the coastline and began a climb to an assigned altitude of 25,000 feet. The climb rate was consistent at 500 feet per minute (fpm), and the airplane remained on course flying toward the assigned airspace fix, named LURKS. When the airplane was about 12 miles from LURKS (about 95 miles southeast of CHS), while climbing through 24,300 feet, the pilot made a garbled radio transmission indicating that he was diverting to CHS. The airplane began a descent at about 1,000 fpm and maintained a course towards LURKS. About 23 seconds later, after several air traffic control requests to repeat the radio transmission, the pilot replied, "we're descending". About 15 seconds later, at an altitude of about 23,500 feet, the airplane turned sharply toward the left, and the descent rate increased to greater than 4,000 fpm. About 25 seconds later, the radar data altitude parameter went invalid, the last reported altitude was 21,500 feet. About 35 seconds later, the pilot transmitted "emergency emergency, five five five papa mike", and no further transmissions were recorded. About 25 seconds later, the last radar position (32.3184N 78.0661W) was recorded at 1119, which was about 3 miles to the left (northeast) of the airplane's original course towards LURKS. That position corresponded to a location about 100 nautical miles east southeast of CHS.

The FAA issued an Alert Notice (ALNOT) and a search effort was conducted by the U.S. Coast Guard. One of the search airplanes reported an oil sheen on the surface of the water near the

last known coordinates; however, neither the airplane nor debris were located. The search effort was cancelled on October 27 at sunset.

A review of the airplane maintenance logbooks revealed that the most recent annual inspection was performed on September 5, 2018, and at that time the airframe had accrued a total of 7,718 hours. That inspection included routine maintenance, the replacement of the starter generators on both engines, replacement of the cabin oxygen bottle, and compliance with several airworthiness directive inspections, including AD 2017-02-06, which addresses a potential issue with electrical wiring arcing and fire risk.

According to FAA airman records the pilot held a private pilot certificate with ratings for airplane single and multi-engine land, rotorcraft-helicopter, and instrument airplane. His most recent medical certificate was issued on March 8, 2018, at which time he reported a total of 2,778 hours of total flight experience.

A preliminary review of weather records revealed that there were no convective or precipitation echoes in the area at the time of the accident. Satellite imagery depicted a mid-level layer of clouds in the area with tops estimated at 15,500 feet. An Airmen's Meteorological Information advisory for moderate turbulence was in effect for the region. Atmospheric model results characterized the atmosphere as stable, with a freezing level around 13,000 feet and a shallow layer favorable for light rime icing at 23,000 feet.

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N555PM
Model/Series:	PA31T	Aircraft Category:	Airplane
Amateur Built:	No		
Operator:	Bulldog Flying Club Inc	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	KCHS, 40 ft msl	Observation Time:	1056 EDT
Distance from Accident Site:	106 Nautical Miles	Temperature/Dew Point:	17° C / 8° C
Lowest Cloud Condition:	Scattered / 12000 ft agl	Wind Speed/Gusts, Direction:	10 knots / 18 knots, 30°
Lowest Ceiling:	Broken / 20000 ft agl	Visibility:	10 Miles
Altimeter Setting:	30.18 inches Hg	Type of Flight Plan Filed:	IFR
Departure Point:	Andrews, SC (PVT)	Destination:	Governors Hrbr., FN (MYEM)

Wreckage and Impact Information

Crew Injuries:	2 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	3 Fatal	Aircraft Fire:	Unknown
Ground Injuries:	N/A	Aircraft Explosion:	Unknown
Total Injuries:	5 Fatal	Latitude, Longitude:	32.318333, -78.066111 (est)

Administrative Information

Investigator In Charge (IIC):	Douglass P Brazy
Additional Participating Persons:	Eric West; FAA/AVP; Washington, DC Robert Martelotti; Piper Aircraft Inc.; Vero Beach, FL
Note:	The NTSB did not travel to the scene of this accident.