



Aviation Investigation Final Report

Location:	Graham, North Carolina	Accident Number:	ERA11LA457
Date & Time:	August 16, 2011, 04:25 Local	Registration:	N492ST
Aircraft:	PIPER AIRCRAFT INC PA-32R-301T	Aircraft Damage:	Substantial
Defining Event:	Fuel exhaustion	Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The airplane was stolen during nighttime hours and flown at varying airspeeds and altitudes for about 2 hours before it impacted trees and terrain. Photographs of the accident scene revealed damage indicative of an almost vertical descent and consistent with a stall. There was no indication of engine power at the time of impact, and no significant amount of fuel was found at the scene, in the airplane, or seeped into the ground. An individual, who had previously held a student pilot certificate, was arrested 2 days after the event. The individual refused to provide a statement to authorities. Fuel prior to takeoff and power settings used could not be determined; however, with fuel exhaustion occurring after only 2 hours for an airplane that should have had considerably more endurance if fully fueled and operated correctly, it is likely that the individual mismanaged the rate of fuel consumption.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The individual's fuel mismanagement, which resulted in fuel exhaustion and a subsequent engine failure. Contributing the accident was the individual's failure to maintain adequate airspeed following the engine failure, which resulted in an aerodynamic stall.

Findings

Aircraft	Fuel - Fluid management
Personnel issues	Incorrect action performance - Pilot
Personnel issues	Stolen/unauthorized - Pilot
Aircraft	Airspeed - Not attained/maintained
Personnel issues	Aircraft control - Pilot

Factual Information

History of Flight

Maneuvering	Fuel exhaustion (Defining event)
Maneuvering	Loss of engine power (total)
Emergency descent	Aerodynamic stall/spin
Uncontrolled descent	Collision with terr/obj (non-CFIT)

On August 16, 2011, about 0425 eastern daylight time, a Piper PA-32R-301T, N492ST, was substantially damaged when it impacted wooded terrain in Graham, North Carolina. No one was found in or near the wreckage; however, on August 18, 2011, a suspect with minor injuries was arrested for larceny of the airplane. The airplane departed Horace Williams Airport (IGX), Chapel Hill, North Carolina. Night visual meteorological conditions prevailed, and no flight plan had been filed for the flight.

Federal Aviation Administration (FAA) radar information indicated that the airplane departed IGX about 0235, and subsequently made multiple turns, climbs and descents. Recorded altitudes varied between 5,100 feet above mean sea level (msl), and 800 feet msl in the vicinity of the accident site, while terrain elevations averaged about 600 feet. Numerous losses of radar contact were also noted during the flight, typically below 800 feet msl. Ground speeds also varied, between a maximum of 156 knots, and 54 knots near the accident site.

Responders found blood at the scene, but the occupant(s) of the airplane could not be located. FAA photographs revealed that the airplane came to rest next to a large tree. Tree damage was apparent almost directly above the wreckage, and there was no evidence of forward motion of the airplane.

According to a responding FAA inspector, the airplane appeared to have descended vertically through the trees. The propeller had one undamaged blade sticking up through fallen tree debris. There was no odor of fuel around the airplane, no fuel in the left tank, and the inspector couldn't tell if there was any fuel in the right tank. The owner of the airplane had arrived prior to the inspector, and had placed the fuel selector into the off position. The owner had also stated to the inspector that the airplane's fuel tanks had been full the last time he saw it and that there were 1.9 additional hours on the Hobbs meter.

According to aircraft recovery personnel, there was no postcrash fire, and no significant amount of fuel could be found either onboard the airplane or seeped into the ground when the airplane was dismantled and removed for transport.

The departure airport was owned by the University of North Carolina. On August 18, 2011, a suspect was arrested and transported to the University of North Carolina at Chapel Hill

Department of Public Safety, where he was charged with larceny of the airplane.

According to a detective, the suspect refused to provide a statement. FAA records for the suspect indicated that he had obtained a student pilot certificate in 2004, which expired in 2009. As of March 13, 2012, the suspect's next court date for the larceny charge was scheduled for April 10, 2012.

The detective also noted that other airplanes on the ramp were found to have been tampered with, but that it could not be verified as to when the tampering occurred.

Pilot Information

Certificate:	None	Age:	Male
Airplane Rating(s):	None	Seat Occupied:	Unknown
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	None	Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER AIRCRAFT INC	Registration:	N492ST
Model/Series:	PA-32R-301T	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	3257489
Landing Gear Type:	Retractable - Tricycle	Seats:	7
Date/Type of Last Inspection:	August 16, 2010 Annual	Certified Max Gross Wt.:	3600 lbs
Time Since Last Inspection:	137 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	563 Hrs at time of accident	Engine Manufacturer:	LYCOMING
ELT:	Installed, activated, aided in locating accident	Engine Model/Series:	TIO-540-AH1A
Registered Owner:	LFW INVESTMENTS LLC	Rated Power:	300 Horsepower
Operator:	Alleged; pending outcome of trial.	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night
Observation Facility, Elevation:	BUY,616 ft msl	Distance from Accident Site:	7 Nautical Miles
Observation Time:	04:54 Local	Direction from Accident Site:	315°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	280°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.88 inches Hg	Temperature/Dew Point:	19°C / 16°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Chapel Hill, NC (IGX)	Type of Flight Plan Filed:	None
Destination:	(UNK)	Type of Clearance:	None
Departure Time:	02:35 Local	Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	35.965557,-79.375(est)

Administrative Information

Investigator In Charge (IIC): Cox, Paul

Additional Participating Persons: Michael Harville; FAA/FSDO; Greensboro, NC

Original Publish Date: July 9, 2012

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.ntsb.gov/Docket?ProjectID=81512>

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