



National Transportation Safety Board

Aviation Accident Data Summary

Location:	Brookneal, VA	Accident Number:	ERA15CA120
Date & Time:	02/04/2015, 1646 EST	Registration:	N619GB
Aircraft:	PIPER PA 18-150	Injuries:	2 Minor
Flight Conducted Under:	Part 91: General Aviation - Instructional		

Analysis

According to the flight instructor and the pilot-rated student, both believed the airplane had been fueled at the time it was pulled out of the hanger by line personnel, and they had observed a fuel truck parked near the airplane prior to the flight. The student had performed the preflight inspection, during which he interpreted the fuel sight gauges as indicating full fuel; however, he did not visually check the fuel in the tanks. When the instructor arrived at the airplane, he asked the student how much fuel was on board and the student said the tanks were full. The flight departed from Lynchburg, Virginia and made several takeoffs and landings at a nearby airport. About 1 hour into the flight as the airplane was 1,000 feet above ground level, the engine lost all power. As the instructor began a turn toward a nearby pasture, the engine started producing power again and the instructor chose to continue the turn, heading toward the nearest airport. The engine then lost all power again. No longer able to glide to the nearby pasture, the instructor flew the airplane straight ahead and let it settle into the trees. The airplane struck the trees and terrain and came to rest inverted. Examination of the wreckage by a Federal Aviation Administration inspector revealed substantial damage to the wings and fuselage. The inspector recovered about 1 pint of fuel from each fuel tank. Additionally, neither pilot reported any mechanical malfunctions or anomalies that would have precluded normal operation of the airframe or engine.

After the accident, the flight school held safety briefings with its instructors, faculty, and students. These briefings included discussion of the circumstances of the accident, and the implementation of policy changes related to pre and post flight responsibilities of students and instructors, new fuel level measuring procedures, and dispatch records of fuel status. These changes were applied to all airplane types and operations at the school, and were subsequently written in the Flight Operations Manual.

Flight Events

Prior to flight - Preflight or dispatch event
Maneuvering-low-alt flying - Fuel exhaustion
Maneuvering-low-alt flying - Loss of engine power (total)
Emergency descent - Off-field or emergency landing
Landing - Collision with terr/obj (non-CFIT)

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The flight instructor and pilot-rated student's inadequate preflight inspection, which resulted in a total loss of engine power due to fuel exhaustion.

Findings

Aircraft-Aircraft systems-Fuel system-Fuel quantity indicator-Incorrect use/operation - C
Aircraft-Fluids/misc hardware-Fluids-Fuel-Not inspected - C

Personnel issues-Action/decision-Action-Lack of action-Instructor/check pilot - C
Personnel issues-Action/decision-Action-Lack of action-Student/instructed pilot - C

Flight Instructor Information

Certificate:	Flight Instructor; Commercial	Age:	52
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	None	Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine
Flight Time:	5130 hours (Total, all aircraft), 100 hours (Total, this make and model), 5018 hours (Pilot In Command, all aircraft), 50 hours (Last 90 days, all aircraft), 14 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Pilot Information

Certificate:	Private	Age:	22
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	230 hours (Total, all aircraft), 12 hours (Total, this make and model), 130 hours (Pilot In Command, all aircraft), 50 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	PIPER	Registration:	N619GB
Model/Series:	PA 18-150	Engines:	1 Reciprocating
Operator:	LIBERTY UNIVERSITY SCHOOL OF AERONAUTICS	Engine Manufacturer:	LYCOMING
Air Carrier Operating Certificate:	Pilot School (141)	Engine Model/Series:	O-320-A2B
Flight Conducted Under:	Part 91: General Aviation - Instructional		

Meteorological Information and Flight Plan

Observation Facility, Elevation:	LYH, 938 ft msl	Weather Information Source:	Weather Observation Facility
Conditions at Accident Site:	Visual Conditions	Lowest Ceiling:	None
Condition of Light:	Day	Wind Speed/Gusts, Direction:	9 knots, 200°
Temperature:	10° C / -6° C	Visibility	10 Miles
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	BROOKNEAL, VA (0V4)	Destination:	LYNCHBURG, VA (LYH)

Airport Information

Airport:	BROOKNEAL/CAMPBELL COUNTY (0V4)	Runway Surface Type:	N/A
Runway Used:	N/A	Runway Surface Condition:	
Runway Length/Width:			

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	Douglass P Brazy	Adopted Date:	08/12/2015
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=90691		

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