



National Transportation Safety Board Aviation Accident Data Summary

Location:	Keene, NH	Accident Number:	GAA16CA377
Date & Time:	07/07/2016, 1200 EDT	Registration:	N190ND
Aircraft:	PIPER PA 44	Injuries:	2 None
Flight Conducted Under:	Part 91: General Aviation - Instructional		

Analysis

The flight instructor in the multiengine airplane reported that, during a simulated single-engine instrument approach to runway 2, the right engine was configured for the simulated failure. The instructor added that the goal was to perform a missed approach on one engine and note the airplane's performance. The pilot under instruction descended to the decision height and executed the missed approach procedure, but the airplane would not climb. The flight instructor told the pilot to go to full power on both engines. According to the flight instructor, "mixtures, props and throttles were all full forward and the fuel flow levers were both at the ON position," and he took control of the airplane.

The flight instructor reported that there were trees and buildings to the north and that he made a left turn about 400 ft above ground level with the intent to land on runway 14. He extended the landing gear but realized that he would not reach the runway. He executed a forced landing to the southwest on taxiway Sierra, the airplane crossed over runway 32/14, and although heavy braking was applied, the airplane exited the taxiway and impacted a drainage culvert. The airplane sustained substantial damage to the aft fuselage stringers and longerons.

The airport elevation was 488 ft, the density altitude was 2,120 ft, the temperature was 81°, the dew point was 66° F, and the wind was calm, and the flight instructor stated that carburetor heat was not used during the approach on either engine.

The relative humidity was about 60 percent, and the weather conditions were conducive to serious icing probability when operating in a gliding flight profile.

Flight Events

Approach-IFR missed approach - Powerplant sys/comp malf/fail
Approach-IFR missed approach - Attempted remediation/recovery
Emergency descent - Landing area undershoot
Landing-landing roll - Loss of control on ground

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The flight instructor's failure to use carburetor heat during the approach while operating in atmospheric conditions that were conducive to carburetor icing, which resulted in a loss of engine power due to carburetor icing.

Findings

Aircraft-Aircraft systems-Ice/rain protection system-Intake anti-ice, deice-Not used/operated - C
 Personnel issues-Action/decision-Info processing/decision-Identification/recognition-
 Instructor/check pilot - C

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

Environmental issues-Conditions/weather/phenomena-Temp/humidity/pressure-Conducive to carburetor icing-Effect on operation - C

Environmental issues-Physical environment-Object/animal/substance-Airport structure-Contributed to outcome

Pilot Information

Certificate:	Flight Instructor; Commercial	Age:	48
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; Instrument Airplane
Flight Time:	(Estimated) 5516 hours (Total, all aircraft), 300 hours (Total, this make and model), 5433 hours (Pilot In Command, all aircraft), 127 hours (Last 90 days, all aircraft), 41 hours (Last 30 days, all aircraft), 4.2 hours (Last 24 hours, all aircraft)		

Pilot Information

Certificate:	Flight Instructor; Commercial	Age:	54
Airplane Rating(s):	Multi-engine Land; Single-engine Land; Single-engine Sea	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	None	Instructor Rating(s):	Airplane Single-engine; Instrument Airplane
Flight Time:	(Estimated) 1265 hours (Total, all aircraft), 6.5 hours (Total, this make and model), 1175 hours (Pilot In Command, all aircraft), 138 hours (Last 90 days, all aircraft), 54 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N190ND
Model/Series:	PA 44 180	Engines:	2 Reciprocating
Operator:	PLANE NONSENSE INC	Engine Manufacturer:	LYCOMING
Operating Certificate(s) Held:	None	Engine Model/Series:	O-360-A1H6
Flight Conducted Under:	Part 91: General Aviation - Instructional		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	KEEN, 481 ft msl	Weather Information Source:	Weather Observation Facility
Lowest Ceiling:		Wind Speed/Gusts, Direction:	Calm / ,
Temperature:	27° C	Visibility	10 Miles
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	BEDFORD, MA (BED)	Destination:	Keene, NH (EEN)

Airport Information

Airport:	DILLANT-HOPKINS (EEN)	Runway Surface Type:	Asphalt
Runway Used:	02	Runway Surface Condition:	Dry
Runway Length/Width:	6201 ft / 100 ft		

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Latitude, Longitude:	42.898333, -72.270833 (est)		

Administrative Information

Investigator In Charge (IIC):	Michael A Hicks	Adopted Date:	04/04/2017
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=93614		

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