National Transportation Safety Board

PRELIMINARY REPORT AVIATION

NTSB ID: ERA16FA215		Most Critical Injury: Fatal
Occurrence Date: 06/16/2016		Investigated By: NTSB
Occurrence Type: Accident		

Location/Time

Nearest City/Place	State	Zip Code	Local Time	Time Zone	
State College	PA	16803	0830	EDT	

Aircraft Information

Registration Number	Aircraft Manufacturer	Model/Series Number
N3591P	PIPER	PA31/325

Type of Aircraft: Airplane	Amateur Built Aircraft? No	

Injury Summary:	Fatal 2	Serious	Minor	None

Revenue Sightseeing Flight: No Air Medical Transport Flight: No

Narrative

Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:

*** Note: NTSB investigators either traveled in support of this investigation or conducted a significant amount of investigative work without any travel, and used data obtained from various sources to prepare this aircraft accident report. ***

On June 16, 2016, at 0830 eastern daylight time, a Piper PA-31-325, N3591P, was destroyed during collision with terrain while on approach to University Park Airport (UNV), State College, Pennsylvania. The airline transport pilot and passenger were fatally injured. The airplane departed Washington County Airport (AFJ), Washington, Pennsylvania, about 0800. Instrument meteorological conditions prevailed, and an instrument flight rules flight plan was filed for the on-demand air taxi flight, which was conducted under the provisions of 14 Code of Federal Regulations Part 135.

Preliminary radar and voice communication information from the Federal Aviation Administration (FAA) revealed that at 0824:33, air traffic control (ATC) provided the airplane with a heading to intercept the final approach course for the instrument landing system (ILS) approach to runway 24 at UNV, and cleared the airplane for the approach. At 0824:25, the airplane was advised that radar services were terminated, and was instructed to change radio frequencies and contact the UNV ATC tower.

At 0825, the airplane contacted UNV tower and announced "…with you on the approach." The tower controller acknowledged the call and issued a landing clearance. There were no further communications with the airplane despite multiple attempts by ATC.

At 0843:50, an airport operations ground vehicle operating at the approach end of runway 24 identified smoke in a woodline about 1 mile northeast of the airport, and notified the control tower. The source of the smoke was later identified as the accident site.

The pilot held an airline transport pilot certificate with a rating for airplane single engine land, multiengine land, and instrument airplane. His most recent Federal Aviation Administration (FAA) first-class medical certificate was issued March 7, 2016. He reported 12,400 total hours of flight experience on that date, 350 hours of which were during the six months previous to that date.

According to FAA and maintenance records, the airplane was manufactured in 1980. Its most recent annual inspection was completed February 19, 2016 at 15,999.6 total aircraft hours.

At 0853, the weather recorded at UNV included an overcast ceiling at 300 feet, calm wind, and visibility 1 statute mile in mist. The temperature was 17 degrees C, and the dew point was 17 degrees C.

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Narrative (Continued)

The altimeter setting was 29.80 inches of mercury. Airmen's Meteorological Information (AIRMET) Sierra for instrument meteorological conditions and mountain obscurations was in effect for the area surrounding the accident site at the time of the accident.

The wreckage was examined at the accident site, and all major components were accounted for at the scene. The wreckage path was in densely wooded terrain, about 450 feet long, and oriented on a magnetic heading of 223 degrees. The initial impact points were in treetops about 70 feet above the ground, and tree trunks and branches displayed impact fractures and sharp, angular cuts along the length of the wreckage path. Both wings were fragmented along the path. Both engines and each main landing gear were separated and scattered prior to the main wreckage.

The fuselage and empennage came to rest upright and facing the direction of travel. The instrument panel, cockpit, and cabin area were completely destroyed by postcrash fire.

Control continuity could not be established due to extensive impact damage; however; parts associated with the wings, flaps, and ailerons were identified. Sheet metal and cabling associated with the empennage, horizontal and vertical stabilizers, as well as the elevators were identified, and the cable attach points at all primary flight controls were secure.

Examination of the landing gear and components associated with the flap system were consistent with a 15-degree flap setting and the gear in the down and locked position.

The propeller systems were attached to their respective engines, and all propeller blades exhibited similar twisting, bending, leading edge gouging, and chordwise scratching. Several tree branches and trunks displayed deep, angular cuts with paint transfers consistent with propeller blade contact.

The engines were each damaged by impact and postcrash fire. The left engine displayed extensive thermal damage. The magnesium oil sump and the accessories mounted to the accessory section were consumed by fire, and the damage and contamination produced by the fire precluded rotation of the engine. The single-drive, dual magneto was consumed by fire and could not be tested. Borescope examination of the cylinders revealed normal operational deposits and wear, and no preimpact anomalies.

The right engine displayed extensive thermal damage. Impact damage to the No. 2 cylinder precluded rotation of the engine. The single-drive, dual magneto was damaged by fire and would not produce spark when rotated. Borescope examination of the cylinders revealed normal operational deposits and wear, and no preimpact anomalies. The No. 2 cylinder was removed, and the engine was rotated by hand at the propeller. Continuity was confirmed from the powertrain through the valvetrain, to the accessory section. Compression was confirmed on all cylinders using the thumb method, with the exception of the No. 2 cylinder.
Updated on Jun 23 2016 11:18AM

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Occurrence Type: Accident

Other Aircraft Involved

Registration Number	Aircraft Manufacturer	Model/Series Number

Accident Information

Aircraft Damage: Destroyed

Accident Occurred During: Approach-IFR final approach

Crew	Name	Certificate No.	Injury
Pilot	On File	On File	Fatal
2			
3			
4			
5			
6			

Operator Information

Name	Operator Designator Code	Doing Business As
AERONATIONAL INC		

Street Address	City	State	Zip Code
	WASHINGTON	PA	153010538

-Type of Certificate(s) Held:

Air Carrier Operating Certificate(s): On-demand Air Taxi

Operating Certificate:

Operator Certificate:

Regulation Flight Conducted Under: Part 135: Air Taxi & Commuter

Type of Flight Operations Conducted: Non-scheduled; Domestic; Passenger Only

Flight Plan/Itinerary

Type of Flight Plan Filed: IFR

	State	Airport Identifier
Last Departure Point: Washington	PA	AFJ
Destination: Same as Accident/Incident Location		UNV

Weather Information

Investigator's Source: Weather Observation Facility

Facility ID: KUNV

Observation Time (Local): 0853

Sky/Lowest Cloud Condition: Ft. AGL

Lowest Ceiling: Overcast 300 Ft. AGL

Visibility: 1 SM

Altimeter: 29.80 "Hg

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Weather Information

(Continued from page 2)

Temperature:	17 °C	Dew Point:	17 °C	Wind Direction:	
Wind Speed:	Calm Kts.	Gusts:	Kts.	Weather Conditions at Accident Site:	Instrument Conditions

Administration Data

Notification From: NTSB ROC	Date:
FAA District Office/Coordinator: FAA/FSDO Harold W. Haase	Investigator-In-Charge (IIC): Brian C. Rayner