



# Aviation Investigation Final Report

<b>Location:</b>	Quinton, Virginia	<b>Accident Number:</b>	ERA18LA169
<b>Date &amp; Time:</b>	June 16, 2018, 16:00 Local	<b>Registration:</b>	N2777U
<b>Aircraft:</b>	Cessna 172D	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of engine power (total)	<b>Injuries:</b>	1 Serious
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot stated that he conducted a preflight inspection, during which he sampled the fuel and recovered about 4 ounces of water. He then performed an engine run-up and taxied to the runway for departure. During the climbout, when the airplane was about 100 ft above ground level, the engine lost total power. The pilot performed a forced landing, and the airplane collided with trees. The fuselage, wings, and empennage were substantially damaged during the impact. Postaccident examination of the engine revealed a large bird nest in the engine cowlings and cabin air intakes. The condition of the engine air intake could not be determined due to impact damage. The propeller was able to rotate and valvetrain continuity and the operation of the magnetos was confirmed. Given the available evidence, the reason for the loss of engine power could not be determined.

## Probable Cause and Findings

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

A loss of engine power for reasons that could not be determined based on the available evidence.

## Findings

Not determined	(general) - Unknown/Not determined
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# Factual Information

## History of Flight

Initial climb	Loss of engine power (total) (Defining event)
Emergency descent	Off-field or emergency landing
Landing	Collision with terr/obj (non-CFIT)

On June 16, 2018, about 1600 eastern daylight time, a Cessna 172D, N2777U, was substantially damaged when it was involved in an accident near Quinton, Virginia. The pilot was seriously injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

The flight was departing from New Kent County Airport (W96), Quinton, Virginia. According to the pilot, two evenings prior to the accident flight, he inspected the airplane in anticipation of the upcoming flight. During the inspection he removed “two walnut sized mud balls” from the area of the engine and noted the presence of straw that suggested the possible presence of a bird nest. During his preflight inspection just before the accident flight, when he removed the engine cowling plugs he found and removed a bird nest from the center/right side of the engine. After using a flashlight to complete the examination of the engine area, he noted no further anomalies. He stated that he sampled the fuel in the left wing tank and removed about 4 ounces of water until he obtained clear fuel; he sampled the fuel in the right wing tank and belly drain and noted no "meaningful" amount of water. He then started the airplane and taxied to the fuel pumps where he filled the airplane’s fuel tanks. About that time he found and removed mud from the fuel tank vent behind the pilot-side wing strut using a flexible wire and a screwdriver.

The pilot stated that when he conducted an engine run-up, he noted “nothing unusual,” and taxied to runway 29 for departure. The pilot stated that the takeoff was normal but that when airplane was about 100 ft above ground level, the engine lost total power. The pilot performed a forced landing straight ahead, and the airplane subsequently collided with trees.

Postaccident examination of the airplane by a Federal Aviation Administration inspector revealed that the fuselage, wings, and empennage were substantially damaged. Examination of the engine revealed a large bird nest in the engine cowling and cabin air intakes. The condition of the engine air intake could not be determined due to impact damage. Valvetrain continuity was confirmed through rotation of the propeller. Both magnetos were capable of producing spark and the spark plugs appeared normal. The carburetor and fuel bowl were broken.

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	61,Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	3-point
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Without waivers/limitations	<b>Last FAA Medical Exam:</b>	
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	(Estimated) 300 hours (Total, all aircraft), 150 hours (Total, this make and model)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N2777U
<b>Model/Series:</b>	172D D	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1963	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	17250377
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	October 9, 2017 Annual	<b>Certified Max Gross Wt.:</b>	2300 lbs
<b>Time Since Last Inspection:</b>	3939 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	as of last inspection	<b>Engine Manufacturer:</b>	CONT MOTOR
<b>ELT:</b>	C91 installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	O-300 SER
<b>Registered Owner:</b>		<b>Rated Power:</b>	145 Horsepower
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	W96,120 ft msl	<b>Distance from Accident Site:</b>	0 Nautical Miles
<b>Observation Time:</b>	16:15 Local	<b>Direction from Accident Site:</b>	0°
<b>Lowest Cloud Condition:</b>	Scattered / 7000 ft AGL	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>		<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>		<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30.02 inches Hg	<b>Temperature/Dew Point:</b>	30°C / 17°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Quinton, VA (W96 )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Quakertown, PA (UKT )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	16:00 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	New Kent County Airport W96	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	120 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	29	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	3603 ft / 75 ft	<b>VFR Approach/Landing:</b>	Forced landing

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Serious	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Serious	<b>Latitude, Longitude:</b>	37.503334,-77.126663(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Alleyne, Eric		
<b>Additional Participating Persons:</b>	Amber D White; FAA/FSDO; Richmond, VA		
<b>Original Publish Date:</b>	May 25, 2021	<b>Investigation Class:</b>	3
<b>Note:</b>	The NTSB did not travel to the scene of this accident.		
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=97491">https://data.nts.gov/Docket?ProjectID=97491</a>		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).