

National Transportation Safety Board

Office of Aviation Safety

Washington, DC 20594



ERA24FA294

INVESTIGATION AND EXAM SUMMARY

April 17, 2026

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A. ACCIDENT

Location: Rutherfordton, NC.
Date: July 7, 2024
Time: 2107 EDT
0107 UTC
Airplane: N2198G, Cessna 182A

B. INVESTIGATION AND EXAM SUMMARY

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C. SUMMARY

D. DETAILS OF THE INVESTIGATION

1.0 Accident Site

The aircraft impacted a tall tree severing it approximately 60' above the ground, followed by a second shorter thicket of trees and subsequently the ground in an apparent wings level attitude. The aircraft left an impact crater where the propeller was found and the main wreckage was located ~50' further along the impact path. The empennage came to rest atop the left wing. The majority of the right wing main spar was found near the initial impact crater and fragments of it's skin were found along the wreckage path.

2.0 Airframe Examination

2.1 Fuselage

The majority of the fuselage and cockpit were thermally damaged.



2.2 Empennage

The empennage was impact and thermally separated near the baggage bulkhead. Both horizontal stabilizers were displaced upwards and had leading edge damage. The right elevator separated from its mounting location. The vertical stabilizer forward dorsal skin displayed wrinkling.



2.3 Wings

The left wing had impact damage at the tip, leading edge and through the root. The left flap was destroyed. The left aileron was still in tact and secured to the wing by its hinges. The trailing edge of the aileron was impact damaged.



The right wing was fragmented from impact forces and the flight controls were fragmented and crushed. The majority of the right wing main spar was recovered with little to no other structure attached.



2.4 Landing Gear

Both main landing gear legs were separated from the airplane with their mountings still attached. The left main landing gear wheel was still attached to the axle and gear leg but the tire and tube were thermally destroyed.

The right main landing gear was still attached to a section of the fuselage fitting. The wheel assembly was detached from the axle and the axle was still attached to the gear leg.

The Nose landing gear was separated from the firewall with its mounts still attached and the steering control arms broken free of their mountings. The nose wheel fork was separated from the lower oleo.



2.5 Cockpit

The cockpit was thermally damaged and crushed. Most environmental and icing control positions could not be determined. Only one seat was observed in the wreckage.



According to airworthiness records, the passenger seats were previously removed for sky diving operations. Multiple attach points were found with the restraint fabric most likely consumed by thermal damage. The instrument panel was heavily crush and thermally damaged. The left cabin door was mostly in tact with the door latch in the closed position and the latch pins

extended. The right cabin door was fragmented with the latch shown to be in the closed position with latch pins extended.



2.6 Survivability

No ELT was observed at the accident site.

2.7 Fuel/Fuel System

Both fuel tanks were thermally damaged, portions of the right fuel cap assembly was found in the wreckage.



The fuel selector handle and face plate were found free in the wreckage with the connecting stem broken at the fuel selector valve. Air was blown through the selector valve and it was determined to be in the "Both" position. Fuel consistent in smell with 100LL was present in the lines of the selector.



2.8 Other Systems

Flight control cable was not established due to the heavily damaged and contorted wreckage and the steep, hazardous terrain. The thermally damaged flap handle was found locked in the second notch indicating flaps were set to 10°. The mixture, propeller, and throttle controls were found in their full rich and full throttle (all the way in) positions.

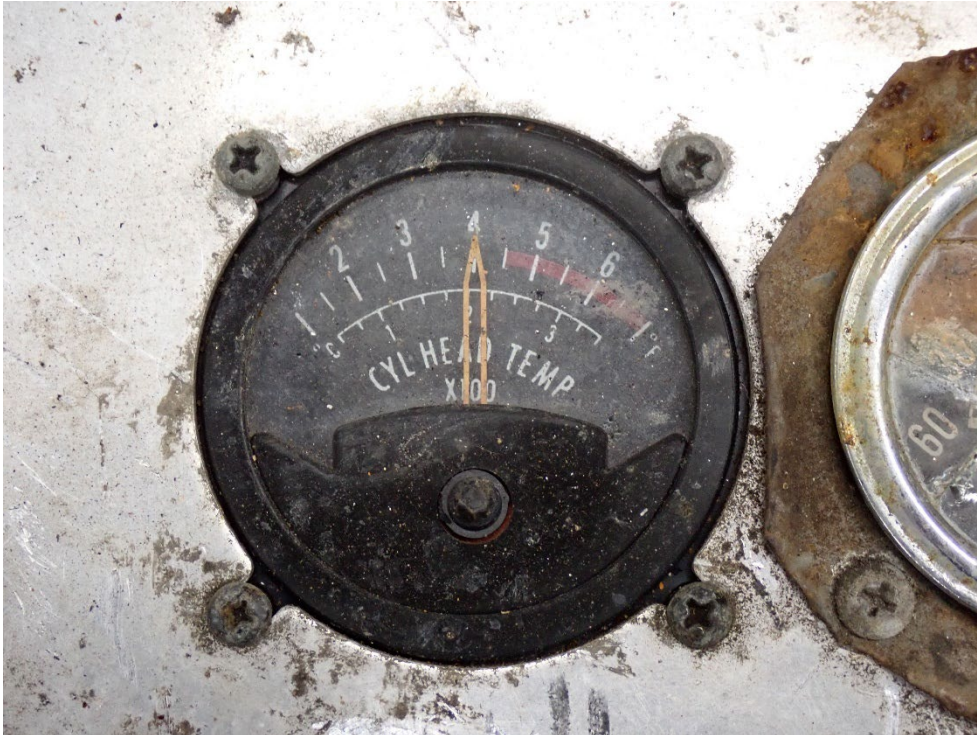




Carb heat was in the off position, the cowl flap switch was broken and position could not be determined, and the magneto switch was in the both position with the key removed. The cabin air control was pulled out and bent up and the cabin heat control was all the way in. The primer knob was broken off.

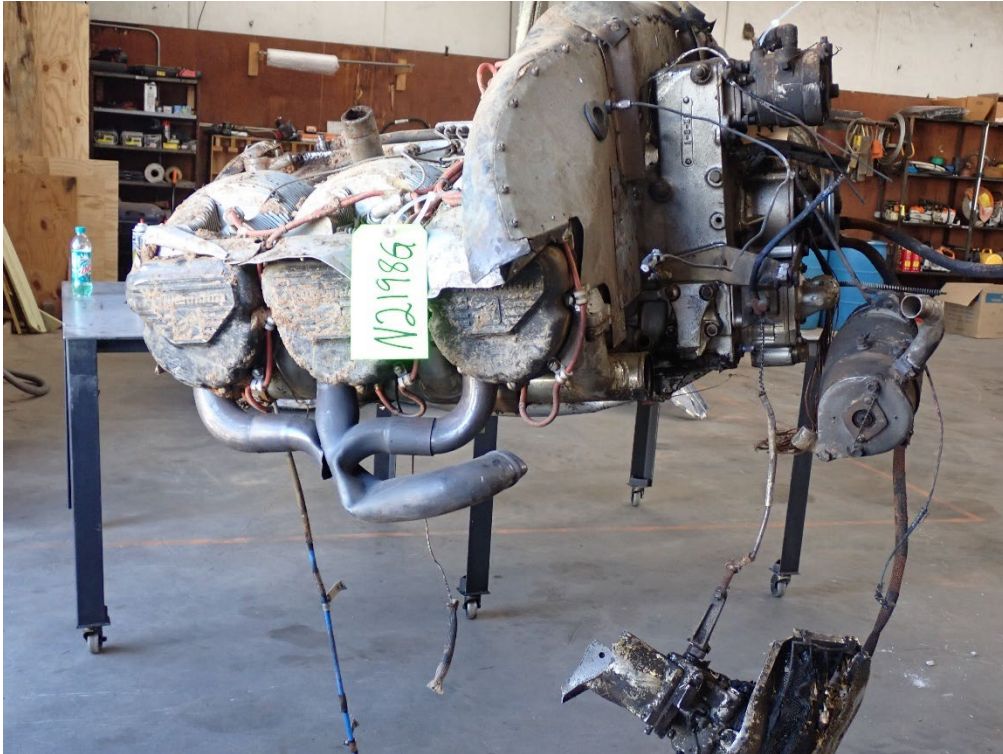


The Cylinder head temperature gauge was stuck at the 400°F mark.

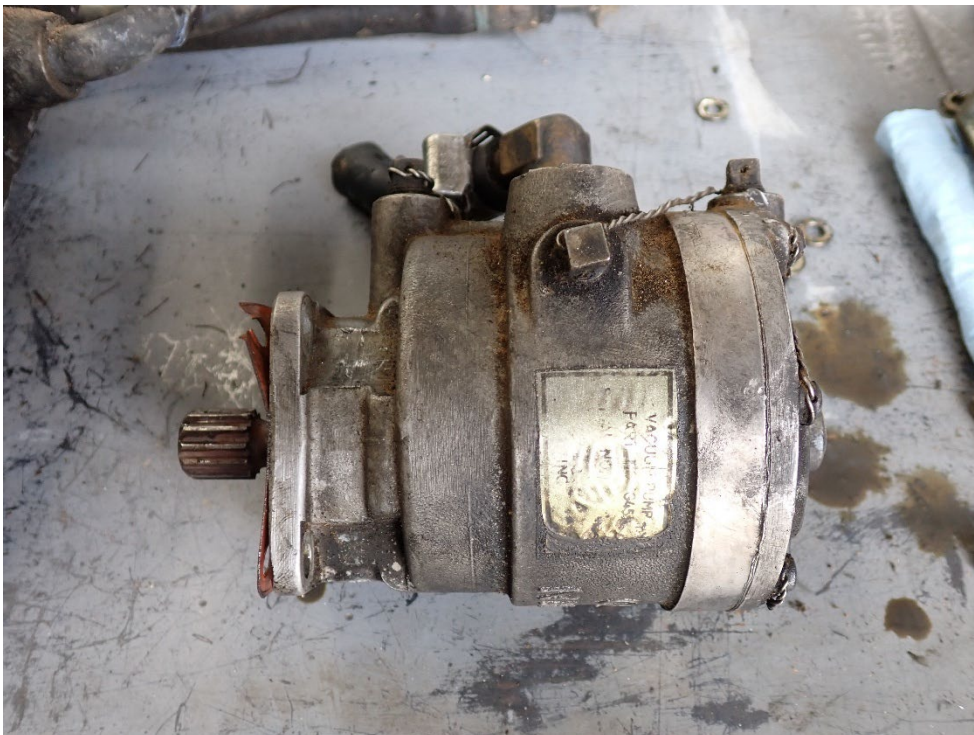


3.0 Engine Examination

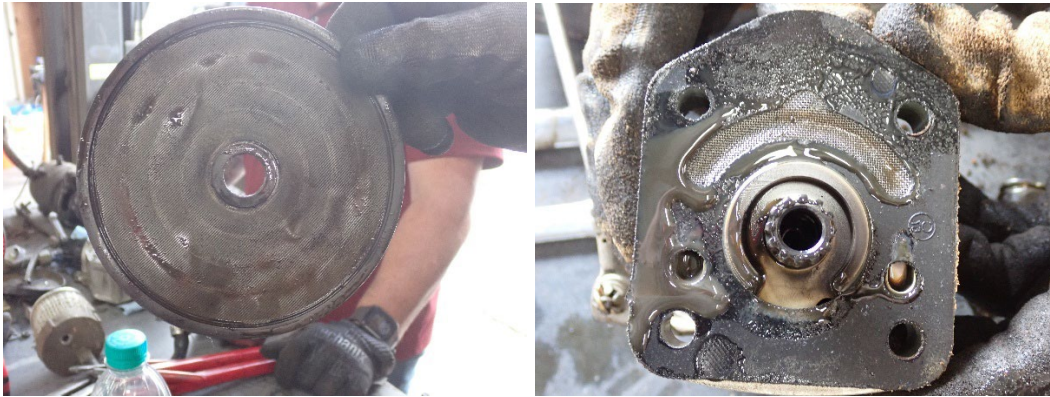
The engine was located forward of the burnt fuselage area free from it's mounts but partially attached to control cables and wires. The engine was impact separated from its mounted position and had dried mud coated on the exterior. The propeller hub assembly separated from the crankshaft forward of the nose seal. The carburetor was separated from the induction manifold and remained attached and hanging from the control cable. The throttle, propeller and mixture levers, as well as the carb heat control lever, were found in their full forward positions.



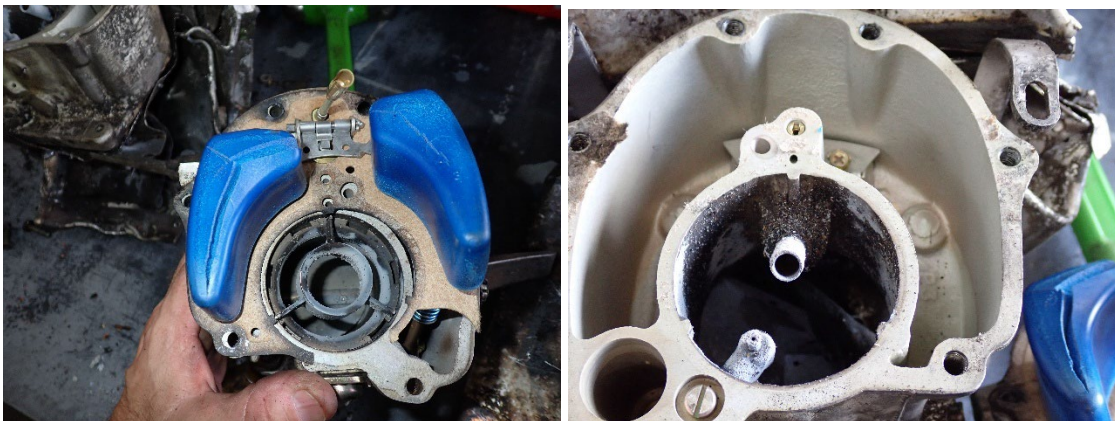
The vacuum pump was removed from the accessory case, the drive shaft remained intact, and no external anomalies were noted.



The crankshaft was rotated manually through the vacuum pump drive. Thumb compression and valve train continuity were established. The right magneto was impact separated from its mounting position. Both magnetos produced spark on all leads when rotated by hand. The STC oil filter, the oil sump screen, and the prop governor screen were all clean.



The carburetor was disassembled. The carburetor floats were the foam type and showed signatures consistent with thermal damage.



No other engine pre-impact anomalies were noted.

4.0 Propeller Examination

The STC installed, 2 bladed, variable pitch propeller assembly separated from the crankshaft. Both blades were lodged in the ground and when removed they were found free of the impact damaged propeller hub. The blades exhibited s-bending, leading edge damage, and some chordwise scratching.



5.0 Pilot Information

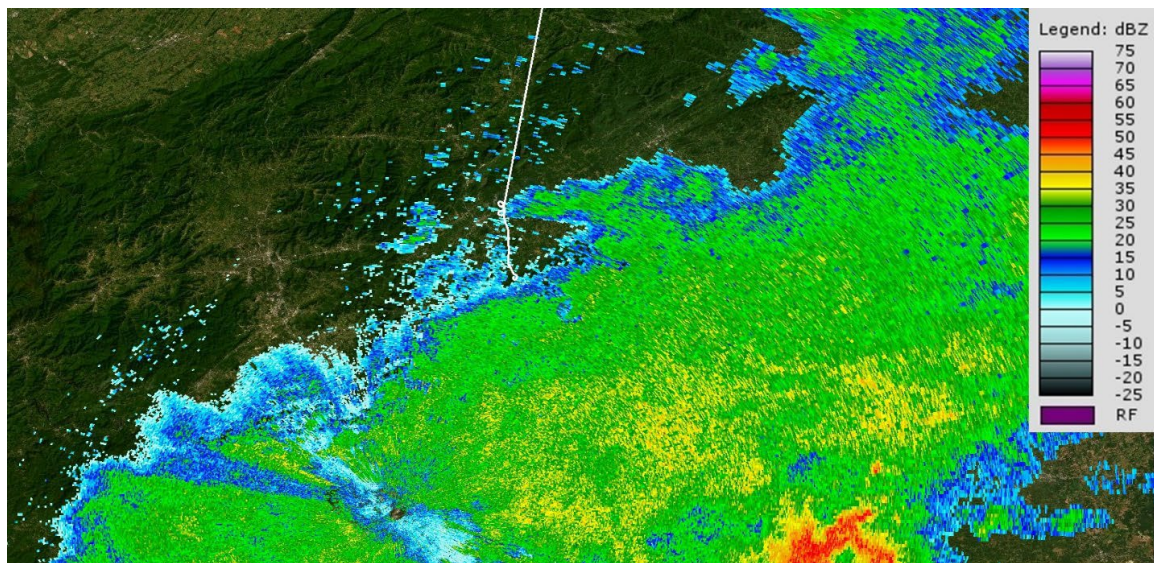
The pilot was a 59 year old Male from Ellenboro NC. His most recent pilot log entries indicated a total flight time of 1098.3 hours. The pilot held a Commercial Single engine land, multiengine land, instrument rating, and a mechanic airframe and powerplant certificate. He held a second class medical dated 02/14/2024, with a limitation for corrective lenses to meet vision standards at all required distances.

6.0 Aircraft Information

N2198G was a Cessna 182A, manufactured in 1958. It was configured as a sky diving airplane by removal of the passenger seats and modification of the right cabin door into a swing up jump door. The airplane was equipped with a Continental Aerospace Technologies O-470-R25 engine and a McCauley 2 blade 2A34C203-B propeller. The last airframe maintenance was performed in January 19, 2024, to repair the flight controls as a result of wind damage. The annual inspection was also signed off, the same day with a documented flight test. The airframe total time reported at last inspection was 9986.8 hours.

7.0 Meteorological Information

Weather radar data indicated that the accident aircraft's flight path terminated in an area of what was likely light rain. Precipitation can reduce visibility and lower ceilings. Weather model data identified an atmosphere that was conducive to clouds down to 1,800 feet amsl. At 2105, the FQD AWOS reported a calm wind, visibility of 7 statute miles, light rain, ceiling overcast at 700 feet above ground level (agl), temperature of 22°C and dew point temperature of 22°C, altimeter setting of 30.09 inches of mercury. The automated station with a precipitation discriminator detected lightning beyond 10 statute miles to the southeast, with a precipitation rate of 0.01 inches per hour. Meteorological data supported the presence of ceilings down to 1,800 feet, or possibly lower, in rain.



Submitted by:

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