

National Transportation Safety Board

Office of Aviation Safety

Washington, DC 20594



ERA23LA334

WRECKAGE EXAMINATION

December 6, 2023

A. ACCIDENT

Location: Hickory, North Carolina
Date: August 13, 2023
Time: 1128 EDT
1528 UTC
Airplane: Scoda Aeronautica Ltda, Super Petrel LS

B. WRECKAGE EXAMINATION

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NTSB - Eastern Region
Alton Bay, New Hampshire

SUMMARY

On August 13, 2023, at 1128 eastern daylight time, an experimental amphibious Scoda Aeronautica Ltda Super Petrel LS, N239WD, was substantially damaged when it was involved in an accident near Hickory, North Carolina. The private pilot and the student pilot-rated passenger were fatally injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

According to Automatic Dependent Surveillance-Broadcast (ADS-B) data, the flight originated from Hickory Regional Airport (HKY) Hickory, North Carolina about 1120 and flew to the northeast at an altitude of 1,600 ft mean sea level (msl) and a groundspeed of about 98 knots toward Lake Hickory. Once the airplane arrived over the lake, it turned left to the west and descended over the lake to 900 ft msl before the ADS-B data ended.

Several witnesses described the airplane as flying "unusually low" over the water on a southerly heading. A witness, who was on his boat dock located about 100 yards northwest of a set of powerlines that spanned the lake, reported that the airplane was flying level about 100 to 200 ft above the water. As the airplane approached the powerlines, it appeared to take a "sudden" nose down attitude before it impacted the middle of the powerlines. There was a large "explosion" and the airplane then "tumble[ed]" into the water. The witnesses described that the engine sounded like it was operating, and the airplane appeared to be flying normally up until the moment of impact.

C. DETAILS OF THE INVESTIGATION

AIRFRAME

The airplane was examined on December 6, 2023, at Atlanta Air Salvage, Griffin, Georgia. The airplane was composed of mostly composite structure. The Plexi-glas windshield/canopy was missing due to impact damage and the entire cockpit area was exposed. The wings were separated from the airframe and sitting under the fuselage. The empennage and tail section were intact, but the left horizontal stabilator was bent down from impact. Striations consistent with contact with a power line cable were observed embedded on the left side of the dashboard. Flight control continuity was established for both horizontal stabilizers by manual manipulation of both control sticks. Continuity was confirmed to the wing root area for both wings when the control sticks were moved. The rudder pedals were partially jammed due to impact, but some movement was achieved to the rudder when the pedals were manipulated. A light coat of soot was observed on the engine pylon, cowling, spinner, and portions of the fuselage. Deep gouging and striation marks were observed on the top left area of the fuselage out toward the wing root and also continued down the left side of the fuselage. The left wing had separated outboard of the wing root from impact and composite material was melted and shriveled along the inboard portion of wing. Heat damaged composite wing material was also observed hanging from where the wing had separated from the airframe. The right wing had been removed from the wing by salvage personnel and was sitting under the airplane. It appeared intact and was not examined.



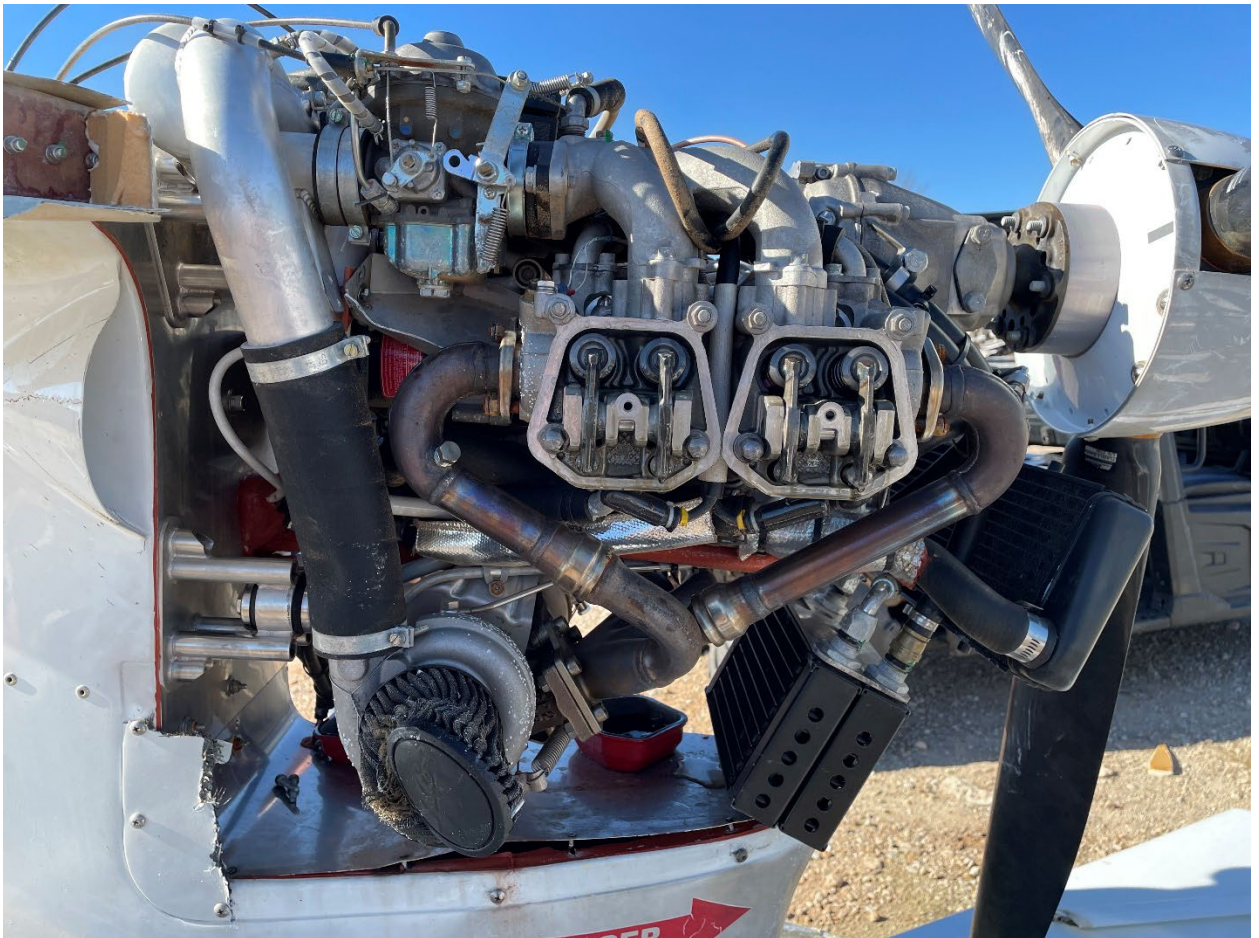


FUEL SYSTEM

The main and auxiliary fuel pump switches and their respective covers were in the UP position. The fuel shut off valve was in the "closed" position, and the fuel selector was in the right tank position. Both valve handles moved freely to their respective detents. A 3-to-4-gallon fuel tank located behind the passenger seat was intact and empty. The tank's plumbing was intact. The fuel lines to the fuel manifold and both carburetors, were intact and undamaged. The fuel bowls for the left and right carburetors were removed and a small amount of liquid was recovered. The liquid was consistent with a combination of auto and aviation gasoline. A small amount of water was observed. The composite carburetor floats were intact. No mechanical anomalies were observed with the fuel system.

ENGINE

The engine remained secured to the engine pylon and was undamaged. The three bladed propeller remained secure to the engine. And all three blades were secure to the hub. The outer half of one blade was missing and the remaining portion of blade exhibited some gouging. The other two blades were intact and exhibited gouging. The top spark plugs, and valve covers were removed. The engine was manually rotated via the propeller. Valve train continuity and thumb compression were established on each cylinder. The spark plugs appeared light gray in color. The electronic ignition system was not examined.





No mechanical deficiencies or malfunctions were observed that would have precluded normal operation of the engine or airframe.

Submitted by:

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