

National Transportation Safety Board

Office of Aviation Safety

Washington, DC 20594



ERA25LA203

ACCIDENT INVESTIGATION EXAMINATION REPORT

March 17, 2025

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A. ACCIDENT

Location: Dahlgren, Virginia
Date: May 17, 2025 (Date of Examination: May 26, 2025)
Time: 1600 EDT
2000 UTC
Airplane: Seamax M-22, N154RL

B. ACCIDENT INVESTIGATION EXAMINATION REPORT

IIC Aaron McCarter
NTSB IIC
Eastern Region

C. SUMMARY

On May 17, 2025, about 1600 eastern daylight time, a special light sport amphibious Seamax M-22 airplane, N154RL, was substantially damaged when it was involved in an accident near Dahlgren, Virginia. The pilot sustained serious injuries. The airplane was being operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

D. DETAILS OF THE EXAMINATION

1.0 Accident Site

Post accident examination of the wreckage by the NTSB Investigator revealed the airplane had impacted the water in a steep nose down attitude. The water was about 8 ft deep at the point of impact. The airplane wreckage was recovered and transported to a nearby dock and secured on private property.

1.1 Airframe Overall

There was substantial damage to the airframe; the left wing was impact separated; the cockpit and fuselage were fractured and crushed in multiple locations. The empennage remained attached by control rods and cables. All fractures in the flight control cables had a “broomstraw” appearance indicative of overload. All flight control surfaces, and critical components were discovered at the location of the wreckage.



Figure 1, Overall view of wreckage.

1.2 Wings, Rudder and Elevator/Stabilator

All flight control surfaces remained attached to their respective positions and were manually manipulated with corresponding cable movement. The left wing was separated. The right wing remained partially attached to the airframe. The empennage remained attached. The rudder and stabilator remained attached and functioned as designed.



Figure 2, View of right wing, elevator, rudder and bottom of hull.



Figure 3, View of impact separated left wing.

1.3 Fuel/Fuel System

The engine fuel line adjacent to the cylinders was examined and about 5-ounces of liquid with the smell and color of aviation fuel was observed; it was free of water or other contaminants when tested with water test paste. The fuel tanks were breached during the impact sequence. There are 2 fuel tanks, one in each wing. Each wing tank holds 12.5 total gallons for a total fuel load of 25 gallons.

1.4 Other Systems

A Rockwell Collins ECU-204-102 was removed and will be delivered to the NTSB Vehicle Recorder Division for examination and download of engine health and performance data.



Figure 4, ECU .

2.0 Engine Examination

The engine was mounted on top of the airframe in a pusher configuration and was exposed to fire near the propeller side of the engine. The fire was limited to the top of the engine and compartment, and the source appears to be a fuel line that was impact separated. Thermal damage was mostly limited to plastics and wiring insulation.

There was no evidence of a preimpact engine or airframe fire. Soot on the top of the tail was not in a slipstream formation and video of the flight showed no evidence of an inflight fire.

Engine crankshaft and valvetrain continuity was established when the propeller was manually rotated. The spark plugs showed normal wear when compared to the Champion Aviation Check-A-Plug AV-27 chart.

The engine appears well lubricated, and the oil tank (dry sump forced lubrication system) was intact and full of oil. The oil looks new and has a dark almond color.



Figure 5, View of engine with engine cowl removed.



Figure 6, Right side view of engine.

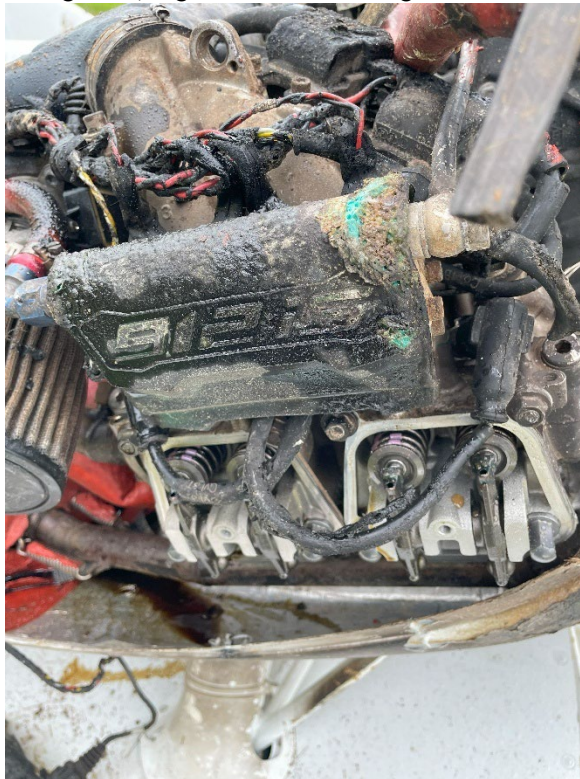


Figure 7, Left side view of engine and thermal damage.

3.0 Propeller Examination

The 3-bladed composite propeller remained attached to the hub and reduction gearbox assembly, and it was manually rotated without any hinderance or noises.

One of the blades was destroyed by fire. The opposing blades remained relatively intact with minor surface damage.

During manual operation of the propeller, bay water was forced out of the cylinders and the air filter assembly.



Figure 8, View of propeller showing damage.

4.0 Aircraft Information

According to the pilot, the airplane had just gone through a continuous airworthiness inspection. The pilot will provide the maintenance records as soon as he recovers.

5.0 Meteorological Information

Location.....: KNYG Day of month.....: 17 Time.....: 19:56 UTC Wind.....: true direction = 210 degrees; speed = 10 knots with gusts of 23 knots Visibility.....: 10 Statute Miles no clouds and no restrictions on vertical visibility Temperature.....: 31 degrees Celsius Dewpoint.....: 16 degrees Celsius QNH.....: 29.53 inHg Remarks site is automated and has a precipitation sensor Unknown Remark token: PK Unknown Remark token: WND minimum 6 hour temp 2.7 degrees Celsius Sea Level Pressure...: 1000.2 Mb Temperature.....: 30.6 degrees Celsius Dew Point.....: 16.1 degrees Celsius

Submitted by:

Aaron McCarter
NTSB Aviation Accident Investigator (IIC)