

## Summary of Aircraft Examination

**NATIONAL TRANSPORTATION SAFETY BOARD  
Office of Aviation Safety  
Washington, DC 20594**

**SUMMARY OF AIRCRAFT EXAMINATION**

-- CEN21FA299 --

**A. OVERVIEW**

On July 1, 2021, about 0755 central daylight time, a Cirrus SR22 airplane, N123RE, was destroyed during an accident at Lamoni Municipal Airport (LWD), Lamoni, Iowa. The private pilot and passenger were fatally injured. The airplane operated under the provisions of Title 14 *Code of Federal Regulations* Part 91 as a personal flight.

**B. PARTICIPANTS**

Representatives from the NTSB, FAA, and Cirrus Aircraft participated in an exam of the aircraft on the day following the accident. A representative of the NTSB conducted an engine exam at the recovery location.

**C. SUMMARY OF ACCIDENT SITE EXAMINATION**

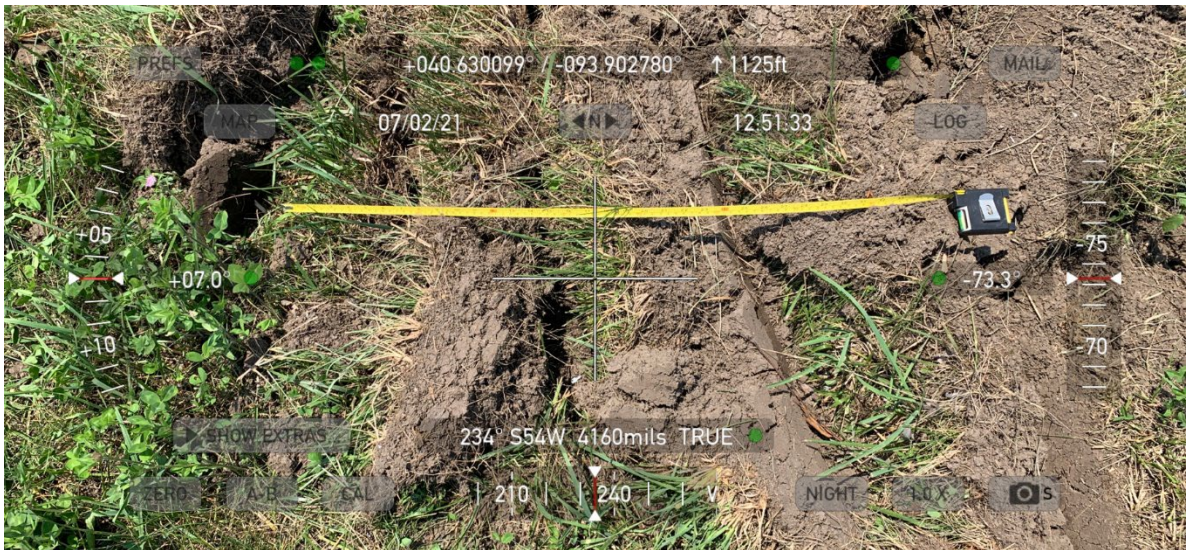
The airplane initially contacted the ground about 75 ft left of the runway edge and about 1,050 ft from the Runway 36 threshold. Left wingtip debris was located about 60 ft beyond the initial ground scar (reference Figure 1) and the debris path was on a northwesterly heading of about 300°.



*Figure 1 – Initial Impact Ground Scar in Foreground, Left Wingtip Debris and Main Wreckage Site in Background*

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Ground scars from propeller strikes (reference Figure 2) were located about 15 ft beyond the left wingtip debris were. The measured distance between 5 of the ground scars was about 3 feet.



*Figure 2 – Propeller Strike Ground Scars*

The airplane came to rest in a soybean field (reference Figure 3) about 60 ft beyond the propeller strike ground scars.



*Figure 3 – Airplane at Accident Site Looking Away from the Runway*

The engine was separated from the fuselage. The three blades of the propeller were bent aft, and one blade was scored chordwise.

Flight control continuity was confirmed for the aileron, rudder, and elevators. Based on the flap actuator position, the wing flaps were in the retracted position.

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The multi-function display (MFD), primary flight display (PFD), and digital flight computer (DFC90) were thermally damaged. Download of data was not possible.

### D. SUMMARY OF RECOVERY LOCATION EXAMINATION

Mechanical continuity of the engine was established throughout the rotating group, valve train and accessory section during hand rotation of the crankshaft.

Each magneto produced spark at the end of the respective spark plug lead.

The spark plug electrodes were mechanically undamaged and the spark plug electrodes displayed coloration consistent with normal operation.

Fuel lines were intact and the fuel supply line from the throttle body to the flow divider contained a small amount of uncontaminated fuel.

All fuel injector nozzles were clear with the exception of #2, which had an oil residue inside.

The fuel pump drive coupling was intact.

No preimpact anomalies were observed with the throttle, mixture, or propeller governor controls.

The oil system was at a normal oil level.

No internal restrictions or failures were observed with the muffler or heat exchanger.

There was no evidence of pre-impact mechanical malfunctions observed during examinations of the engine and airframe.

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