

# National Transportation Safety Board

Office of Aviation Safety

Washington, DC 20594



CEN24FA277

## **EXAMINATION SUMMARY STATEMENT**

## **A. ACCIDENT**

Location: Oshkosh, Wisconsin  
Date: July 22, 2024  
Time: 1213 CDT  
Airplane: Lancair ES

## **B. EXAMINATION SUMMARY STATEMENT**

|     |                                                                           |
|-----|---------------------------------------------------------------------------|
| IIC | Jennifer Rodi<br>National Transportation Safety Board<br>Aurora, Colorado |
| FAA | Peter Hupfer<br>Federal Aviation Administration<br>Milwaukee, Wisconsin   |
| FAA | Tim Spreen<br>Federal Aviation Administration<br>Milwaukee, Wisconsin     |

## **C. EXAMINATION SUMMARY**

### **1.0 Accident Site**

The airplane impacted a soybean field south of Road N, about 1.5 miles from the approach end of runway 36L.

A debris extended from the initial impact point, about 35 ft to the main wreckage. The debris field included a position light from left wing, torn fiberglass, the pitot tube, wooden splinters from the propeller, and fragmented pieces from the elevator. The soybean vegetation in the field was depressed and torn from the ground in the direction of impact.

The airplane came to rest upright on a heading of about 060°. A postimpact fire ensued.



**Figure 1. Main Wreckage and Debris Field**

## **2.0 Airframe Examination**

The main wreckage included the empennage, fuselage, both wings, and the engine, and exhibited impact and fire damage.

The pitot tube was found separated in the debris field - when tested air flowed through from the separation point to pitot tube orifice.

The fuselage included the cabin area, cabin seats, instrument panel, and engine and propeller assembly. The entire fuselage was impact and fire damaged. The cabin contained several bags of personal effects and camping equipment which weighed about 160 pounds total. This weight did not account for anything consumed by fire. The instrument panel was destroyed and did not provide any reliable information.

The right wing assembly included the wing, the right flap, and right aileron. Right aileron control continuity was confirmed from the right aileron inboard to the

cabin flight control yoke. The right wing flap was partially separated. The inboard portion of the right wing exhibited damage consistent with exposure to heat and fire.



**Figure 2. Right Wing**

The left wing assembly included the wing, left flap, and the left aileron. The left wing was impact separated about midspan and exhibited damage consistent with exposure to heat and fire. Left aileron control continuity was confirmed, through impact damage, from the left aileron inboard to the cabin flight control yoke. The aileron was impact separated and fire damaged. The left wing flap exhibited impact and fire damage.

The flap jack screw measured about 5 7/8" which was consistent with the flaps extended to 10°.



**Figure 3. Left Wing**

The empennage included the horizontal stabilizer, rudder, vertical stabilizer, and elevator. The entire assembly exhibited impact and fire damage. The rudder control cables were continuous from the rudder control horn forward to the rudder pedals in the fuselage. The elevator push-pull tube was impact separated at the horn and exhibited impact and fire damage from the elevator control forward to the flight control yoke.



**Figure 4. Empennage**

### **3.0 Engine Examination**

The Continental IO-550 N (7) sn 1045957 engine and 3-blade wooden propeller remained attached to the fuselage and exhibited impact and fire damage.

The oil pan was crushed up and the oil pan and oil filter were void of oil. The fuel servo was impact and fire damaged and could not be functionally tested.

The upper bank of spark plugs and valve covers were removed and the engine was rotated through at the propeller assembly. Continuity was observed at the engine accessory end. Intake and exhaust valve movement was observed and air movement was noted on all cylinders.

The sparkplugs exhibited normal lean signatures. The spark plug ignition leads were fire damaged and could not be functionally tested.

One propeller blade was impact-separated entirely at the hub. One propeller blade was impacted-separated with about 7 inches of splintered wood that remained at the hub. One propeller blade was impact-separated with about 24 inches of splintered wood that remained at the hub.



**Figure 5. Engine and Propeller Assembly**