



## **NATIONAL TRANSPORTATION SAFETY BOARD**

Office of Aviation Safety  
Western Pacific Region

August 12, 2019

# **ACCIDENT SITE AND WRECKAGE EXAMINATION SUMMARY**

**WPR19FA216**

This document contains 14 embedded photos.

## A. ACCIDENT

Location: Kooskia, Idaho  
Date: August 11, 2019  
Aircraft: N350CL; Lancair IV  
NTSB Investigator-in-Charge: Andrew Swick

On August 11, 2019, about 1040 Pacific daylight time, N350CL, experimental Lancair IV, impacted sloping terrain, about 3 miles east of Kooskia, Idaho. The private pilot and passenger were fatally injured. The aircraft was registered and operated by the pilot under the provisions of 14 *Code of Federal Regulations* Part 91. Visual meteorological conditions prevailed and a flight plan was not filed. The local flight departed Polson Airport (8S1), Polson, Montana, at 0930, with a destination of Sacramento, California. Family members were expecting their arrival at 1230.

A local resident was driving near the accident site about the time of the accident and remembered the weather being “nasty,” with heavy rain, and lightning. As he was driving, he remembered seeing a flash of light and an explosion from the accident site location and thought it was a lightning strike that struck a tree. He called local authorities and hours later found out that it was the airplane impacting terrain. In a follow-up conversation with the NTSB, he stated he did not see the airplane prior to impacting terrain.

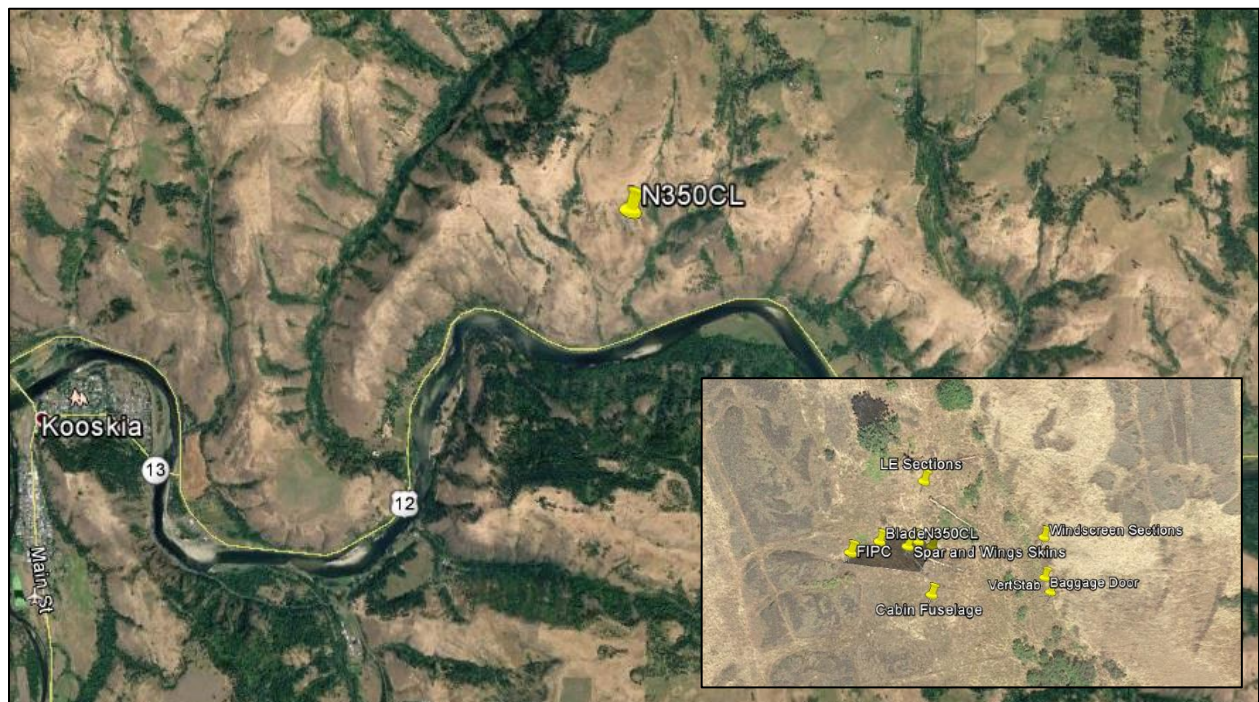
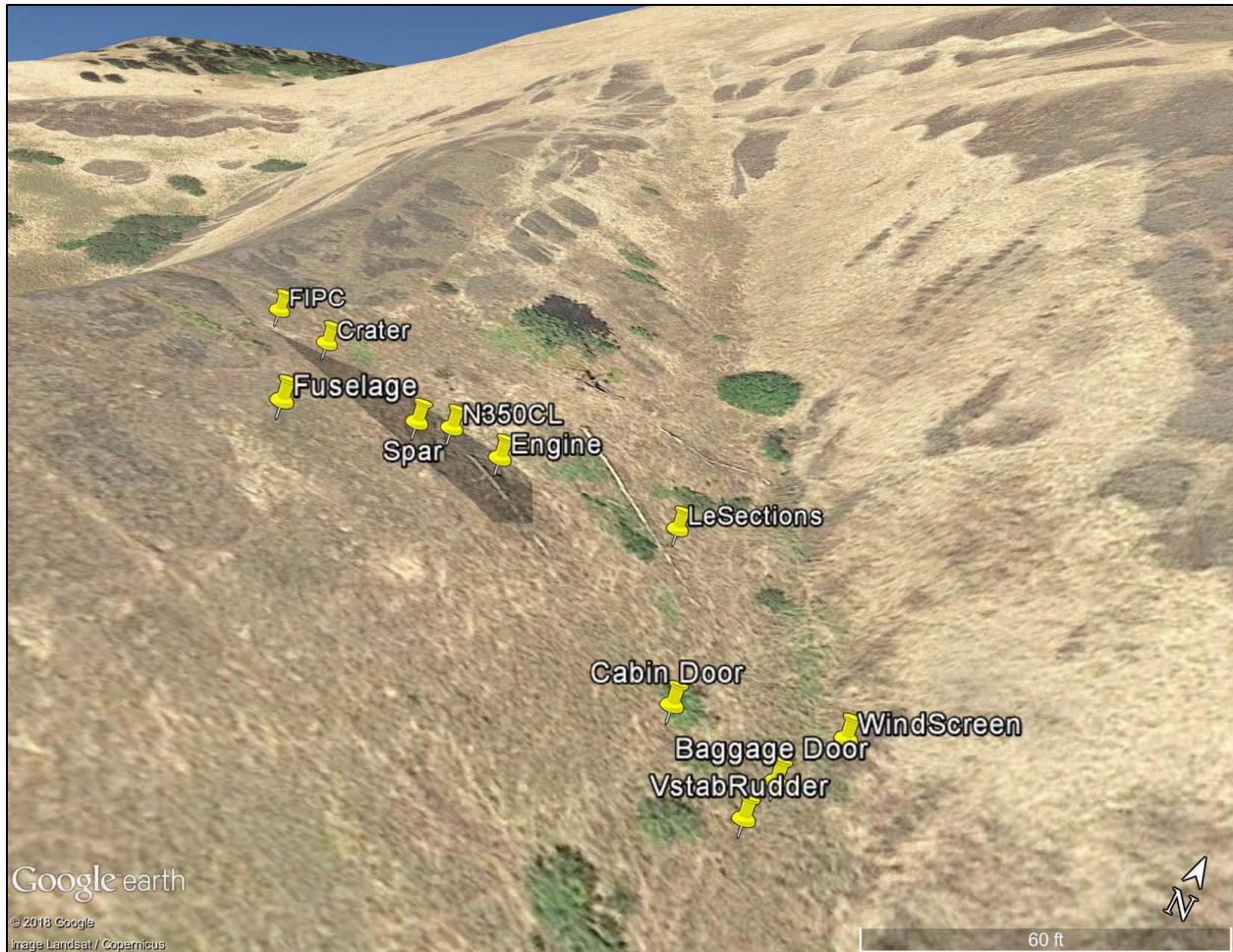


Figure 1-Google Earth view of the accident site.



**Figure 2-Google Earth view of the accident site.**

## **B. PARTICIPANTS**

Andrew Swick-NTSB IIC (onsite August 12, 2018)  
 Terry Brewer-FAA-FSDO (onsite August 12, 2018)  
 Chris Lang-Continental Motors Incorporated (Party Member)  
 Michael Richards-NTSB Meteorologist  
 Betty Koschig-NTSB ATC Data

## **C. SUMMARY**

Examination of the accident site was conducted on August 12, 2019. All major structural components of the airplane were located at the accident site. Unofficial preliminary radar track data reveals a track consistent with the accident airplane flying direct to the area of the accident site, momentarily climb, and descend rapidly in a left descending track to the area of the accident site. Local residents described heavy rain, hail and lightening strikes in the area at the time of the accident.

#### **D. DETAILS OF THE INVESTIGATION**

Main Wreckage: N46° 9.469, W-115° 55.175' – Elevation: 1,950 feet

The accident site was located on an eastern facing slope, about 1/2-mile uphill from the Clearwater River, and 3 miles east from the town of Kooskia, Idaho. The 40° sloping terrain was grass covered with outcroppings of exposed loose rock near the ridgelines. Fallen timber are scattered on the sloping terrain.

The debris field was about 180 ft long and about 100 ft wide, with a directional heading of about 94° magnetic. An area of burned grass, about 1,500 square ft, is where a majority of the wreckage was found.



Figure 3-Accident site, view to the east.



**Figure 4-Debris field, view uphill.**

The first identified point of contact (FIPC) was an area of disturbed ground about 2 ft wide that continued downhill about 16 ft to an impact crater. Shattered red lens fragments were scattered to the left side of the debris field near the top end of the FIPC. The impact crater was about 4 ft diameter, about 5 inches deep, and was located on the left side of the debris field. Adjacent to the impact crater was an area of disturbed ground about 6 ft across. Two shallow troughs were located on the right side of the debris field and were found parallel to the FIPC. Further down the debris field was a large area of disturbed ground; about 20 ft long and 10 ft wide. At the end of this disturbed ground were fragments of blue colored lens and the right wing tip fairing. The FIPC and the areas of disturbed ground were covered in burned flat fiberglass sections.

One propeller blade separated at its shank and was found near the impact crater. The blades revealed twisting and deep leading-edge gouging.



**Figure 5-Propeller blade found near the impact crater.**



**Figure 6-Propeller assembly and engine.**



**Figure 7-Fuel selector valve and handle.**

The fuel selector valve handle was found in the left tank position and its associated lines had impact and thermal damage.



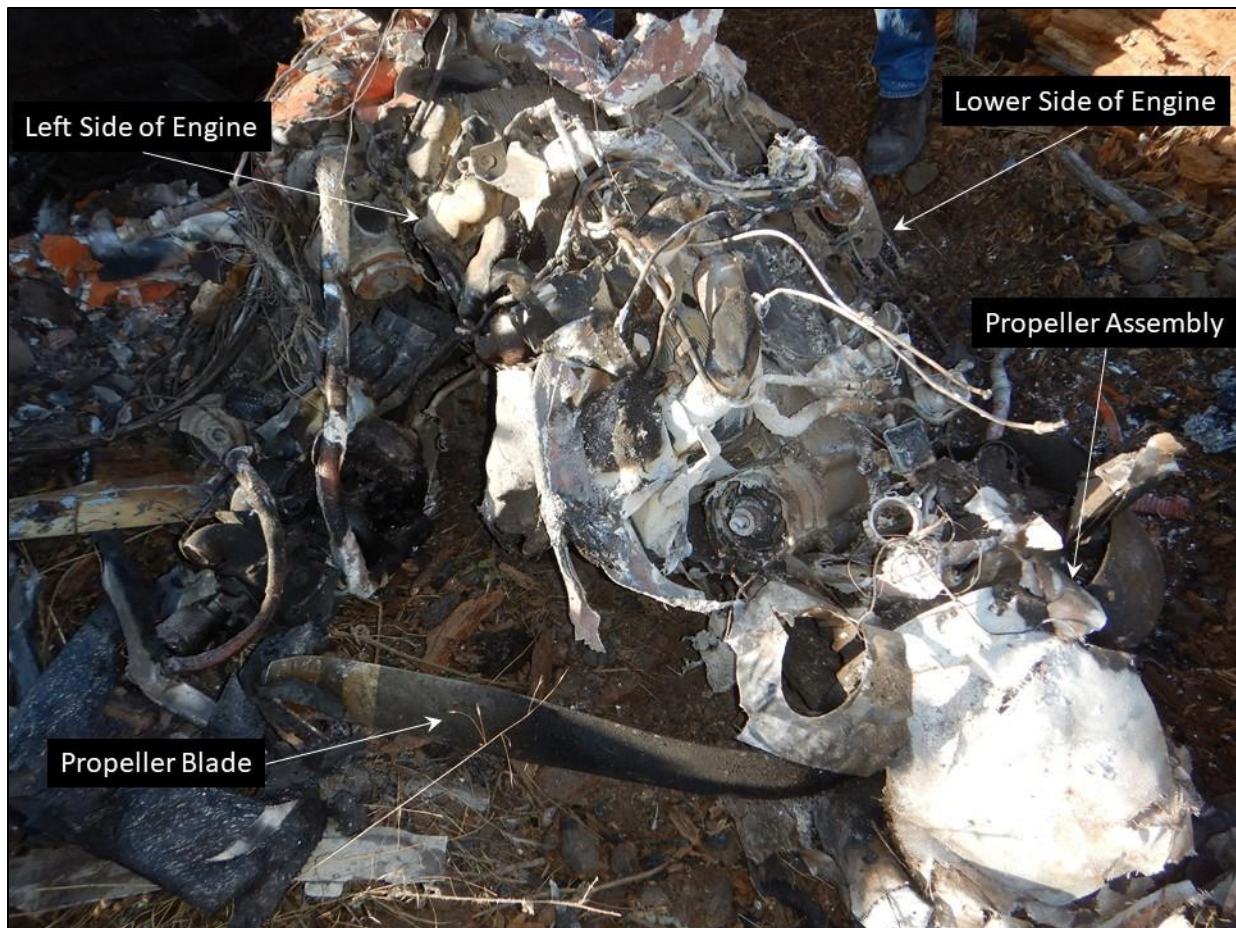
**Figure 8-Debris Field, Wing Spar and Wing Sections**

The debris field continued downhill about 80 ft where the main wreckage was found. Large wing sections and horizontal stabilizers were found stacked on top of each other. The upper wing surfaces, wing spar, landing gear and landing gear structure had thermal and impact damage. The horizontal stabilizer and elevators remained attached and separated from the fuselage near their attachments. The outboard section of the left stabilizer separated and was found in the grass right of the main wreckage. Static wicks were found on the elevator surfaces. On the left side of the debris field, wing leading edge sections were found in the grass. To the right side of the debris field, fuselage sections were found along with a large section of aft cabin structure including the left rear window and baggage door area.



**Figure 9-Main wreckage, landing gear assembly.**

The landing gear appeared to be in the retracted position and remained attached to the gear motor assembly.



**Figure 10-Debris Field, Engine and Propeller Assembly**

The engine and propeller were found 15 ft further down the debris field and had thermal and impact damage. Two blades remained attached to the hub were twisted and had deep leading-edge gouging. Most of the engine's accessories separated from the engine and had thermal damage. The cylinders and crankcase remained attached and had impact damage. The propeller assembly and crankshaft rotated slightly when the engine was moved.

The induction assembly separated from the engine and parts were found in the debris field. The exhaust stacks were crushed into the lower sides of the cylinders and the turbochargers and associated parts remained partially attached. The oil sump was crushed. The engine support structure had impact damage and was partially attached.

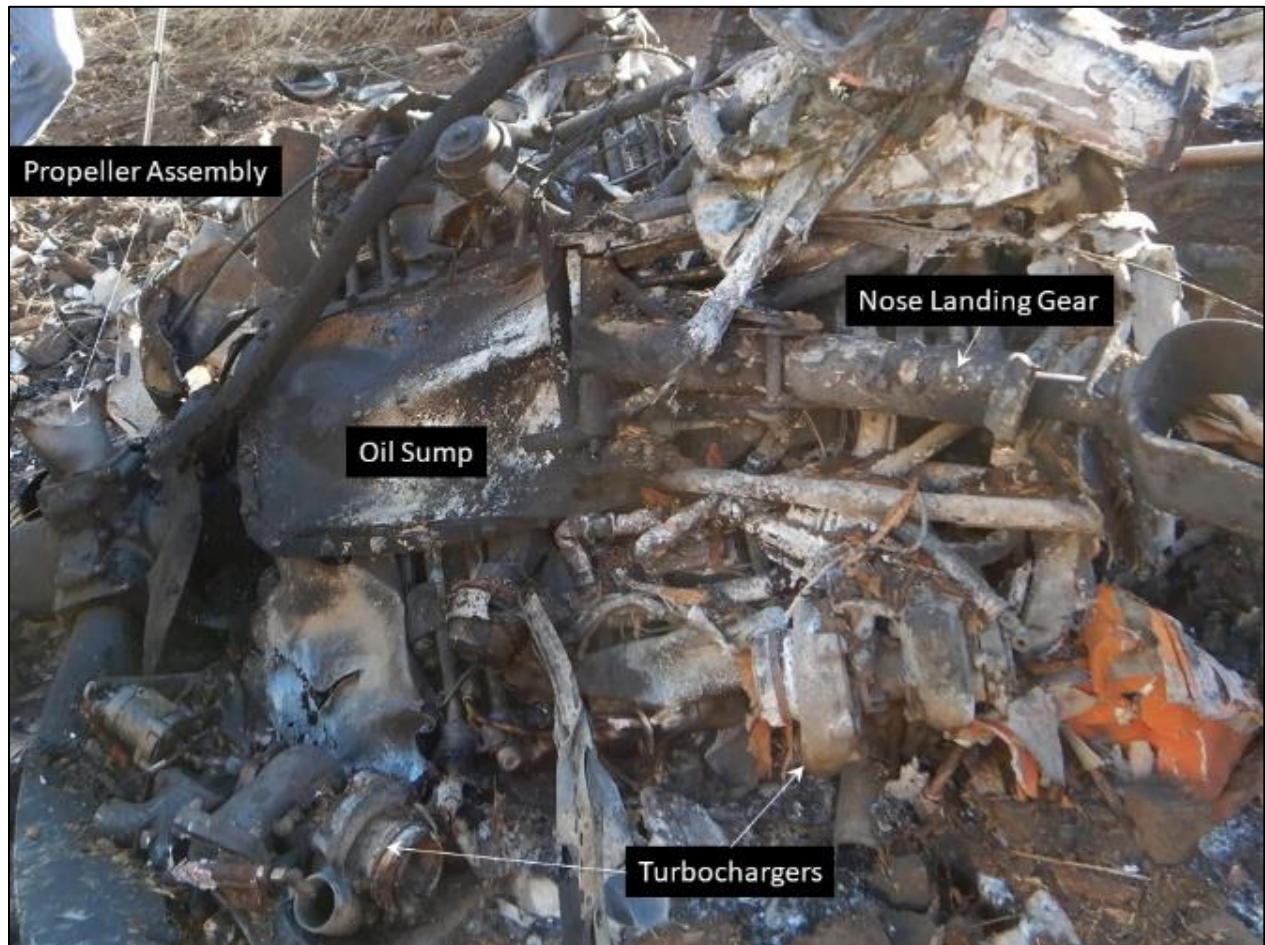
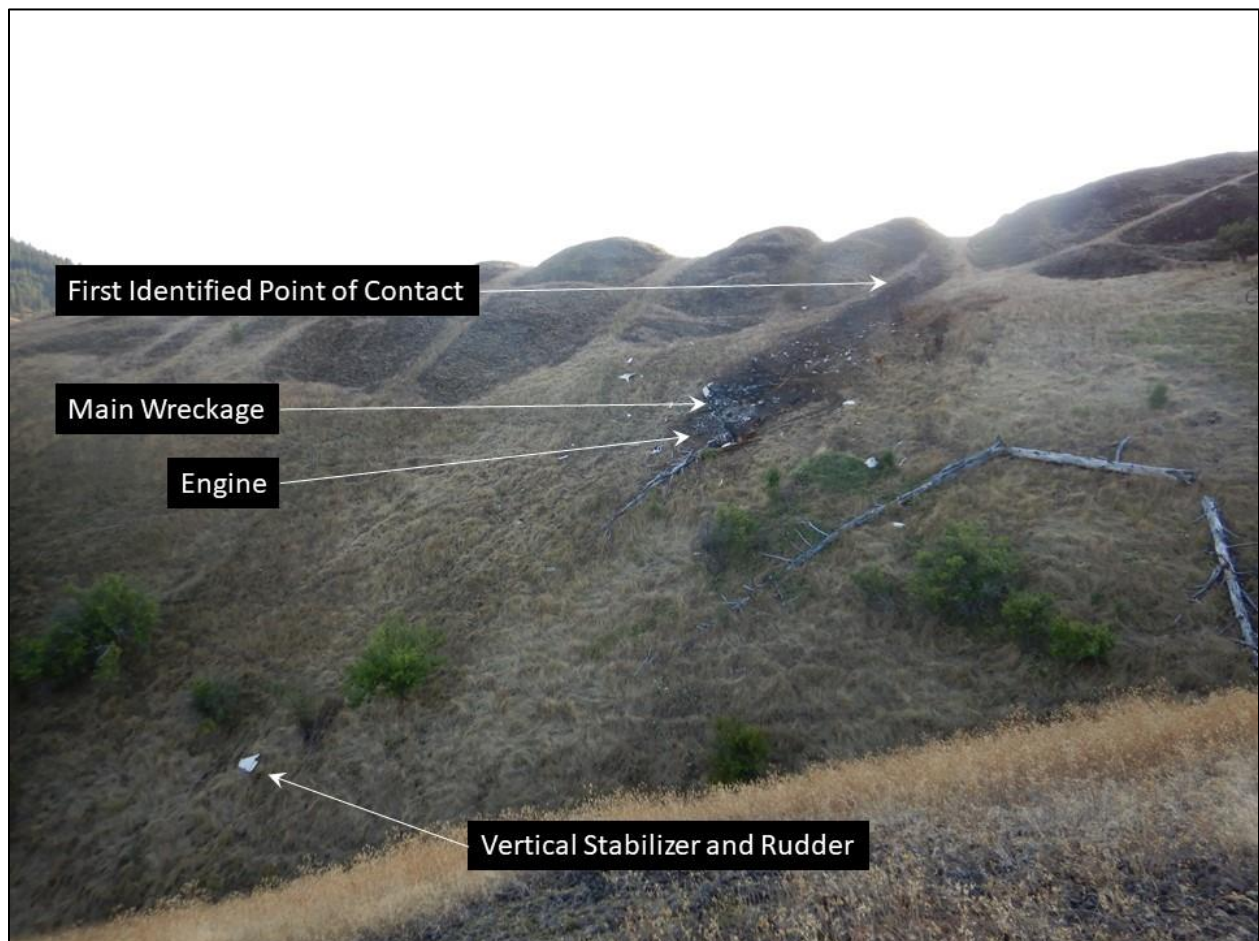


Figure 11-Engine and propeller assembly, lower side view.

The vertical stabilizer and rudder were found near the ravine about 70 ft downhill from the main wreckage. The rudder counterweight separated from the rudder. Multiple sections of windscreen were found in the ravine.



**Figure 12-Vertical Stabilizer and Rudder**



**Figure 13-Accident site, view to the west.**

Submitted by: Andrew Swick