

National Transportation Safety Board

Office of Aviation Safety

Washington, DC 20594



CEN25LA053

AIRCRAFT EXAMINATION SUMMARY

December 11, 2024

A. ACCIDENT

Location: Boscobel, WI
Date: 12/01/2024
Time: 18:21 CST
Aircraft: Piper PA-28R-200; N41997

B. AIRCRAFT EXAMINATION SUMMARY

IIC	Aaron Sauer NTSB Denver, CO
Party Coordinators	John Bohnhoff Federal Aviation Administration Milwaukee, WI

SUMMARY:

On December 1, 2024, at 1821 central standard time, a Piper PA-28R-200 airplane, N41997, sustained substantial damage when it was involved in an accident near Boscobel, Wisconsin. The flight instructor and pilot receiving instruction were not injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 instructional flight.

According to the flight instructor, they were established in cruise on the return leg of a night cross-country instructional flight at 9,000 ft mean sea level, when they noticed an odor in the cockpit. The flight instructor noted no issues in the cockpit, and adjusted the heat control, in which the odor diminished. The flight instructor then noticed an opaque windscreen and immediately thought they had encountered icing conditions. The flight instructor contacted air traffic control (ATC) and requested a lower altitude. Utilizing a flashlight, the flight instructor illuminated the windscreen and noticed a “brown river” completely obscuring their forward visibility. The cockpit oil pressure gauge indicated little to no oil pressure.

The flight instructor declared an emergency with ATC and took the airplane controls from the pilot receiving instruction. The flight instructor located the nearest airport to attempt a forced landing. During the forced landing to the airport with the windscreen covered in engine oil, the airplane impacted terrain adjacent to the

runway surface, bounced, and came to rest upright. The airplane sustained substantial damage to the right horizontal stabilator.

Postaccident examination of the airplane revealed engine oil on the top engine cowling, windscreen, and empennage. No evidence of an uncontained engine failure was noted. The airplane was retained for further examination.

AIRCRAFT EXAMINATION:

- Salvage facility mounted the fuselage and engine on structure to facilitate examination.
- Current tachometer time: 1570.65
- Engine: Lycoming IO-360-C1C; Serial Number L-38282-51E. Total Time SMOH (Factory) – 355 hours.
- Oil residue covered forward windscreen, right side of fuselage and vertical stabilizer (horizontal stabilator removed during recovery and washed – pre-recovery photographs showed oil residue on horizontal stabilator).
- Oil dipstick measured 3 quarts of oil contained within the engine.
- Engine/airframe oil breather clear of obstructions.
- Propeller and ring gear support removed, nose seal protruding from crankcase.
- Nose seal removed by cutting seal to facilitate removal around crankshaft.
- Top spark plugs removed; no issues noted.
- All four cylinders borescoped; no issues noted.
- Engine/airframe breather tube removed. Secondary breather hole located about 1.5” from the bottom/end of the aluminum tube.



1. Accident airplane at salvage facility.



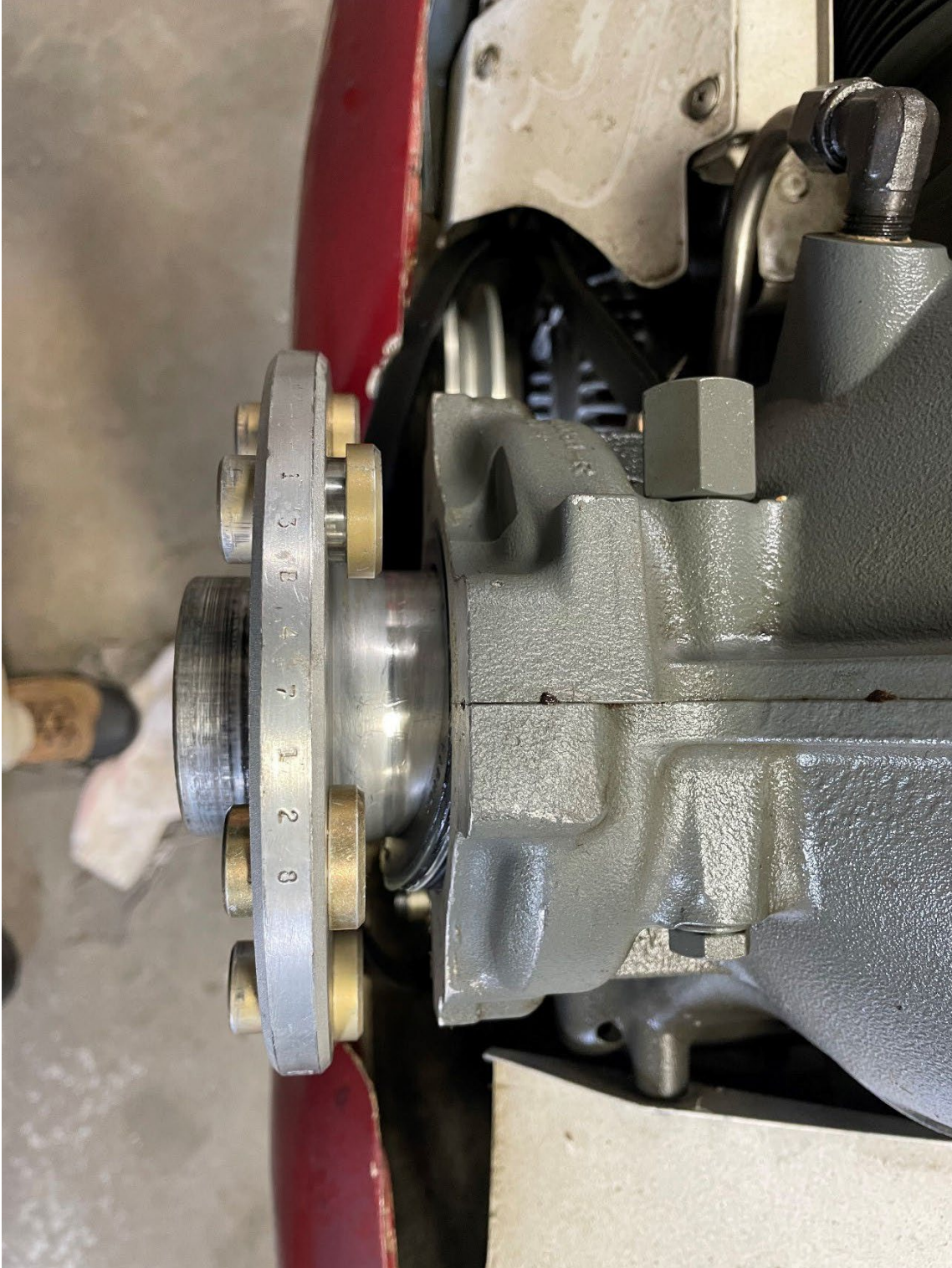
2. Oil residue noted on forward windscreen.



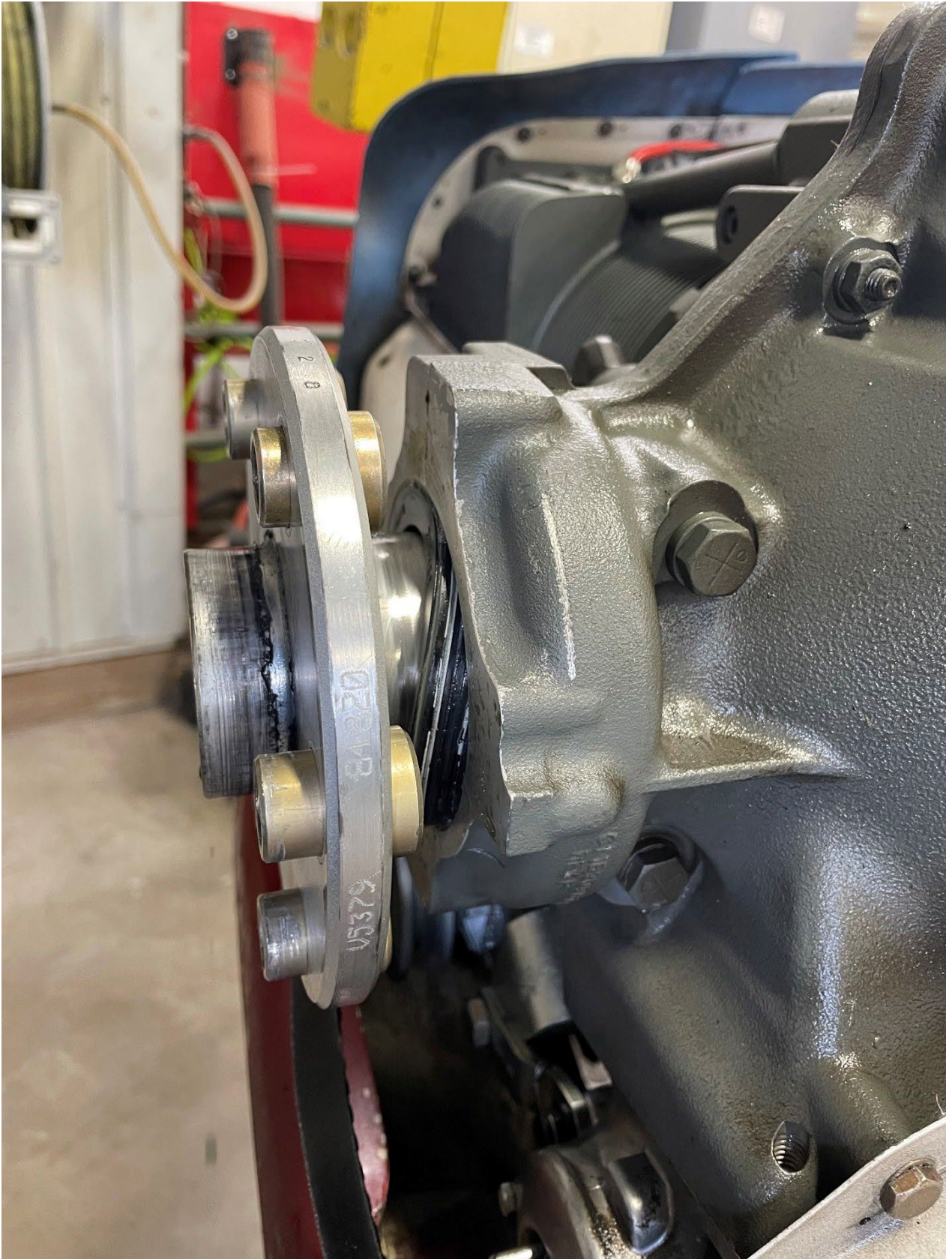
3. Forward fuselage with propeller attached.



4. Propeller removed.



5. Nose seal protruding from crankcase.



6. Nose seal protruding from crankcase.



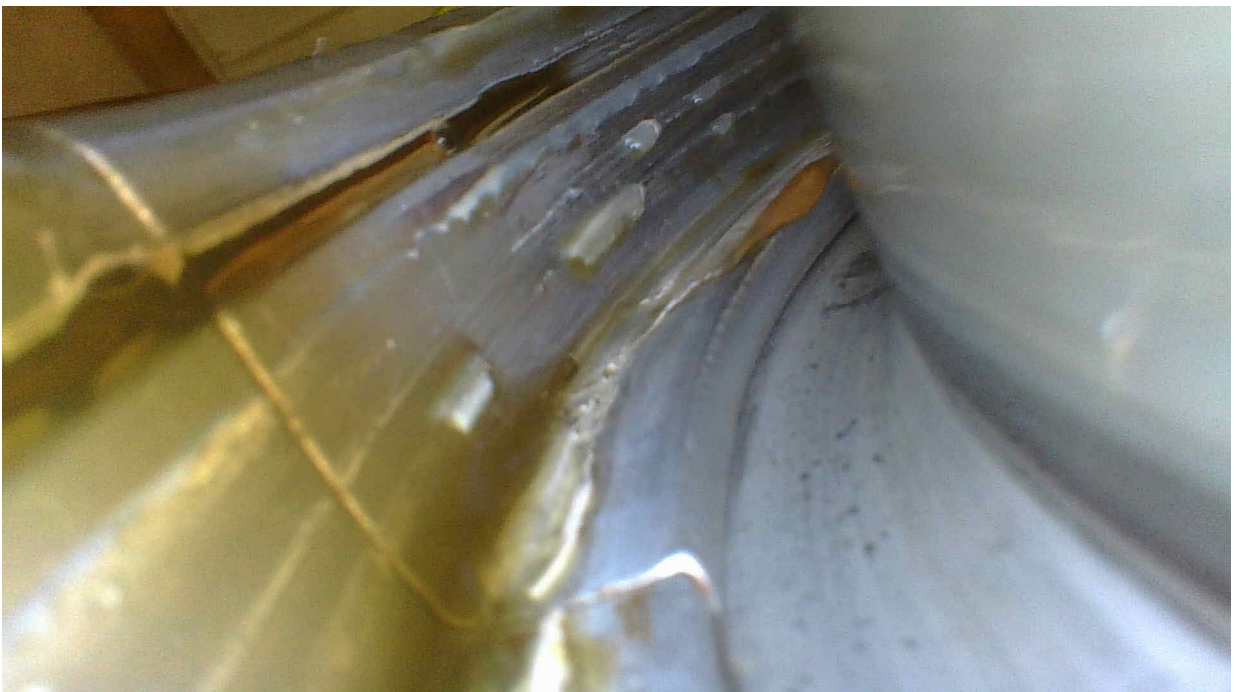
7. Nose seal removed from engine - front face.



8. Nose seal removed from engine - rear face.



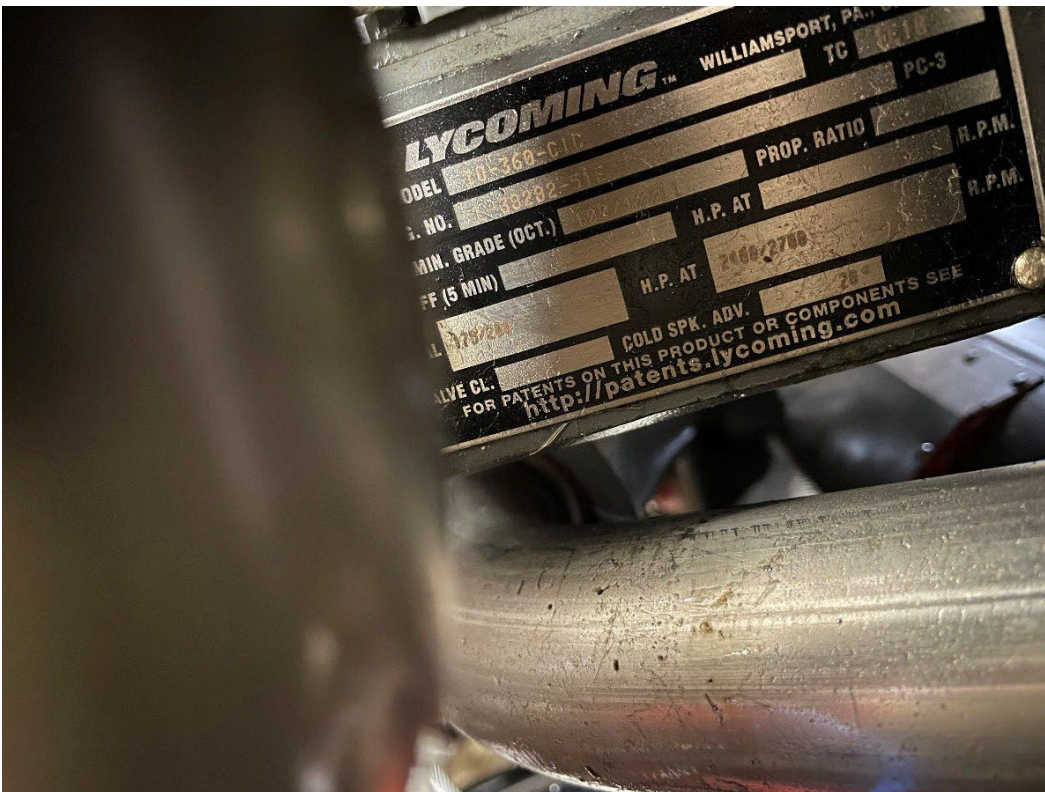
9. Crankshaft bore at upper case halves (photo taken with a borescope).



10. Crankshaft bore at lower case halves (photo taken with a borescope).



11. Engine top sparks plugs.



12. Engine data plate.



13. Aircraft oil breather tube, as removed.



14. Bottom/end of breather tube with secondary hole.