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Date: January 19, 2023

Subject: ERA22LA207, N600FS Engine Examination

The engine was examined at the facility of Anglin Aircraft Salvage in Clayton, Delaware, on the above date, with a representative from Lycoming Engines. The following is a summary of the findings of the examination.

The engine, a Lycoming IO-360-A1A, was factory-rebuilt in July 2019. The engine remained attached to the airframe.

The three-bladed Hartzell propeller remained attached to the crankshaft flange and exhibited minor rotational scoring.

The fuel injector remained secured to the bottom of the engine and was undamaged. The induction air boot connecting the fuel injector to the airbox was found severely deteriorated. The fuel injector inlet screen was clean, the diaphragms undamaged, and fuel was present within the unit. The fuel tested negative for water contamination.

The fuel flow divider was undamaged and the fuel lines remained secured. Fuel was present within the unit and the diaphragm was undamaged. The fuel nozzles were secured in their respective cylinder heads and were undamaged. Removal and examination revealed that the nozzles were unobstructed.

The spark plugs remained installed in their respective cylinder heads and were undamaged. The electrodes exhibited normal operating signatures.

The engine was rotated by hand at the propeller; thumb compression was established in all cylinders, valve lift action was observed, and continuity to the accessory section was confirmed. A borescope examination of the cylinders revealed no anomalies.

The fuel pump remained installed on the accessory housing. The pump was removed and pumped fuel when actuated by hand.

Both magnetos remained secure to their accessory housings. The units produced spark at all terminal leads when rotated by hand.

Removal and examination of the oil filter revealed that the element was clean.

The exhaust system was intact and undamaged.

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