

NATIONAL TRANSPORTATIONS SAFETY BOARD
Office of Aviation Safety
Washington, DC 20594

SUMMARY OF AIRCRAFT EXAMINATION

-- CEN20LA322 --

A. ACCIDENT

Location: Jonesboro, Louisiana
Date: August 2, 2020
Time: 1855 central daylight time
Aircraft: Quad City Challenger II (s/n CH2-1004-CW-253), N990SS

B. PARTICIPANTS

Dean Johnson
Airworthiness Inspector
FAA Flight Standards
Baton Rouge, Louisiana

Jordan Paskevich
Chief Accident Investigator
Rotech Flight Safety
Vernon, British Columbia

C. ACCIDENT SUMMARY

On August 2, 2020, about 1855 central daylight time, an experimental, amateur-built Quad City Challenger II Special airplane, N990SS, was substantially damaged when it was involved in an accident near Jonesboro, Louisiana. The pilot and passenger sustained serious injuries. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

D. DETAILS OF AIRCRAFT EXAMINATION

The NTSB did not respond to the accident site. The airplane was recovered to the pilot's hangar following the accident. A post-recovery engine examination was conducted by an FAA inspector and a representative of the engine manufacturer on October 22, 2020.

Summary of Aircraft Examination

E. SUMMARY OF EXAMINATION¹

Engine – Rotax 582 Mod 99 (s/n 6025135)

The engine remained attached to the airframe. It appeared intact and undamaged. The crankshaft rotated and internal engine continuity was confirmed. Visual examination of the cylinders and cylinder heads was unremarkable. The spark plugs were removed. They exhibited an oil residue typical of an inverted engine. The plugs appeared undamaged with normal operating signatures. The no. 2 spark plug common to the power take off (PTO) carburetor contained a carbon fragment; however, the position of the fragment did not appear to affect operation of the spark plug.

The fuel pump and fuel lines were installed and routed in accordance with the manufacturer's installation instructions. The fuel lines appeared undamaged and all connections were secure. The fuel filters were clean and free of contamination. No anomalies with respect to the fuel system were observed. The carburetors remained secured to the engine and appeared undamaged. Examination of the carburetors did not reveal any anomalies.

Both carburetor float bowls contained fluid consistent in odor and appearance with automotive fuel. However, the fuel exhibited a darker yellow color and odor consistent with stale (old) fuel.

The induction and exhaust systems appeared undamaged. The air filter was intact and securely installed. The engine cooling system did not exhibit any anomalies.

The reduction gearbox appeared intact and was free to rotate. The drive belt appeared undamaged and remained in place.

----- end of summary -----

¹ Directions related to accident site placement and component damage/deformation are with respect to an intact airframe unless otherwise noted.