



U.S. Department
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**Federal Aviation
Administration**

Aviation Safety

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Subject: This report is to document the findings from a 02/23/2021 visit to Beegles Aircraft Service, Greeley, Colorado to inspect N93AB wreckage, provide oversight for the removal of hydraulic trim actuator, and trim control valve. Trim control valve and trim actuator has been sent to Amphibians plus for bench check and tear down inspection.

Federal Aviation Administration Aviation Safety Inspectors, Bruce Hanson and Chad Glaza traveled to Beegles Aircraft Service, Greeley, Colorado on 02/23/2021 to inspect N93AB wreckage to determine elevator trim hydraulic system, trim position indication continuity, observe removal of the elevator hydraulic trim actuator, and trim control valve. Trim control valve and trim actuator were sent to Amphibians plus for bench check and tear down inspection.

Initial inspection of N93AB revealed that Beegles personnel had removed the tail assembly in order to prevent further damage during transport. (ref. IMG_0145) The tail was separated where the vertical stabilizer bolts to the tail section of the fuselage. In addition, the hydraulic lines for the elevator trim and the trim indication cable were also cut to facilitate removal of the tail assembly. (ref. IMG_0150 and 0157)

The bolts that connect the trim rods to the arm at each elevator trim tab were removed by Beegles personnel to aid in the transport of the tail assembly. (ref. IMG_0147)

Beegles personnel also removed the bolts that connected the elevator trim bell crank to left and right torque shafts just outboard of the vertical stabilizer. (ref. IMG_0148 and 0151)

Beegles disconnected the hydraulic lines from the trim actuator during the recovery of the wreckage. (ref. IMG_0149)

The trim position cable (aside from being cut during tail removal) seemed to be intact and in proper operating condition. We checked for general condition and freedom of movement in the cable run up into the vertical stabilizer, and checked the section of cable that ran forward to the trim indicator arm. The indicator arm was bent, possibly from the accident or the subsequent extraction of passengers.

We were not able to determine the quantity of hydraulic fluid remaining reservoir, or in the system due to the engine pylon being ripped off during the crash and due to the hydraulic lines for the trim actuator being cut at the base of the vertical stabilizer.

I conducted a general visual inspection of the trim valve, trim actuator, and the hydraulic lines for system continuity. Other than the obvious damage caused by the accident, I did not note any indications of damage or external leaks. (ref. IMG_0154 through 0164)

Due to the extent of dis-assembly mechanical system of the elevator trim, and the fact that the hydraulic system was compromised, I could not obtain a meaningful measurement of the trim tab travel to ensure proper rigging. I was able to move the trim tabs and all of the other components in the system through their normal range of motion to check for any roughness or binding. Everything appeared to move freely and easily through its normal range.

We removed the trim actuator and trim valve so that it could be sent out for bench test and teardown report.

-----Nothing follows.-----



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