



MEMORANDUM FOR RECORD

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Eastern Region Aviation

Wreckage Examination

Date: March 14, 2017

Location: Anglin Aircraft Recovery

NTSB Accident Number: ERA17LA100

Narrative:

Examination of the cockpit revealed that the shoulder harness remained attached to the pilot's lapbelt; however, the shoulder harness had separated from the airframe. Further examination revealed that the shoulder harness did not contain an inertia reel and was actually the shoulder harness designated for the passenger seat behind the pilot. The pilot seat shoulder harness had an inertia reel, remained intact and was not fastened to a lapbelt. The fuel selector was in the right main fuel tank position and continuity was established from the right main fuel tank to the fuel selector. The throttle, mixture, and propeller levers were difficult to move, consistent with impact forces.

The engine was separated from the airframe for examination. The valve covers were removed and oil was noted throughout the engine. The top spark plugs were removed and the propeller was rotated by hand. Camshaft, crankshaft, and valve train continuity was confirmed to the rear accessory section of the engine. Thumb compression was attained on all cylinders with the exception of the No. 6 cylinder, which was impact damaged. Timing of the magnetos revealed that the left magneto was 14.6 degrees ahead of 20 degrees top dead center and the right magneto was 17 degrees ahead of 20 degree top dead center. Both magnetos produced spark at all leads when rotated by hand.

The engine driven fuel pump was removed from the engine. Approximately 1 ounce of 100-low-lead aviation gasoline was recovered from the engine driven fuel pump. The fuel was clear, blue, and absent of water when tested with water finding paste. When the engine driven fuel pump was actuated by hand, suction and compression were confirmed at the inlet and outlet port. The engine driven fuel pump was then disassembled and its diaphragm was intact with no obstructions noted. Disassembly of the fuel flow divider revealed that its spring and diaphragm were intact. Several drops of fuel were recovered from the fuel flow divider. Approximately ½ ounce of fuel was also recovered from the fuel servo. The fuel servo fuel screen was absent of debris. The fuel

servo throttle was in the closed position and difficult to move, consistent with impact damage. The throttle and mixture controls remained attached, but were impact bent.

The top and bottom sparkplug electrodes were intact and gray in color. The top fuel injector nozzles were clear and absent of debris. The oil sump suction screen was absent of debris. The oil filter was opened and no contamination was observed.