



MEMORANDUM FOR RECORD

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Date: 11/29/2023
Subject: Wreckage Examination
NTSB Case Number: ERA24LA010

During examination of the wreckage of N1953Y, the following information was gathered.

Airplane

Examination of the airplane revealed that both wings, and the fuselage displayed multiple areas of wrinkling and deformation. The right wing displayed tearing and heavy creasing about 4 feet inboard of the wingtip, and buckling was observed behind the firewall mounting location on both sides of the fuselage. The firewall had been torn and crushed, and the engine was canted approximately 10° downward. The left main landing gear wheel assembly had separated from its mounting location, and the right main landing gear had separated from its mounting location. The nose landing gear had been crushed back under the engine.

Cockpit

Examination of the cockpit revealed that the landing gear handle was in the forward locked position (landing gear down), The magnetos, master switch, and electric fuel pump were off, and the fuel selector was in the “OFF” position. The throttle was full out (idle position), the mixture was in idle cutoff, and the propeller was in the coarse pitch (low rpm) position.

Propeller and Engine

Examination of the propeller and engine revealed that both propeller blades of the two bladed propeller did not display any evidence of rotation during the impact sequence. One blade was bent back at an approximate 45° angle about 8 inches inboard of the propeller tip, and the other was straight. The spinner had come into contact with a pole (a

chain link fence upright) and displayed an impression of the pole on one side but did not display any evidence of rotation or other damage.

There was oil in the engine, and thumb compression and suction was able to be established on all cylinders. Continuity of the drivetrain was able to be established. All the massive electrode type sparkplugs were normal gray in color, and when rotated, the magnetos produced spark at all towers.

Fuel System

Examination of the fuel system revealed the presence of water throughout the fuel system. This included water in the left and right fuel tanks, the fuel selector valve sump drain / strainer, the fuel servo, and the fuel distribution manifold.