



MEMORANDUM FOR RECORD

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Date: September 10, 2021
Subject: Wreckage Examination
NTSB Case Number: ERA21LA328

On September 9, 2021, the Wreckage of N98304 was examined at Florida Air Recovery in Jacksonville, Florida.

During the examination, the following information was acquired.

The fuselage exhibited impact damage to its firewall and cockpit belly skin. Downward deformation was observed at the tail cone area. The cabin door remained attached to its mounts with no obvious impact damage observed. The nose gear was impact separated and the engine cowlings exhibited impact damage.

No anomalies were noted to the control wheels or T-bar assembly. The rudder pedal assembly was partially separated from its left outboard mount. All control cables remained attached to their respective attach points. The carburetor heat control was in the "off" position.

The tachometer recorded 4958.93 hours. The Datcon Hobbs indicated 2400.6 hours, and the Honeywell Hobbs read 1269.3 hours. The flap lever was noted in the stowed "0°" of flap extension. No remote ELT switch was observed. The manual primer was stowed, and the electric fuel pump switch was in the "ON" position.

The pilot and copilot seats remained attached to their respective mounts. The pilot and copilot seats were in poor condition. Their lap belt restraints remained attached to their respective attach points. No shoulder harnesses were installed for any of the seats. The rear bench seat remained attached to its mounts. The bench seat's inboard seat belt latches were not installed and were not observed within the recovered wreckage.

The fuel selector was installed directly to the interior side panel with oversize screws and not in the correct orientation / clocked position; no selector cover attach bracket was installed. The fuel selector was observed between the left tank and off position. Prior to verification of the fuel

selector position, fuel line continuity could not be established with low pressure air from the left- or right-wing root fuel lines to the gascolator. The selector cover hardware precluded normal rotation of the selector valve.

Removal of the cover confirmed the valve was actually positioned between the “left fuel tank” and “off” positions. Detents in the fuel selector valve were confirmed. Fuel line continuity was confirmed with low pressure air when selector was placed in the “left and “right” tank positions, respectively.

The left wing was separated at the wing root by recovery personnel and was impact separated about mid-span. The main gear was impact damaged and separated from the wing. Hardened high expansion foam was visible through some of the breaks in the wing. A residual amount of blue liquid consistent in color and odor to that of aviation type gasoline was observed within the fuel tank. Fuel line continuity was established from the wing root to the fuel tank with low pressure air. The fuel cap was not attached to its receptacle and was not located within the recovered wreckage.

The aileron remained attached to its mounts and exhibited impact damage. The aileron control cables remained attached to their respective attach points and were separated at the wing root by recovery. Aileron control continuity was established from the cockpit through recovery and impact separations to the aileron. The flap was impact damaged and partially separated from the wing. The flap’s control rod remained attached to its mounts and was separated by recovery personnel.

The pitot mast remained attached to the wing and its ports were partially obstructed by an organic material consistent with soil. The lift detector exhibited impact damage which precluded field test.

The right wing was separated from the fuselage by recovery personnel. The wing exhibited impact damage to its outboard leading edge area. The main gear exhibited impact damage and remained attached to the wing.

The flap and aileron remained attached to their respective attach points with impact damage noted. The flaps control rod remained attached to its mounts. The aileron control cables remained attached to their respective attach points and was separated at the wing root by recovery. Aileron control continuity was established from the cockpit through recovery and impact separations to the aileron.

A residual amount of blue liquid consistent in color and odor to that of aviation type gasoline was observed within the fuel tank. Fuel line continuity was established from the wing root to the fuel tank with low pressure air. The fuel cap was observed attached to its receptacle.

The stabilator remained attached to its mounts and was separated by recovery personnel at its left and right inboard areas. The stabilator control cables remained attached to their respective attach points and were continuous to the cockpit. Stabilator control continuity was established. The stabilator trim tab remained attached to its mounts. The stabilator trim jackscrew exposed about

10 jackscrew threads 1 1/8" from the top of the assembly indicative of a partial "nose up" stabilator trim setting.

The vertical stabilizer remained attached to its mounts with no obvious impact damage observed. The rudder remained attached to its mounts with impact or recovery damage observed to its trailing edge area.

The rudder control cables remained attached to their respective attach points and were continuous to the cockpit. Rudder control continuity was established.

The engine remained attached to the impact damaged mount. The induction air box was impact damaged and the carburetor heat was observed in the "off/filtered air" position. No anomalies were noted to the heat muff, and the exhaust tailpipe was crushed at its lower area. The induction air filter assembly exhibited impact damage and no obstructions were observed. Examination of the induction air hose/duct revealed it was not a Piper part/correct hose. The induction Scat type hose exhibited impact damage.

The electric fuel pump's filter was clear of debris and fuel was observed during the examination. The gascolator exhibited impact damage and its filter was clear of debris.

The aluminum two-bladed fixed pitch propeller remained attached to the engine. Both propeller blades were deformed aft about mid-span with no leading edge damage observed. The propeller spinner remained attached to the propeller with leading edge impact or recovery damage noted.

The engine was prepped for a ground run. Both propeller blades were cut inboard of their bent areas. The gascolator was bypassed with a fuel line due to impact damage of the gascolator. A fuel supply was attached to the aircraft's fuel line at the right wing root and the fuel selector was placed in the "right fuel tank" position.

The engine was then started and ran to about 100° of oil temperature, about 80 psi of oil pressure, and about 6 psi of fuel pressure were observed. The magneto drop was observed about 400 RPM between the left and right magnetos. The engine was then run to 2500RPM with no anomalies noted.

The engine was shut down via the mixture control and the fuel supply tank was then attached to the fuel line at the left wing root area. The fuel selector was then placed in the "left fuel tank" position. The engine was then started and ran to 2500RPM with no anomalies noted.