



Memorandum of Record

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Subject: CEN19LA314 Airframe Examination Notes

An examination of N2890T was conducted on October 24, 2019 at Florida Air Salvage. The examination was conducted with federal oversight from Juan Garcia, FAA FSDO-19 inspector. Also present were air safety investigators Damian Galbraith, Piper Aircraft, and Kurt Gibson, Continental Aerospace Technologies. The following observations were recorded during that examination.

Fuselage

The fuselage was impact damaged and was destroyed from the baggage door aft to the empennage. The baggage and cabin doors remained attached to their respective hinges with no obvious damage noted. The 4 seats and their restraints remained attached to their respective attaching points. Shoulder harnesses were not installed for the rear #3 & #4 seats; however, they were installed for the pilot and copilot seats. The restraints were determined to be functional during field test with the exception of the pilot and copilot shoulder harness reels which were locked. The nose gear was impact damaged and separated from the engine mount.

The instrument panel remained intact with no apparent impact damage noted. The control wheels remained attached to the T-bar. Aileron control continuity was established except where impact and recovery separations exist. The flap control lever was noted in the stowed/0° position. The following switch and control positions were observed as follows;

- Throttle lever: mid travel
- Mixture control: forward/rich
- Propeller control: Forward/ high rpm
- Alternate air: Off
- Pitot heat: Off
- Rotating beacon: Off
- Auxiliary fuel pump: Off
- Rotating beacon: Off

- Strobes: On
- Landing light: Off
- Magneto switch: Off
- Battery and alternator: On
- Tach time: 4059.26

The fuel selector was observed between the Left and Right tank positions. The fuel selector was determined to be functional during field test with low pressure air. The gascolator bowl and screen were clear of debris and no fuel was observed. The electric fuel pump was determined to be functional during field test with a DC power source and water.

Left Wing

The left wing remained attached to the fuselage and its main spar was fractured at its attaching points. The main gear was impact separated from the wing. The wing was separated about 6' from the wing root and its fuel tank was breeched from impact damage. The fuel cap was attached to its receptacle and the fuel pickup screen was free of obstruction. The lift detector remained attached to the wing and was determined to be functional during field test. The pitot mast remained attached to the wing and its ports were clear of obstruction.

The aileron was crushed and separated from the wing, and its balance weight was separated from the assembly. The aileron bellcrank was crushed and its control cables though remained attached were separated at various lengths. The separated ends of the control cables exhibited a splayed, broomstrawed appearance consistent with tension overload separation. The flap exhibited impact damage and was partially separated from the wing.

Right Wing

The right wing remained attached to the fuselage and was separated about 7' from the wing root. The outboard about 8' of wing was mostly fragmented. The fuel tank was breeched at the outboard leading edge impact damaged area. The fuel cap was separated from its receptacle and its pickup screen was clear of obstruction. The main gear was separated from the wing. The aileron was fractured in 3 sections and its balance weight remained attached. The aileron bellcrank was pulled from its supporting structure. The aileron control cables remained attached to the bellcrank and were continuous to the T-bar and centerboard turnbuckle. Aileron control continuity was established except where impact separations exist. The flap remained attached to the wing with impact damage noted.

Empennage

The vertical stabilizer exhibited U-shaped deformation and was partially separated from its attaching points. The rudder remained attached to its hinges and its balance weight was separated from its attaching points. Impact damage was observed to the rudder. The rudder control cables remained attached to the rudder bellcrank and were continuous to their respective rudder pedal weldments which were separated from the rudder pedal assembly.

The supporting structure of the stabilator attach point was separated from the remainder of the fuselage. The left side of the stabilator exhibited leading edge impact damage with skin separations noted to its outboard end. The right side of the stabilator exhibited minor impact damage. The stabilator trim tab exhibited impact damage but remained attached to its mounts. The stabilator trim barrel assembly exposed no jackscrew threads from the top of the assembly which is indicative of a "full nose down" trim setting; however the stabilator trim control cables were separated at various lengths in the tail cone area.

The stabilator remained attached to the separated section and its balance weight assembly was deformed and partially separated from the stabilator. The stabilator control cables remained attached to their balance weight mast and were separated at various lengths. The separated cable ends exhibited a splayed, broomstrawed appearance consistent with tension overload separation.

Engine

The engine cowlings and engine mount were fragmented. The induction air filter housing was impact damaged and its filter was clear of debris. The induction air tubes were clear of obstruction. The exhaust system was impact damaged and partially separated on its left side of the engine. The turbo exhaust outlet pipe was impact damaged but no anomalies were noted upon removal and examination under the heat muff shield.

Propeller

The two-bladed propeller and its spinner remained attached to their respective attaching points. Impact damage was noted to the spinner with no torsional deformation observed. One propeller blade was bent aft about 30° and about mid-span with leading edge abrasions observed. The other propeller blade exhibited slight aft bending with trailing edge abrasions noted.