

Piper Off-Site Exam Notes

N3672K, PA-28-140, 02/28/2020

Fuselage

Except for some components submerged in the creek or ejected during the accident sequence, the cabin area was consumed by fire.

The #1 seat was impact separated from the seat rails and some deformation was noted to the frame. No thermal damage to the #1 seat was apparent. The #2, #3, and #4 seats displayed some frame deformation, and the upholstery had been consumed by fire.

A section of the cabin floor tunnel structure had been submerged in the creek and was not thermally damaged. The male end of the #1 seat lap belt remained anchored to the tunnel structure; it appeared undamaged and was not buckled to the female end of the lap belt. The #2 seat lap belt had been pulled from the tunnel structure and was noted lying along the bank of the creek at the accident site. The #2 seat lap belt was buckled, and the outboard end was melted. The anchors for the #3 and #4 lap belts were observed still attached to aircraft structure, however the webbings were consumed by fire. No shoulder harnesses were installed in the aircraft.

The muffler and shroud assembly remained mounted to the forward face of the firewall. The defrost and cabin heat scat hoses were thermally damaged. The muffler/shroud assembly was removed from the firewall and the shroud was opened. The muffler internal baffles were intact. No holes, cracks, pits, or corrosion was noted to the exterior of the muffler. No exhaust staining was noted on the interior surface of the shroud.

Left Wing

The left wing displayed thermal damage inboard of the fuel tank. Some of the wing spar carry through remained attached to the wing spar. The outboard leading edge of the wing displayed accordion-like aft crushing. The aileron remained attached to the wing and was buckled. The aileron control bellcrank and stops were soot stained but otherwise unremarkable. The aileron control cables remained attached to the bellcrank and continuity was established to recovery cuts at the wing root. The flap remained attached to the wing and displayed buckling throughout its structure.

Right Wing

The right wing had separated from the fuselage at the wing root. The wing was fractured at Wing Station (WS) 106 (approx.) The inboard wing section leading edge was crushed back to the main wing spar. The flap remained attached to the inboard wing section and was buckled. The fuel tank was impact separated and crushed. The outboard wing section displayed some denting and scraping. The aileron remained attached to the outboard wing section with some denting and deformation noted. The aileron bellcrank had impact separated from the wing and had been observed alongside the remains of the cabin on scene. The rib bearing the aileron bellcrank stops had been impact separated from the wing; the stops appeared undamaged.

Empennage

The empennage had been consumed by fire forward of Fuselage Station (FS) 200 (approx.) The remaining aft empennage section was deformed. The vertical stabilizer and rudder remained mounted to the empennage, each displaying impact damage. The rudder cables remained attached to the rudder control horn and were

traced forward to recovery cuts. The rudder stops appeared undamaged. The stabilator remained mounted to the empennage and was impact damaged. The stabilator balance weight remained mounted to the stabilator. The stabilator control cables remained attached to the stabilator balance weight and were traced forward to recovery cuts. The stabilator trim barrel appeared undamaged, and the trim screw displayed 12 threads (1.75") of extension, correlating to an aircraft nose up trim setting.