



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Western Pacific Region

June 9, 2016

AIRFRAME AND ENGINE EXAMINATION SUMMARY

WPR16LA122

This document contains 5 embedded photos.

A. ACCIDENT

Location:	Lodi, California
Date:	May 23, 2016
Aircraft:	Rans S-5, N481TJ
NTSB Investigator-in-Charge:	Maja Smith

B. DETAILS OF THE INVESTIGATION

1.0 Airframe Examination

Examination of the airplane revealed that the wings, fuel tank, and propeller had been previously removed. The engine remained attached to the fuselage via its mounts. The fuel line from the engine remained connected to the fuel pump, and from the fuel pump, the fuel line extended into the right side of the fuselage. The owner of the airplane said he had cut the fuel line just forward of the fuel shut off valve, located on the right side of the airframe, just behind the seat. No abrasions or chafing were observed on the fuel line. The fuel line about 3 inches from the area it was cut could be compressed by hand. The seat remained partially attached to the airframe. The seat featured a rigid mount via two tubes on the left and right sides of the seat, that attached to the airplane structure forward of the seat. The rear of the seat frame was suspended by seat belt type webbing attached to the left and right side of the seat frame assembly. The right side seat frame tube exhibited a wear mark on the lower right side, which corresponded to another wear mark on an aluminum tube that spanned the airplane crosswise. No evidence of any preexisting mechanical malfunction was found that would have precluded normal operation.



Photo 1: Seat installation.



Photo 2: Seat assembly and fuel line (side side).



Photo 3: Fuel line and shut off valve and wear mark on the airframe tube.



Photo 4: Wear mark on the seat frame.



Photo 5: Airframe and engine as found.

Submitted by: Joshua Cawthra