



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety

October 8, 2019

CANOPY EXAMINATION

ERA19FA265

This document contains 5 embedded photos.

(5 Pages)

1.0 EXAMINATION PARTICIPANTS:

Lynn Spencer
Air Safety Investigator
National Transportation Safety Board
Ashburn, VA

2.0 SUMMARY

The follow-up examination of the canopy of N767FS was conducted on October 8, 2019 at Florida Air Recovery, Jacksonville, FL. This examination of the canopy revealed preimpact anomalies of the latching mechanism.

3.0 DETAILS OF THE INVESTIGATION

3.1 Canopy Examination

Examination of the metal canopy roll bar frames and latching mechanism revealed that the fixed portion of the canopy bow was separated at the midspan attachment point. The left side of the roll bar was impact twisted 180° while the right side of the roll bar displayed little deformation in shape. The latch block remained affixed to the left side of the roll bar. The canopy bow that connected to the fixed portion of the canopy at the latching mechanism was fractured at the handle but displayed no twisting. The latch handle was intact and slightly bent in the portion of the handle opposite where it latched over the latch block.

The latching mechanism was compared to drawings sent by Van Aircraft of both the original latch and canopy handle and the replacement kit that had recently been purchased by the pilot. Close examination revealed that only the canopy handle from the new kit was installed on the accident airplane. Additional washers were installed with this handle that were not part of the kit. The wreckage has the new handle with the older latching system. Per the schematics, the handle tube that protrudes through canopy is ¼ inch longer in the replacement handle than in the original handle tube. Little deformity observed in the area of the latch mechanism.



Canopy roll bar

Canopy latch handle (new)

Latch block (original design)

Canopy bow that connects to roll bar when latched.

Photo 1: Canopy roll bar and canopy bow



Photo 2: Close-up of Latching Area



Extra washers

Photo 3: Latch handle



Photo 4: CloseUp View of Latching Mechanism

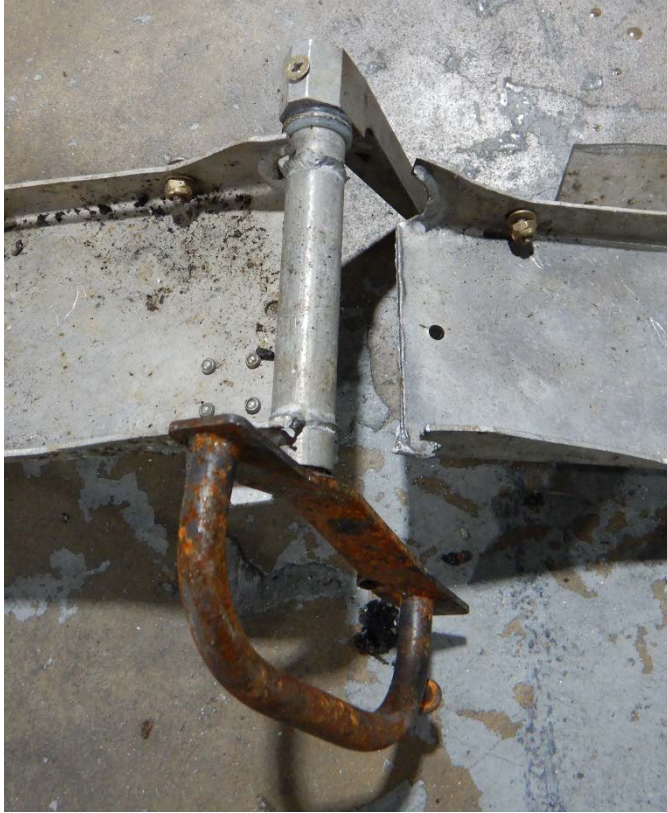


Photo 5: CloseUp Showing Additional Washers

Submitted by: Lynn Spencer