



## **NATIONAL TRANSPORTATION SAFETY BOARD**

Office of Aviation Safety  
Western Pacific Region

July 23-24, 2022

# **ACCIDENT SITE AND WRECKAGE EXAMINATION SUMMARY**

**WPR22FA264**

This document contains 9 embedded photos.

## **A. ACCIDENT**

|           |                   |
|-----------|-------------------|
| Location: | Seguin, Texas     |
| Date:     | July 22, 2022     |
| Aircraft: | N8542W; PA-28-235 |

## **B. PARTICIPANTS**

|                              |                   |
|------------------------------|-------------------|
| NTSB Investigator-in-Charge: | Andrew Swick      |
| FAA Inspector-in-Charge:     | Christian Morales |
| Piper Aircraft:              | Jon Hirsch        |
| Lycoming Engines:            | Troy Helgeson     |

## **C. SUMMARY**

Examination of the accident site was conducted on July 23-24th, 2022. All major structural components of the airplane were located at the accident site. The accident site is about 1/4 mile east of 0TX6. The wreckage examination was completed at the accident site on July 24, 2022. Postaccident examination of the airframe and engine revealed no evidence of any preimpact mechanical malfunctions or failures that would have precluded normal operation.

## **D. DETAILS OF THE INVESTIGATION**

### **1.1 Accident Site Examination**

Main Wreckage: N29° 30.155', W97° 59.494' – Elevation: 512 feet

The accident site was about 1/4 mile from 0TX6 and located on sparsely wooded terrain. An area of burned grass and trees surrounded the debris field and extended about 500 ft to the North of the main wreckage.



Figure 1-Accident site, initial tree strikes.

The debris field was about 181 ft long and on a directional heading of 332 degrees magnetic from the initial impact with trees to the engine cowling located furthest in the debris field. A 3 ft deep 30 ft wide dry pond was located within the debris field between the initial tree strikes and the main wreckage. A 5 ft long ground strike was identified near the edge of the pond and disturbed ground extended through the pond to the right main landing gear strut that separated from the main wreckage and was located on the other side of the pond. A 'longeron stringer' and portions of fiberglass were located in the dry pond. The main wreckage was found further in the debris field about 20 feet from the dry pond. The fuselage and engine were inverted and the wings separated and remained upright. The fuselage was positioned at a directional heading of about 250 degrees. The wreckage was mostly consumed by postimpact fire.

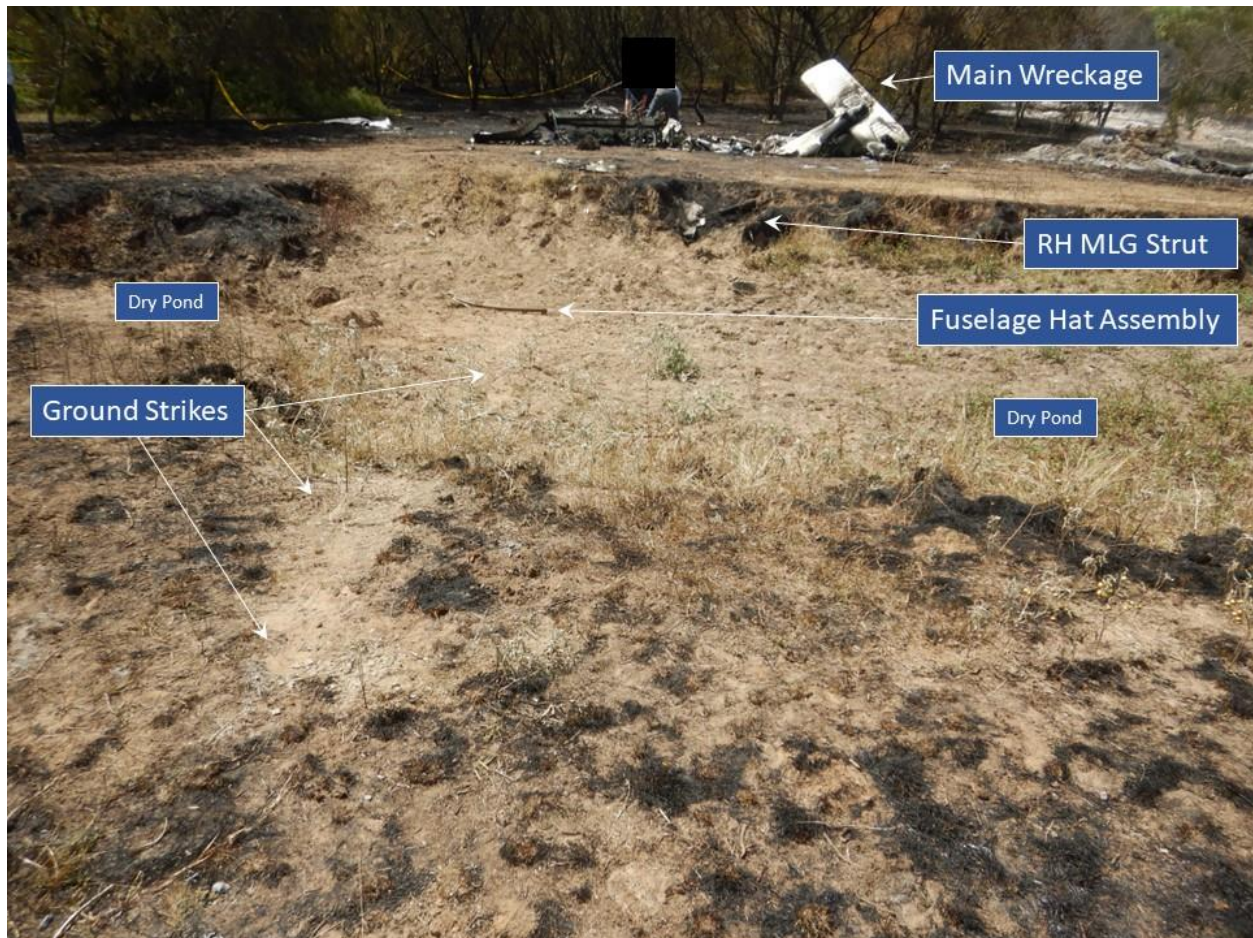


Figure 2-Ground scars and main wreckage.

Both wing tip tanks separated from the main wreckage and were found further in the debris field. The tip tanks had thermal damage and were mostly destroyed by postimpact fire.



Figure 3-Right wing tip tank.

The left horizontal stabilizer leading edge had impact signatures consistent with impacting small trees.



Figure 4-View of the left horizontal stabilizer.

Flight control cable continuity was established to the central cabin area and associated bellcranks and attachments. The cabin area had excessive thermal damage and most had been consumed by postimpact fire. The instrument panel had excessive thermal damage and no switches or instruments offered any data or positions.



Figure 5-Main wreckage, cabin and wings.

The engine remained partially attached to the engine mounting assembly. The engine mounts were cut and the engine was examined hanging from a hoist. Most of the engine accessories had been consumed by postimpact fire. Internal engine component surfaces were visible through melted crankcase areas and no preimpact mechanical damage was noted.



Figure 6-Propeller and engine assemblies.

The propeller assembly remained attached to the engine and one blade was mostly consumed by postimpact fire. The other blade was intact and was bent in multiple areas consistent with an undetermined amount of power at the time of impact with the ground.



Figure 7-Propeller assembly and engine.

The engine cowling was found furthest in the debris field. The cowling was found right side up and had thermal damage throughout. The four cowling latches and fasteners remained attached to the upper cowling. The left side cowling latch and fasteners remained attached to the receiver ends of the thermally damaged sections of the lower cowling. The right side cowling latch and fasteners were intact and the aft latch assembly was bent. The lower cowling right side fastener receivers were not found during the examination.



Figure 8-Upper engine cowling.



Figure 9-Upper engine cowling.

Submitted by: Andrew Swick