

# National Transportation Safety Board

Office of Aviation Safety

Washington, DC 20594



CEN23LA108

## **AIRCRAFT EXAMINATION SUMMARY**

March 7, 2023

## **A. ACCIDENT**

Location: Crosby, TX  
Date: February 12, 2023  
Time: 1728 CST  
2328 UTC  
Airplane: Cessna 172H

## **B. AIRCRAFT EXAMINATION SUMMARY**

|              |                                                                        |
|--------------|------------------------------------------------------------------------|
| IIC          | Aaron Sauer<br>NTSB<br>Denver, CO                                      |
| Party Member | Andrew Hall<br>Textron Aviation<br>Wichita, KS                         |
| Party Member | Daniel Prince<br>Federal Aviation Administration - FSDO<br>Houston, TX |

## **C. SUMMARY**

A follow-up examination of the airframe and engine was completed on March 7, 2023, at Air Salvage of Dallas. Party members from Textron Aviation and the Federal Aviation Administration were present to witness and assist. The examination revealed no pre-accident mechanical anomalies that would have precluded normal operation of the aircraft.

## **D. DETAILS OF THE EXAMINATION**

### **1.0 Airframe Examination**

#### **1.1 Fuselage**

- No issues noted. Forward fuselage crush impact related damage present.

## 1.2 Empennage

- No issues noted. Empennage wrinkling and structure impact related damage present.
- Horizontal Surface & Elevator: No issues noted. Elevator cables intact and present. Recovery cuts at empennage to fuselage recovery separation.
- Pitch Trim: No issues noted. Trim found at 1.45 which is approximately 9° NOSE UP.
- Vertical stabilizer & Rudder: No issues noted. Rudder cables intact and present. Recovery cuts at empennage to fuselage recovery separation.

## 1.3 Wings

### Right Wing

- No issues noted. Outboard leading edge crush damage near wingtip. Minor skin wrinkling noted on wing surfaces.

### Right Flap

- Flap Cables present and intact. Cables disconnected via the turnbuckle at wing root.
- Flap motor jackscrew and control surface found in UP position.

### Right Aileron

- Aileron Cables present and intact.
- Attached and free movement.

### Left Wing

- No issues noted. Minor damage noted to outboard wing. Small punctures noted in wing skin.

### Left Flap

- Found in the UP position.
- Free movement with no surface damage.
- Flap Cables present and intact. Cables disconnected via the turnbuckle at wing root.

### Left Aileron

- Aileron Cables present and intact.
- Attached and free movement

## **1.4 Landing Gear**

- Left Gear: No issues noted. Remained attached to the fuselage.
- Right Gear: No issues noted. Separated at impact with train car. Found lying in the train car after inspection by the railroad.
- Nose Gear: Separated during impact sequence.

## **1.5 Cockpit**

- Pilot Seat: No primary seat stop installed. Secondary Seat Stop is installed but is unusable. Pilot Seat locked in FWD position.
- Copilot Seat: Primary seat stop present. Outboard seat track was found separated from the fuselage at the accident site. Seat track witness marks show seat in a FWD position at impact.
- Fuel Selector: Found in the RIGHT position at accident site.
- Stall Warning: System check performed. No issues noted.
- Throttle and mixture controls in the full forward position.
- No other issues noted.

## **1.6 Fuel/Fuel System**

- Fuel System: Free and Clear
- Wing Tanks: No issues noted. Tank outlet screens found clean.
- Vent System: No issues noted.
- Fuel Selector Valve: No blockages noted. Found with the Right Fuel Tank selected.

## **2.0 Engine Examination**

- Throttle, Mixture, and Carb Heat cables found attached to carburetor.
- Spark Plugs: Newer to Worn with minor carbon fouling.
- Crankshaft freely rotates with no issues noted.
- Mechanical continuity noted throughout the engine when propeller was manually rotated.
- No other issues noted.

## **3.0 Propeller Examination**

Blades displayed leading edge gouging, chordwise scratching, s-type bending, and both propeller blade tips were separated.

Submitted by:

Aaron Sauer  
Sr. Air Safety Investigator