

# National Transportation Safety Board

Office of Research and Engineering

Washington, DC 20594



ERA23FA235

## **COCKPIT DISPLAY**

Specialist's Factual Report

March 4, 2025

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## **A. ACCIDENT**

Location: Summerville, South Carolina  
Date: May 18, 2023  
Time: 0018 eastern daylight time (EDT)  
Airplane: Honda Aircraft Company HA-420, N255HJ

## **B. COCKPIT DISPLAY SPECIALIST**

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## **C. FEDERAL CARRIAGE REQUIREMENTS**

The event aircraft, N255HJ, was operating as Title 14 *Code of Federal Regulations* (CFR) Part 91 personal flight. The event aircraft was not equipped with a Flight Data Recorder or Cockpit Voice Recorder, nor were they required.

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

A group was not convened. The NTSB Vehicle Recorder Division received the following cockpit display capable of recording flight data:

Recorder Manufacturer/Model: Garmin GDU display - MFD  
Part Number: illegible (burned dataplate)  
Recorder Serial Number: illegible (burned dataplate)

Recorder Manufacturer/Model: microSD card from Garmin GDU display - Right PFD  
Part Number: N/A  
Recorder Serial Number: N/A

Recorder Manufacturer/Model: Chips from Garmin GDU display - Left PFD  
Part Number: N/A  
Recorder Serial Number: N/A

Recorder Manufacturer/Model: Garmin GIA computer - Left  
Part Number: illegible  
Recorder Serial Number: illegible

Recorder Manufacturer/Model: Garmin GIA computer - Right  
Part Number: illegible

Recorder Serial Number: illegible

### **1.1 Recorder Condition - GDU display MFD**

The MFD display sustained severe heat damage. The display is shown in figure 1. The display was disassembled, and the memory module was removed from the device (see figure 2). All internal components were severely burned, and the microSD card was completely consumed by fire. The extent of the damage precluded any recovery effort, and no information could be recovered.



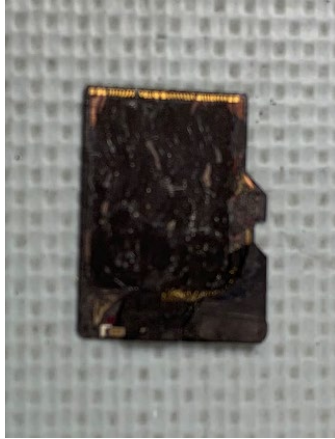
**Figure 1.** Damaged exterior of GDU MFD display.



**Figure 2.** Memory module removed from the GDU MFD display.

## **1.2 Recorder Condition - microSD card from Right PFD**

The microSD card from the right display was found to be intact, although the outer plastic packaging was burned off the card. See figures 3 and 4 for views of the top and bottom of the card. The microSD card was installed in a reader, but it would not mount for recovery. The extent of the damage precluded any recovery effort, and no information could be recovered.



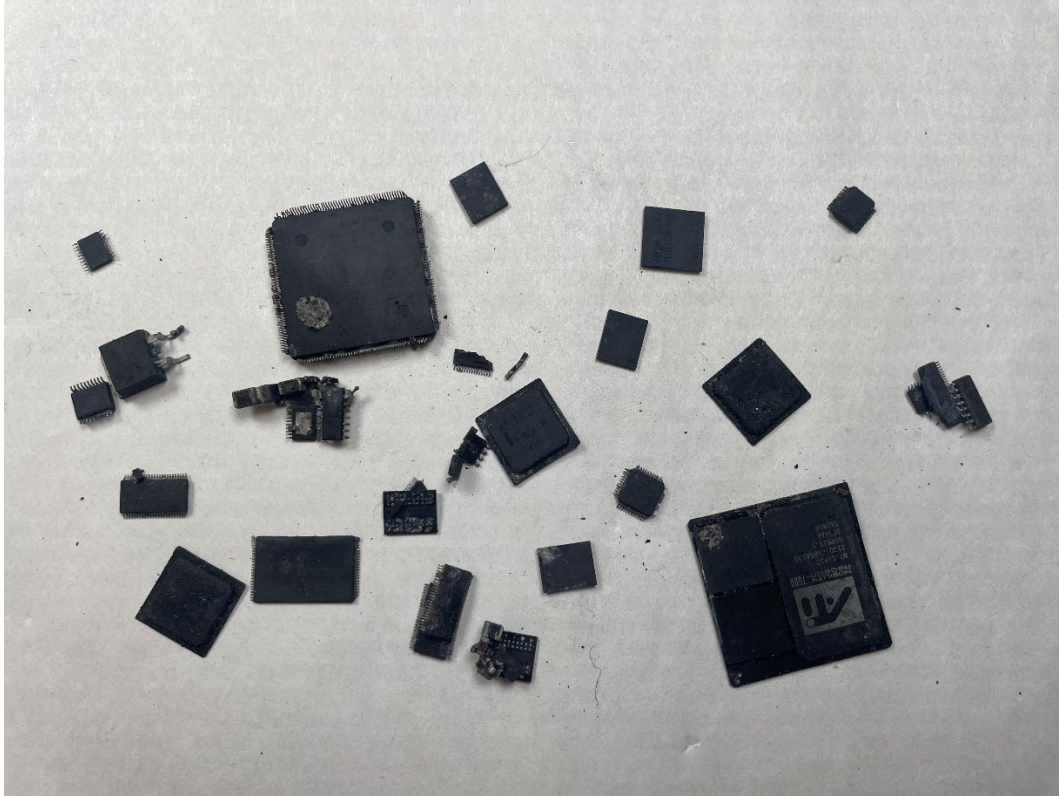
**Figure 3.** Top of microSD card from right PFD display.



**Figure 4.** Bottom of microSD card from right PFD display.

### **1.3 Recorder Condition - Chips from Left PFD**

A bag of chips taken from the Left PFD was sent to the recorder laboratory for evaluation. Figure 5 shows the chips sent to the lab. The chips were burned and broken to various degrees. According to the manufacturer, only the microSD cards installed in the displays contain flight data. There were no microSD cards in the chips and none of the chips were found to contain data pertinent to the accident.



**Figure 5.** Chips from left PFD display.

#### **1.4 Recorder Condition - Garmin GIA computers - Left and Right**

Two Garmin Integrated Avionics (GIA) computers (left and right) were sent to the recorder laboratory for evaluation. Figures 6 and 7 show the left and right GIA computers, respectively. The GIA computers were severely burned. They contained no flight data pertinent to the accident.



**Figure 6.** Left side GIA computer.



**Figure 7.** Right side GIA computer.

Submitted by:

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