

National Transportation Safety Board

Office of Research and Engineering

Washington, DC 20594



WPR22FA098

SATLOC G4 AERIAL APPLICATOR GUIDANCE SYSTEM

Specialist's Factual Report

October 27, 2022

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A. ACCIDENT

Location: Coalinga CA
Date: February 16, 2022
Time: 21:30 (PST)
Helicopter: Bell UH-1H N72297

B. SATLOC G4 AERIAL APPLICATOR GUIDANCE SYSTEM SPECIALIST

Specialist David L. Case
Vehicle Recorder Specialist
National Transportation Safety Board (NTSB)

C. DETAILS OF THE INVESTIGATION

An Applicator Guidance System group was not convened.

The NTSB Vehicle Recorder Division received the following electronic device:

Recorder Manufacturer/Model: Satloc G4
Part Number: 806-1040-000
Recorder Serial Number: 1325-05739-LN1-058

1.0 Satloc G4 Description

The Satloc G4 is an aerial guidance system designed to assist the pilot of an agricultural aircraft with spraying substances onto crops. The system includes a light bar that mounts on the nose for guiding the pilot in spraying, a touch screen display for controlling the system, and a box containing an embedded computer and a GPS receiver.

The Satloc G4 records a log of up to 30 parameters to an SSD device connected to the embedded computer. These parameters include date, time, GPS location and information about the spray application system. Data is written with a frequency of 1hz.

1.1 Satloc G4 Data Recovery

The Satloc G4 was in good condition (see figure 1) and the data were downloaded using the manufacturer's procedure.



Figure 1. Satloc G4 CPU Module



Figure 2. SSD Memory Module removed from the Satloc G4 CPU Module

1.2 Satloc G4 Recording Description

The data extracted included information from October 3, 2014, through February 15, 2022. The event occurred on February 16, 2022. There were no data pertinent to the event recorded on the device. The last recorded flight contained in the device was from the day before the accident and showed evidence consistent with an agricultural spraying flight several miles northwest of the accident location.

Submitted by:

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Vehicle Recorder Specialist