

National Transportation Safety Board

Office of Research and Engineering

Washington, DC 20594



WPR23FA141

RECOVERABLE DATA MODULE

Specialist's Factual Report

June 30, 2023

A. ACCIDENT

Location: Oxbow, Oregon
Date: April 2, 2023
Time: 0950 Pacific daylight time (PDT)
Airplane: Cirrus SR22, N424SW

B. RECOVERABLE DATA MODULE SPECIALIST

Specialist: W. Deven Chen
Electrical Engineer – Recorder Specialist
National Transportation Safety Board (NTSB)

C. DETAILS OF THE INVESTIGATION

A recorder group was not convened. The NTSB Vehicle Recorder Division received the following recoverable data module (RDM):

Recorder Manufacturer/Model:	Aerosance RDM
Recorder Serial Number:	Unknown

1.0 Device Description

The Aerosance RDM is a flight data recording device with a fire-resistance soft shell installed in the tail of the aircraft that records critical flight information at a 1 Hz recording rate. The RDM can store approximately 200 hours of flight data on an internal 1 GB Compact Flash (CF) memory card.

1.1 Device Condition and Data Recovery

Upon arrival at the Vehicle Recorder Division, the Aerosance RDM was in very poor condition, as shown in figure 1. The outer shell had multiple tears. The internal CF memory card (Figure 2) was recovered and read out normally. However, all the data files stored on the CF memory card were recorded on December 31, 2000, and those data files could not be converted into engineering unit data due to data file corruption. When contacted, the manufacturer of the accident aircraft stated that it was a common issue with Aerosance RDMs, and that no data could be recovered in that situation. Thus, there was no data pertinent to the accident recovered from the device.



Figure 1. Aerosance RDM as received.



Figure 2. Recovered RDM CF memory card.

Submitted by:

W. Deven Chen
Electrical Engineer – Recorder Specialist