

National Transportation Safety Board

Office of Research and Engineering

Washington, DC 20594



WPR22LA334

PERSONAL ELECTRONIC DEVICE

Specialist's Factual Report

April 26, 2023

A. ACCIDENT SUMMARY

Location: Medicine Bow, Wyoming
Date: September 5, 2022
Time: 1033 mountain daylight time (MDT)
Airplane: Edward Long-EZ, N444MR

B. PERSONAL ELECTRONIC DEVICE 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 personal electronic device:

Recorder Manufacturer/Model:	Apple iPad 6 th Generation
Part Number:	A1954
Recorder Serial Number:	DMPXNPQ6JF88

1.0 Recorder Description

Personal Electronic Devices (PEDs) are a category of devices comprised primarily of portable computing devices and mobile phones. Portable computing devices are typically capable of internet access, email, messaging services, and can run user-installed applications to perform specific tasks. Depending on the model, mobile phones can perform many of the same tasks as portable computing devices, plus have voice call and text messaging capabilities. PED user and system data is typically stored on non-volatile memory¹ (NVM) and can be accessed through manufacturer-provided interfaces.

1.1 Recorder Data Recovery

The device had sustained severe impact damage upon arrival at the Vehicle Recorder Division, as shown in Figure 1. The motherboard was removed from the device and placed into a surrogate device. The device powered up and was locked with a 6-digit passcode. The device was unlocked with a provided passcode. The stored contents were reviewed, and it was determined that there were no data

¹ Non-volatile memory is semiconductor memory that does not require external power for data retention.

pertinent to the accident found on the device. The last flight logged on ForeFlight² was on August 29, 2022, and the last track log available on the account was recorded on July 28, 2022. The accident occurred on September 5, 2022. The last two photos on the device were saved on September 4, 2022, and they were not pertinent to the accident.



Figure 1. the Apple iPad 6th Generation as Received.

² ForeFlight - Integrated flight App for pilots to plan, brief and file flight plans; it also logs flights.