

National Transportation Safety Board

Office of Research and Engineering

Washington, DC 20594



CEN23FA139

PERSONAL ELECTRONIC DEVICE

Specialist's Factual Report

November 6, 2023

A. ACCIDENT SUMMARY

Location: Lubbock, Texas
Date: March 17, 2023
Time: approximately 1150 central daylight time (CDT)
Airplane: Beech 58P, N2061K

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 (PED) belonged to the pilot:

Recorder Manufacturer/Model:	Apple iPhone 13 Pro
IMEI Number:	358823344514081

1.0 Recorder Description

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 and can be accessed through manufacturer-provided interfaces.

1.1 Recorder Data Recovery

Upon arrival at the Vehicle Recorder Division, the device had sustained severe damage, as shown in Figure 1. The motherboard was removed from the device and powered up normally within a surrogate unit. The device was unlocked with a provided passcode. The device was connected to a PC and read using forensic evidence recovery software for PEDs.

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



Figure 1. Front and back of the Apple iPhone 13 Pro as Received.

1.2 Recording Description

ForeFlight² was running on the background of the phone. Although the flight plans (including route, estimate time, fuel and payload) of the accident flight (F82 to KHQZ) and the previous flight (KHQZ to F82) were filed on the ForeFlight, the track logs of those two flights were not presented on the ForeFlight account. After consulting with ForeFlight technical support, it was confirmed that neither of those two flights were recorded on the phone.

The data showed that there was an incoming call at 11:28:14 CDT prior to the accident. The phone call lasted 12 minutes and 34 seconds and ended at 11:40:48 CDT. The data also showed that the pilot's phone was connected to a Bose A20 headset via Bluetooth at 11:40:07 CDT. Other categories of files were reviewed and there were no other data pertinent to the accident presented on the phone.

² ForeFlight is a software application used as an electronic flight bag by aircraft pilots.