

NATIONAL TRANSPORTATION SAFETY BOARD

Vehicle Recorder Division
Washington, D.C. 20594

June 7, 2016

Personal Electronic Device

Specialist's Factual Report By Jane Foster

1. EVENT SUMMARY

Location: West Caldwell, New Jersey
Date: August 15, 2015
Aircraft: Cessna T206H
Registration: N63TV
Operator: Private
NTSB Number: ERA15FA312

2. DETAILS OF INVESTIGATION

The National Transportation Safety Board (NTSB) Vehicle Recorder Division received the following device:

Device Manufacturer/Model:	Apple iPad (3rd Generation)
Serial Number:	DKVJQ05WDNQT

2.1. Device Description

The Apple iPad is a tablet computer with a high-resolution color touch-screen interface. All iPad devices support WiFi and Bluetooth connectivity, and use either 16, 32, or 64 GB, of non-volatile memory for storage (depending on model). Some devices also support data connectivity via existing cell-phone networks. The iPad also includes front and back cameras. The iPad implements its functionality by running programs called "Apps" capable of supporting web-browsing, email, audio/video playback, contact and calendar management, and numerous other specialized functions. User-installed Apps can be used to support functionality for electronic flight bags, flight planning and filing, aviation weather depiction, and electronic flight charts. Application data is stored in non-volatile memory (NVM)¹ and may include image, video, and position location information. Specialized application data may be stored in a proprietary file structure using numerous proprietary file formats. The amount and type of data stored varies based on the software version and configuration of the specific device.

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

2.2. Device Condition

Upon arrival at the Vehicle Recorder Laboratory, an examination revealed the unit had sustained damage. The extent of the damage is shown in figures 1 and 2. The extraction of the data was performed by using a surrogate unit.

Figure 1. Front of the iPad (3rd Generation) as received.



Figure 2. Back of the iPad (3rd Generation) as received.



2.3. Data Description

There is an optional security feature that requires a user password to unlock the device and access functions and stored data.

Power was applied to the device and it was evident that the user password security feature was enabled. According to the Investigator-in-charge, the password was not obtainable so the device's functions and any stored data were not accessible. It is unknown whether there were any stored data pertinent to the event. No further attempts were made to access the data.