

NATIONAL TRANSPORTATION SAFETY BOARD

Vehicle Recorder Division
Washington, D.C. 20594

August 13, 2015

Electronic Devices

Specialist's Factual Report
By Jane Foster

1. EVENT SUMMARY

Location: Spokane, Washington
Date: May 07, 2015
Aircraft: Piper PA-46
Registration: N962DA
Operator: Private
NTSB Number: WPR15FA158

On May 7, 2015, at 1604 Pacific daylight time, a Piper PA 46-350P, N962DA, collided with water in the Spokane River following an attempted landing at Felts Field Airport, Spokane, Washington. The airplane was owned by Flying Colors Aviation LLC, and operated by the pilot under the provisions of 14 Code of Federal Regulations Part 91. The commercial pilot and pilot rated passenger sustained fatal injuries and the airplane was destroyed during the impact sequence. The local flight departed Felts Field at 1553. Visual meteorological conditions prevailed and no flight plan had been filed.

2. GROUP

A group was not convened.

3. DETAILS OF INVESTIGATION

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

Device Manufacturer/Model:	Apple iPad
Serial Number:	DN6GND7WDFJ3

Device Manufacturer/Model:	Appareo Stratus
Serial Number:	225453

Device Manufacturer/Model:	Garmin Aera 560
Serial Number:	1QV005944

3.1. Device Descriptions

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 MB, of non-volatile memory for storage (depending on model). Some devices also support data connectivity via existing cell-phone networks. The iPad2 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 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.

The Appareo Stratus is a small wireless receiver that connects with the iPad to be used as a flight tool. This device is designed to be used to provide situational awareness to the pilot.

The Garmin Aera 560 is a portable GPS navigation device employing 4.3 inch touch-screen and color moving map display. The Aera is capable of interfacing with the Garmin GTX 330 Mode S transponder to display TIS traffic alerts. The Aera is capable of storing track logs that contain position and location information for an unspecified number of points in non-volatile memory. This data is stored internally in an industry-standard format and may be transferred to a PC running Windows Explorer via USB.

3.2. Data Recovery

Upon arrival at the Vehicle Recorder Laboratory, the iPad, the Stratus, and the Aera 560 had water damage. An exterior examination revealed that the iPad had sustained moderate physical damage and the Stratus had sustained minor physical damage. Figure 1 and 2 show the front and back of the iPad as received. Figure 3 shows the front and back of the Stratus as received. Figure 4 shows the Garmin Aera 560 as received.

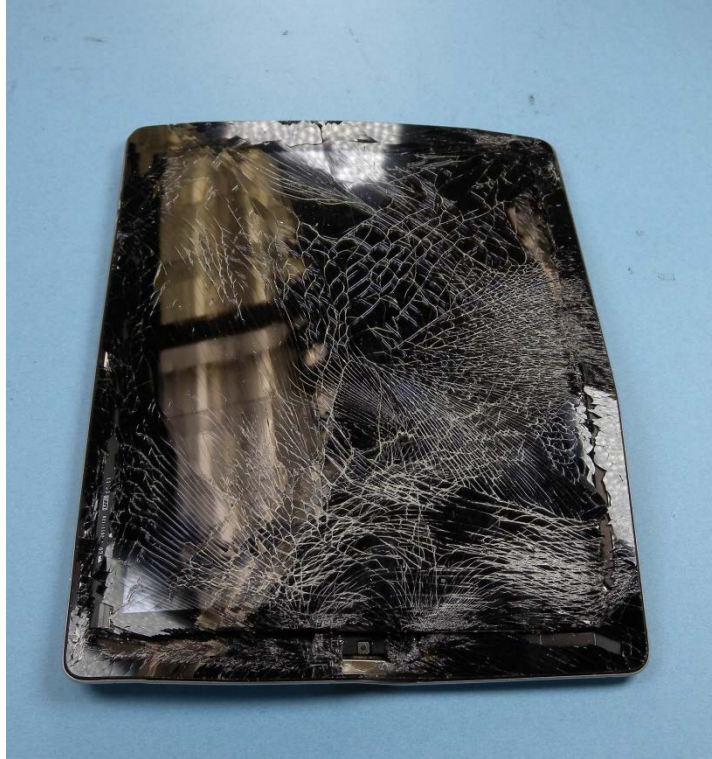


Figure 1 : Front of iPad



Figure 2 : Back of iPad



Figure 3 : Front and back of Stratus



Figure 4 : Garmin Aera 560 as received

4. DEVICE INVESTIGATIONS

4.1. Apple iPad

Download was achieved but data recording ForeFlight was not enabled. Accident data was not found.

4.2. Appareo Stratus

The device was downloaded, but no data relevant to the accident was found.

4.3 Garmin Aera 560

The device was downloaded, but the accident flight was not recorded.