

NATIONAL TRANSPORTATION SAFETY BOARD
Vehicle Recorder Division
Washington, D.C. 20594

October 18, 2013

Electronic Device Factual Report

Specialist's Factual Report
by Bill Tuccio, Ph.D.

A. EVENT

Location: Johnstown, New York
Date: May 24, 2013
Aircraft: Piper PA-34-200T
Registration: N31743
Operator: Private
NTSB Number: ERA13FA253

B. GROUP - No Group

C. SUMMARY

On May 24, 2013, at 1710 eastern daylight time, a Piper PA-34-200T, N31743, operating as Angel Flight 743, was destroyed during an in-flight breakup near Johnstown, New York. The certificated commercial pilot and one passenger were fatally injured; the second passenger was missing and presumed fatally injured. Visual meteorological conditions prevailed, and an instrument flight rules flight plan was filed for the personal flight, which departed Laurence G. Hanscom Field Airport (BED), Bedford, Massachusetts, and was destined for Griffiss International Airport (RME), Rome, New York. The flight was operated under the provisions of Title 14 Code of Federal Regulations Part 91.

D. DETAILS OF INVESTIGATION

The NTSB Vehicle Recorder Laboratory received the following device:

GPS Manufacturer/Model:	Google Nexus 7
Serial Number:	CCOKBC003164

Google Nexus 7 Device Description

The Google Nexus 7 is a tablet computer with a high-resolution color touch-screen interface. The device supports WiFi and Bluetooth connectivity, and use 16 or 32 GB of non-volatile memory for storage (depending on model). Some devices also

support data connectivity via existing cell-phone networks. The Nexus 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.

Google Nexus 7 Data Recovery

Upon arrival at the Vehicle Recorder Laboratory, an external inspection revealed the unit had sustained minimal damage, and it initially powered on briefly, as shown in Figure 1. However, the unit did not remain powered. An internal inspection revealed evidence of water damage, as shown in Figure 2. Attempted repairs to the unit were unsuccessful.

Figure 1. Google Nexus 7 as received.



Figure 2. Internal damage to Google Nexus 7.

