

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

March 16, 2017

## **Personal Electronic Devices**

### **Specialist's Factual Report By Bill Tuccio, Ph.D.**

#### **1. EVENT SUMMARY**

Location: Fredericksburg, Virginia  
Date: August 12, 2016  
Aircraft: Beechcraft 55  
Registration: N128VB  
Operator: Private  
NTSB Number: ERA16FA288

#### **2. GROUP**

A group was not convened.

#### **3. DETAILS OF INVESTIGATION**

The National Transportation Safety Board (NTSB) Vehicle Recorder Division received five personal electronic devices (PEDs).

##### **3.1. Device 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 memory<sup>1</sup> and can be accessed through manufacturer-provided interfaces.

##### **3.2. Device Condition**

Upon arrival at the Vehicle Recorder Laboratory, an examination revealed the all the PEDs had been subjected to significant heat damage, destroying internal components. Figures 1 through 4 show all PEDs received.

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

**Figure 1. Two unidentified PEDs.**



**Figure 2. Unidentified PED.**



**Figure 3. Unidentified PED.**



**Figure 4. Unidentified PED (likely iPhone 6).**



### **3.3. Data Description**

The devices were capable of storing data in the non-volatile memory. The extent of the damage precluded any recovery. Therefore, no data pertinent to the event were recovered.