### NATIONAL TRANSPORTATION SAFETY BOARD

Vehicle Recorder Division Washington, D.C. 20594

August 30, 2017

# **Electronic Devices**

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

#### 1. EVENT SUMMARY

Location: Teterboro, New Jersey

Date: May 15, 2017 Aircraft: Gates Learjet 35A

Registration: N452DA

Operator: Trans-Pacific Air Charter LLC dba Trans-Pacific Jets

NTSB Number: CEN17MA183

#### 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 iPhone 5S

Serial Number: Unknown

Device Manufacturer/Model: Universal FMS UNS-1K

Serial Number: Unknown

### 3.1. Device Description

The Apple iPhone is a personal electronic device capable of calls, text messaging, email, and mobile computing. Damage to the other device was such that no effort was made to identify the device manufacturer/model.

The Universal FMS UNS-1K is a flight management system (FMS). The system has a 5" screen along with an alpha-numeric keypad. The FMS is used by the flight crew to enter flight plans as well as communicate navigational and limited maintenance information, among other functions.

## 3.2. Device Conditions

Upon arrival at the Vehicle Recorder Laboratory, an examination revealed both units had suffered impact and fire damage. Figure 1 shows the iPhone, figure 2 shows the Universal FMS UNS-1K.

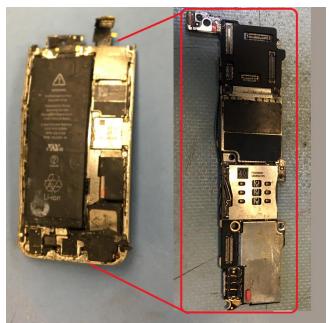


Figure 1. iPhone 5S, with inset showing internal component board.





# 3.3. Data Description

The NTSB unsuccessfully attempted to repair the iPhone 5S. The iPhone was then sent to a forensic vendor, who also unsuccessfully attempted a repair. Given the extent of the damage, no data was recovered from the iPhone.

Damage to the Universal FMS UNS-1K destroyed all internal components. No recovery was possible.