

# NATIONAL TRANSPORTATION SAFETY BOARD

Vehicle Recorder Division  
Washington, D.C. 20594

September 16, 2014

## Non-Volatile Memory Devices

### Specialist's Factual Report By Ben Hsu

#### 1. EVENT

Location: Soldotna, Alaska  
Date: July 7, 2013  
Aircraft/ID: DeHavilland DHC-3 / N93PC  
Operator: Rediske Air  
NTSB Number: DCA13MA121

#### 2. SUMMARY OF ACCIDENT

On 7 July 2013, about 1120 Alaska Daylight Time (ADT), a De Havilland DHC-3 Otter, registration N93PC, impacted the ground off the right side of runway 25 after takeoff from Soldotna Airport (PASX), Soldotna, Alaska. The 9 passengers and 1 commercial pilot were fatally injured and the airplane was destroyed by impact forces and post-crash fire.

#### 3. GROUP

No group was convened.

#### 4. DETAILS OF DEVICE INVESTIGATION

The Safety Board's Vehicle Recorder Division received the following devices:

Device 1: Apple iPhone 5 (Figure 1)  
Device 1 Serial Number: F2LJMGLWF8H2  
Device 2: Apple iPhone 5 (Figure 2)  
Device 2 Serial Number: Unknown  
Device 3: Apple iPhone 4S (Figure 3)  
Device 3 Serial Number: C8PKJ6A1DTC1  
Device 4: Apple iPhone 4S (Figure 4)  
Device 4 Serial Number: DNPGX9MGDTFD  
Device 5: Apple iPhone 4S (Figure 5)  
Device 5 Serial Number: Unknown  
Device 6: Nikon Coolpix S6300 Digital Camera (Figure 6)  
Device 6 Serial Number: Unknown

Device 6: Spidertracks S3 GPS Tracker (Figure 7)  
Device 6 Serial Number: Unknown

All devices were severely damaged by impact forces and fire. Each device was examined using NTSB laboratory equipment and accident-related data was recovered where possible.

The Apple iPhone 5 (Device 1, S/N F2LJMGLWF8H2) recorded photos and videos prior to the accident. A video of the take-off and impact was also recorded on this device.

The Nikon Coolpix S6300 (Device 6, S/N Unknown) recorded photos prior to the accident. A summary of these data is included in this report.

No accident-related data was recovered from the other devices.

#### **4.1. Device 1: Apple iPhone 5**

##### **4.1.1. Recovered Photos**

Three accident-related photos were recovered from the iPhone. These photos showed passengers boarding the aircraft and the passenger seating arrangement prior to the accident. These photos also showed the arrangement of passenger luggage in the cabin prior to the accident.

##### **4.1.2. Recovered Videos**

Three accident-related videos were recovered from the iPhone. The three videos were recorded successively after the aircraft had begun to taxi during the accident flight. All videos were recorded by a passenger seated in the third row in the left side window seat of the passenger cabin.

The first video was approximately 45 seconds long and showed a view out the left side window of the aircraft while the aircraft was taxiing to the runway. The first video also showed the seating arrangement of the passengers and the arrangement of passenger luggage in the cabin prior to the accident.

The second video was approximately 19 seconds long and showed a view out the left side window of the aircraft while the aircraft was taxiing to the runway.

The third video was approximately 3 minutes and 16 seconds long and showed a view out the left side window of the aircraft. The video begins with the aircraft continuing to taxi to the runway. Approximately 17 seconds into the video the aircraft turns onto the runway and begins its takeoff roll. The aircraft lifts off approximately 45 seconds into the video. The impact occurs approximately 1 minute and 1 second into the video. The remainder of the video shows a black frame. At 1 minute 47 seconds fire is visible in the frame.

Audio was recorded during all three videos. The audio recorded with the videos indicated normal operation of the aircraft. No anomalous engine sounds were recorded.

## **4.2. Device 6: Nikon Coolpix S6300 Digital Camera**

### **4.2.1. Recovered Photos**

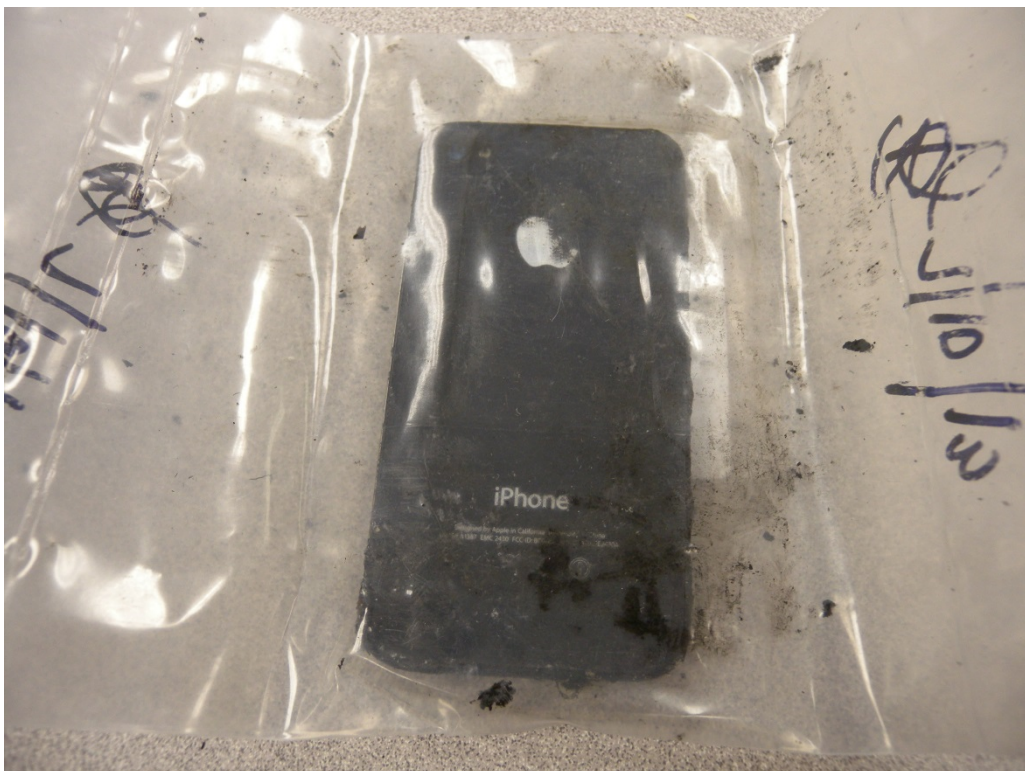
Six accident-related photos were recovered from the digital camera. These photos showed passengers boarding the aircraft and the passenger seating arrangement prior to the accident. These photos also showed the arrangement of passenger luggage in the cabin prior to the accident.



**Figure 1: iPhone 5 (S/N F2LJMGLWF8H2)**



**Figure 2: iPhone 5 (S/N Unknown)**



**Figure 3: iPhone 4S (S/N C8PKJ6A1DTC1)**



**Figure 4: iPhone 4S (S/N DNPGX9MGDTFD)**



**Figure 5: iPhone 4S (S/N Unknown)**



**Figure 6: Nikon Coolpix S6300 (S/N Unknown)**



**Figure 7: Spidertracks S3 (S/N Unknown)**