NATIONAL TRANSPORTATION SAFETY BOARD

Vehicle Recorder Division Washington, D.C. 20594

September 20, 2019

Personal Electronic Devices

Specialist's Factual Report By Sean Payne

1. EVENT SUMMARY

Location: Flushing, New York Date: March 11, 2018

Aircraft: Airbus Helicopter AS350 B2

Registration: N350LH

Operator: Liberty Helicopters, Inc.

NTSB Number: ERA18MA099

On March 11, 2018, about 1908 eastern daylight time (EDT), an American Eurocopter Corp (Airbus Helicopters) AS350 B2, N350LH, was substantially damaged when it impacted the East River and subsequently rolled inverted after the pilot reported a loss of engine power near New York, New York. The pilot egressed from the helicopter and sustained minor injuries. The five passengers did not egress and were fatally injured. The scheduled 30-minute, doors-off aerial photography flight was operated by Liberty Helicopters, Inc., on behalf of FlyNYON under the provisions of Title 14 *Code of Federal Regulations* (CFR) Part 91. Visual meteorological conditions prevailed, and no flight plan was filed for the flight, which originated from Helo Kearny Heliport (65NJ), Kearny, New Jersey about 1900.

2. GROUP

A group was not convened.

3. DETAILS OF INVESTIGATION

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

Device Manufacturer/Model: Apple iPhone 8
Owner: Passenger S3¹

¹ Passengers are referred to by their seating position in the accident helicopter. For a seating chart, refer to figure 1 in the Onboard Image Recorder – Group Chairman's Factual Report, which can be found in the public docket for this accident.

Device Manufacturer/Model: Apple iPhone 7
Owner: Passenger S4

Device Manufacturer/Model: Apple iPhone X Owner: Passenger S6

Device Manufacturer/Model: Apple iPhone 7 Plus (1)

Owner: Unknown²

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 memory³ and can be accessed through manufacturer-provided interfaces.

3.2. Data Recovery

Figure 1 shows two of the recovered PEDs (iPhone X (left) and iPhone 8 (right)). Figure 2 shows the other two recovered PEDs (iPhone 7 plus (left) and iPhone 7 (right)). Section 4, below, discusses how each phone was evaluated and/or recovered.



Figure 1. Photo of PEDs recovered for this investigation (iPhone X and iPhone 8).

² The phone was recovered from the East River by the NYPD Dive Unit on May 25, 2018. The phone was unable to be matched to a passenger involved in the accident, or the pilot.

³ Non-volatile memory is semiconductor memory that does not require external power for data retention.

Figure 2. Photo of PEDs recovered for this investigation (iPhone 7 plus and iPhone 7).

4. DEVICE INVESTIGATIONS

4.1. Apple iPhone 8 – Passenger S3

The PED was functional but was passcode locked. The passcode was unable to be provided by the passenger's family. No data was recovered.

4.2. Apple iPhone 7 – Passenger S4

The PED was rebuilt using a surrogate device. The device powered but was passcode locked. The passcode was unable to be provided by the passenger's family. No data was recovered.

4.3. Apple iPhone X – Passenger S6

The PED arrived to the laboratory in a functional state. The device's screen was cracked. The passenger's family provided a passcode which unlocked the device. The PED contained 57 photos and 17 videos associated with the accident flight. Those photos and videos were used in the generation of the Onboard Image Recorder – Group Chairman's Factual Report, which can be found in the public docket for this accident.

The phone contained 17 emails between the passenger's business email account and FlyNYON's Director of Sales. The first email, from the passenger, was a "follow[ing] up on [a] cold-call" that the passenger had "texted over." The passenger proposed a business opportunity where his employer, a NYC located tourism operation, could

potentially "sell your tours." There was nothing in the subsequent email chain that addressed the passenger's use of the word "tour."

The passenger continued to discuss his company's ticketing locations and ticketing systems as well as a potential opportunity to run virtual reality (VR) experiences near Times Square using footage from FlyNYON's "footage/software."

Emails continued to be exchanged to set a time to either meet or call to discuss the proposed business opportunity. By the 11th email, the Director of Sales proposed getting the passenger "over here to fly." Emails continued to be exchanged setting a date and time for the flight. The passenger asked to bring a coworker and the Director of Sales stated that he would "have two seats held." The Director of Operations stated in one email, "90-minutes prior to departure will give us plenty of time to chat and show you the VR set up & get you prepared for your flight. Dress warmly! Hat, gloves, layers, etc." The Director of Sales sent one last email on the day of accident reminding the two passengers (the coworker, passenger S5, was now CC'ed on the email) to "please dress warmly."

All other electronic items found on the phone were determined to be non-pertinent to the investigation.

4.4. Apple iPhone 7 Plus

The PED was rebuilt using a surrogate device. The device failed to power in the surrogate device. No data was recovered.

Correlating with video evidence discussed in the Onboard Image Recorder – Group Chairman's Factual Report, this PED, which was recovered by NYPD divers in the East River, was determined not to have belonged to anyone associated with the accident helicopter.

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⁴ The accident flight was operated as a Part 91 flight.