

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

February 23, 2021

Onboard Image Recorder

Specialist's Factual Report by Gerald Kawamoto

1. EVENT

Location: Carlinville, Illinois
Date: May 31, 2020
Aircraft: Piper PA-28-235
Registration: N8991W
Operator: Private
NTSB Number: CEN20LA201

2. DETAILS OF INVESTIGATION

The National Transportation Safety Board (NTSB) Vehicle Recorder Division received the following Onboard Image Recorder:

Device: **GoPro Hero 4**
Device Serial Number: **C3131124878203**

2.1. Device Description

The GoPro is a compact, lightweight, point-of-view digital camera enclosed in a ruggedized housing that allows the camera to be mounted in a variety of positions using an array of supported accessories. The camera supports various recording resolutions and frame rates set by the user. The camera can be set to record still images simultaneously or independently of the video stream. The camera supports recording to microSD¹ cards.

2.1.1. Data Recovery

Upon arrival at the Vehicle Recorder Laboratory, an external examination revealed the device had sustained impact damage, as shown in Figure 1. The internally mounted 256 GB microSD card was undamaged and data was extracted normally.

¹ Secure Digital – a standardized format for removable memory devices.



Figure 1. GoPro Hero 4 as received.

2.1.2. GoPro Hero 4 Data Description

The microSD card contained 16 video files, half of which were low resolution duplicates. The last recorded file contained images from what appeared to be the takeoff portion of the accident flight. The recording started while on the ground. The camera was held in the hand of the passenger in the front right seat. The passenger moved the camera around and at various points the instrument panel could be observed. The pilot was seen holding a checklist and performed tasks consistent with a pre-takeoff checklist. Nothing out of the ordinary was noted. The pilot made a radio transmission for entering the active runway and departed approximately 3 minutes and 20 seconds into the recording. The recording ended when the camera appeared to be manually shutoff by the passenger at 5 minutes and 42 seconds elapsed time. The video did not indicate any unusual operations for this category and class of aircraft.

A GoPro Hero Session camera was seen mounted to the windshield. The field-of-view (FOV) was outward facing forward. This device was not recovered with the wreckage.

The last recorded file did not contain the accident event and in agreement with the Investigator-In-Charge, it was determined that no relevant accident data was contained on the recorded files.