

NATIONAL TRANSPORTATION SAFETY BOARD
Vehicle Recorder Division

April 5, 2019

Onboard Image Recorder

Specialist's Factual Report
By Christopher Babcock

1. EVENT

Location:	Fredericksburg, Virginia
Date:	12/14/2018
Aircraft:	Quicksilver MXL II, N350FT
Operator:	Private
NTSB Number:	ERA19FA066

2. GROUP

A group was not convened.

3. SUMMARY

On December 14, 2018, at 0740 eastern standard time, an experimental amateur-built Quicksilver MXL II, registration N350FT, was substantially damaged after it impacted terrain near Shannon Airport (EZF), Fredericksburg, Virginia. The commercial pilot was fatally injured. Visual meteorological conditions prevailed, and no flight plan was filed for the local flight, which originated around 0738. The personal flight was conducted under the provisions of Title 14 *Code of Federal Regulations* Part 91. A GoPro camera was recovered and forwarded to the NTSB Vehicle Recorder Laboratory for evaluation.

4. DETAILS OF INVESTIGATION

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

Recorder Manufacturer/Model:	GoPro Hero 4
Recorder Serial Number:	c313112

4.1. Recorder Description

The GoPro Hero 4 is a compact, lightweight, 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 1080 high definition as well as other lower quality recording resolutions at higher frame rates. The camera supports recording to micro Secure Digital microSD cards.

4.2. Damage

Upon arrival at the NTSB Vehicle Recorder Division, it was evident that the device had not sustained any heat or structural damage and the video and audio information was extracted from the camera's microSD card normally, without difficulty.

4.3. Video Files

Two .mp4 video files were recovered from the microSD card. They were both 17 minutes and 43 seconds long. Both contained 1920x1080 pixel resolution color videos recorded at 59.94 frames per second and stereo audio recorded at 48 kHz.

4.4. Timing and Correlation

Timing of the transcript is expressed as Video Elapsed Time (mm:ss), which is time from the beginning of the recording.

4.5. Summary of Recording Contents

4.5.1. Video Recording One: GOPR0342.mp4

The video began as the pilot was mounting the camera to the underside of the left wing. The camera was pointing downward and slightly left. No part of the aircraft was visible in the frame.

The engine started at 1:22 and the aircraft began taxiing at 3:00. The aircraft turned on to the runway at 10:12 and began a series of high speed taxi maneuvers and short flights along the runway followed by landing on the runway. The aircraft taxied back and repeated the maneuvers. The video ended at 17:43.

4.5.2. Video Recording Two: GP010342.mp4

The video was a continuation of the previous video as the aircraft continued its taxi maneuvers. The aircraft began its takeoff roll on the accident flight at 13:17 and appeared to be airborne at 13:22. The rpm decreased and increased at 13:37 when the aircraft began a left bank. The engine rpm increased and decreased slightly until the aircraft struck the ground. The aircraft overflowed a field and began an increasing left bank turn at about 14:07 and began descending at about 14:13. The aircraft impacted the ground at 14:34. The video ended at 17:43.