#### NATIONAL TRANSPORTATION SAFETY BOARD

Vehicle Recorder Division Washington, D.C. 20594

July 24, 2019

# **Global Positioning System Device**

# Specialist's Factual Report By Gerald Kawamoto

#### 1. EVENT SUMMARY

Location: Lakeway, Texas
Date: March 14, 2019
Aircraft: Cessna 172
Registration: N8620B
Operator: Private

NTSB Number: CEN19FA099

On March 14, 2019, about 1340 central daylight time (CDT), a Cessna 172 (Skyhawk) airplane, N8620B, impacted terrain at a road intersection while attempting to land at the Lakeway Airpark (3R9), Lakeway, Texas. The certificated flight instructor (CFI) sustained serious injuries and the student pilot sustained fatal injuries. The airplane sustained substantial damage. The airplane was registered to a private individual and was operated by the CFI as part of the Lakeway Flying Club, Inc., under the provisions of Title 14 Code of Federal Regulations Part 91 as a visual flight rules instructional flight. Day visual meteorological conditions prevailed at the time of the accident, and no flight plan was filed. The flight originated from 3R9 about 1325 CDT.

#### 2. GROUP

A group was not convened.

#### 3. DETAILS OF INVESTIGATION

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

Device Manufacturer/Model: Garmin Aera 510 Serial Number: 1QR001769

### 3.1. Device Description

The Garmin Aera 510 is a portable GPS unit designed for both automotive and aviation environments. It is capable of storing a detailed tracklog – including latitude, longitude, date, time, GPS altitude, and groundspeed information – within the unit whenever the

receiver has a lock on the GPS navigation signal. All recorded data is stored in non-volatile memory. Communication to the device is provided by a built-in USB port.

# 3.2. Data Recovery

Upon arrival to the Vehicle Recorder Laboratory, the device showed signs of exposure to biohazardous material. The device was otherwise in good condition and powered on normally. Data was extracted using laboratory tools.

# 3.3. Data Description

The data stored on the device was reviewed and the last session recorded was dated August 18, 2017. The "Track Record Mode" was set to "Off", as shown in Figure 1. When this setting is set to "Off", the track log recording function on the device is disabled. No accident-related data was recorded on the device.



Figure 1. Track Record Mode set to Off.