

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

August 22, 2019

Electronic Devices

Specialist's Factual Report by Gerald Kawamoto

1. EVENT

Location: Marion, South Carolina
Date: September 12, 2018
Aircraft: Sonex
Registration: N75SX
Operator: Private
NTSB Number: ERA18LA249

On September 12, 2018, about 1320 eastern daylight time, an experimental, amateur-built Sonex, N75SX, was destroyed when it impacted terrain while maneuvering near Marion, South Carolina. The commercial pilot was fatally injured. The airplane was registered to and operated by the pilot under the provisions of Title 14 *Code of Federal Regulations* Part 91. Visual meteorological conditions prevailed, and no flight plan was filed for the personal flight that departed the Florence Regional Airport (FLO), Florence, South Carolina, at an unknown time.

2. DETAILS OF INVESTIGATION

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

Device 1: Garmin GPSMAP 195
Device 1 Serial Number: 61026620
Device 2: Grand Rapids Technology EIS 2000
Device 2 Serial Number: N/A

2.1. Garmin GPSMAP 195 Device Description

The Garmin GPSMAP 195 is an aviation-oriented GPS. The device has the ability to store tracklog data in volatile memory via the use of a back-up battery.

2.1.1. Garmin GPSMAP 195 Data Recovery

Upon arrival at the Vehicle Recorder Division, an exterior examination revealed impact damage, as shown in Figure 1. The internal components were found damaged preventing the device from powering on normally. The extent of the damage precluded normal recovery procedures and additional attempts were unsuccessful in yielding usable data.

Figure 1. Front and back of the Garmin GPSMAP 195 as received.



2.2. Grand Rapids Technology EIS 2000 Device Description

The GRT EIS Model 2000 is a panel mounted engine monitor. The device contains a back-lit, sunlight readable display providing the operator graphical and digital displays of various engine parameters. The device also assists the pilots to lean the engine and allows for various alarms when monitored systems exceed various settings. The device does not contain any internal memory for the recording of engine information, other than retention of total engine time.

2.2.1. Grand Rapids Technology EIS 2000 Data Recovery

Upon arrival at the Vehicle Recorder Laboratory, an exterior examination revealed the unit had sustained severe impact damage. The device's memory chip was cracked and no data were recovered.

Figure 2. Grand Rapids Technology EIS 2000 as received.

