

NATIONAL TRANSPORTATION SAFETY BOARD

Vehicle Recorder Division
Washington, D.C. 20594

October 4, 2018

Global Positioning System Device

Specialist's Factual Report
By Ben Hsu

1. EVENT

Location: Chignik Lake, Alaska
Date: May 1, 2017
Aircraft/ID: Cessna 208B
Registration: N803TH
Operator: Grant Aviation, Inc.
NTSB Number: ANC17FA021

2. EVENT SUMMARY

On May 1, 2017, about 1350 Alaska daylight time, a turbine-powered Cessna 208B Grand Caravan airplane, N803TH, sustained substantial damage after impacting steep, mountainous terrain about 8 miles south of Chignik Lake Airport, Chignik Lake, Alaska. The airplane was being operated as Flight 341 by Grant Aviation, Inc, Anchorage, Alaska, as a scheduled commuter flight under the provisions of 14 *Code of Federal Regulations* (CFR) Part 135 and visual flight rules (VFR). The airline transport pilot, the sole occupant, sustained fatal injuries. Visual meteorological conditions prevailed at the airplane's point of departure, and company flight following procedures were in effect. Flight 341 departed Port Heiden Airport, Alaska, at 1305, destined for Perryville Airport, Perryville, Alaska.

3. DETAILS OF DEVICE INVESTIGATION

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

Device: Garmin GNS 530W Memory Cards
Device Serial Number: Unknown

Figure 1 shows the condition of the memory cards as they arrived in the laboratory.

3.1. Detailed Description

The Garmin Model GNS 530W is a panel-mounted GPS receiver featuring a 5-inch color liquid crystal (LCD) display and offering navigation and communication data, along with precision and non-precision approach certification in the IFR environment. The unit has a slot for a Jeppesen database (front-loading data card) containing all airports, VORs, NDBs, intersections, Approach, STAR/SIDs and SUA information.

The memory cards contain only aviation database information. They were placed in a surrogate Garmin GNS 530W device to determine the dates for which the aviation database information contained in the memory cards were valid. Figure 2 shows the surrogate unit's display with the memory cards from this accident installed. The databases contained in the memory cards were valid from April 27, 2017 to May 25, 2017.



Figure 1. Photo of memory cards

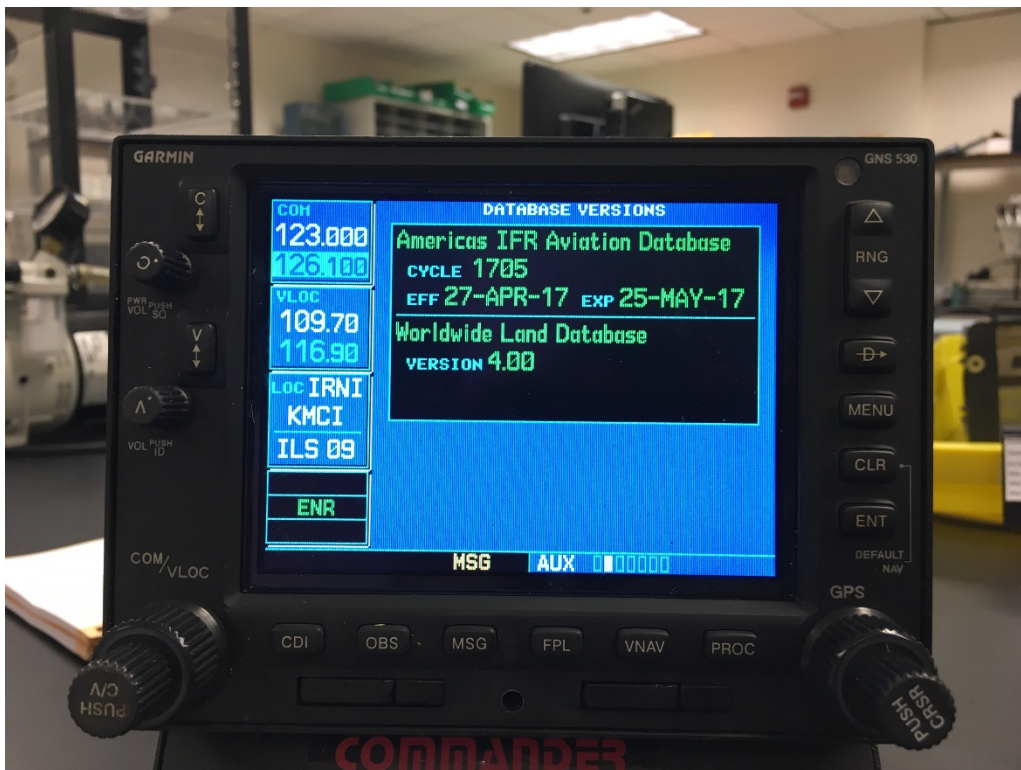


Figure 2. Photo of Garmin GNS 530 surrogate unit showing the database effective and expiration dates