

NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Washington, D.C. 20594

October 21, 2019

Global Positioning System

Factual Report
By Adam M. Gerhardt

1. EVENT DETAILS

Location: Cameron, North Carolina
Date: October 14, 2019
Aircraft: Vans Aircraft RV-4
Registration: N4332J
Operator: Individual
NTSB Number: ERA20FA009

2. SUMMARY

On October 14, 2019, at 1156 eastern daylight time, an experimental, amateur-built Vans Aircraft RV-4, N4332J, was substantially damaged when it impacted wooded terrain near the Rooster Field Airport (84NC), Cameron, North Carolina. The private 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 as a personal flight. Day visual meteorological conditions prevailed, and no flight plan was filed for the flight, which originated from Woodward Field Airport (CDN), Camden, South Carolina, at 1046, and was destined for 84NC.

3. DETAILS OF INVESTIGATION

The following device was downloaded:

Device: Garmin GPS Map 296
Serial Number: 67005151

3.1. Data Recovery

The device was undamaged and was downloaded normally using the manufacturer's software. Figures 1 and 2 show the front and back of the device.



Figure 1: Front of GPS Unit



Figure 2: Back of GPS Unit

3.2. Data Description

The data extracted included 112 track logs. The accident flight track log was identified as the track log that began on October 14, 2019, 10:44AM local. The track logged continued to 10:56AM, recording 339 data points. Figures 3 and 4 provide an overview of the

accident flight track. Additional flight tracks from October 1, 6, and 10, 2019 were extracted and plotted in Figure 5.

3.3. TABULAR DATA

Tabular data are included as Attachment 1. This attachment is provided in electronic comma-delimited (.CSV) format.

3.4. DATA DESCRIPTION

The following figures are excerpts from the downloaded data.

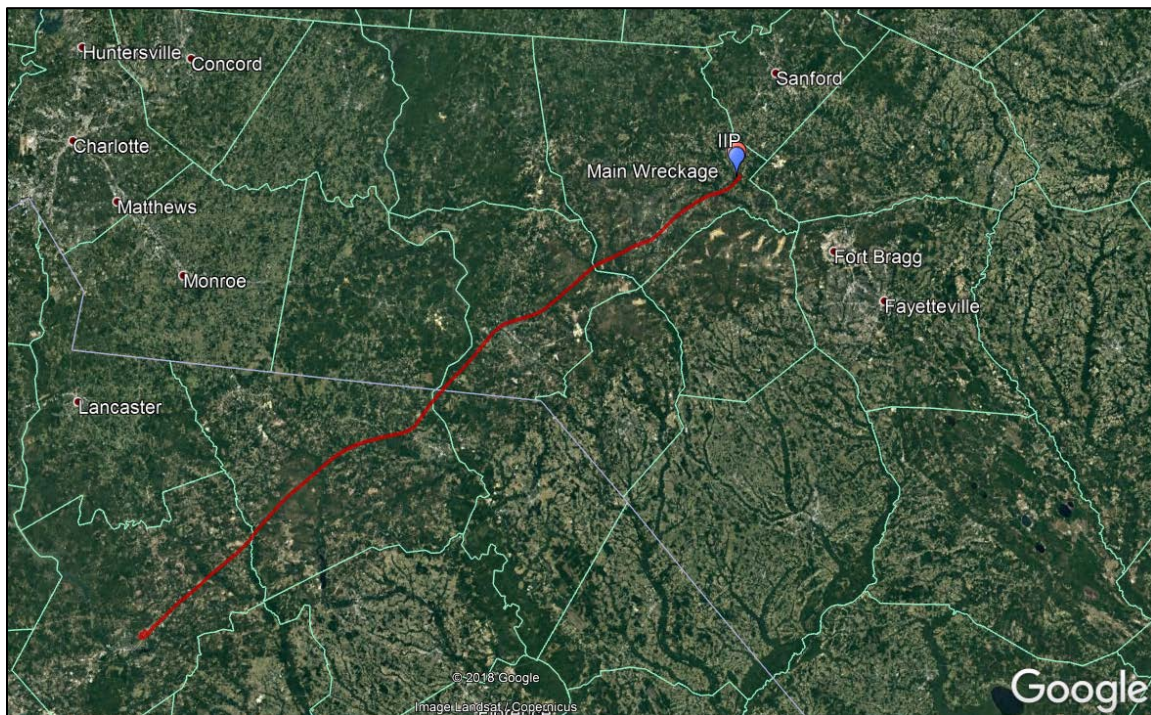


Figure 3: Complete overview of accident flight track, with the main wreckage and initial impact location (IIP) denoted

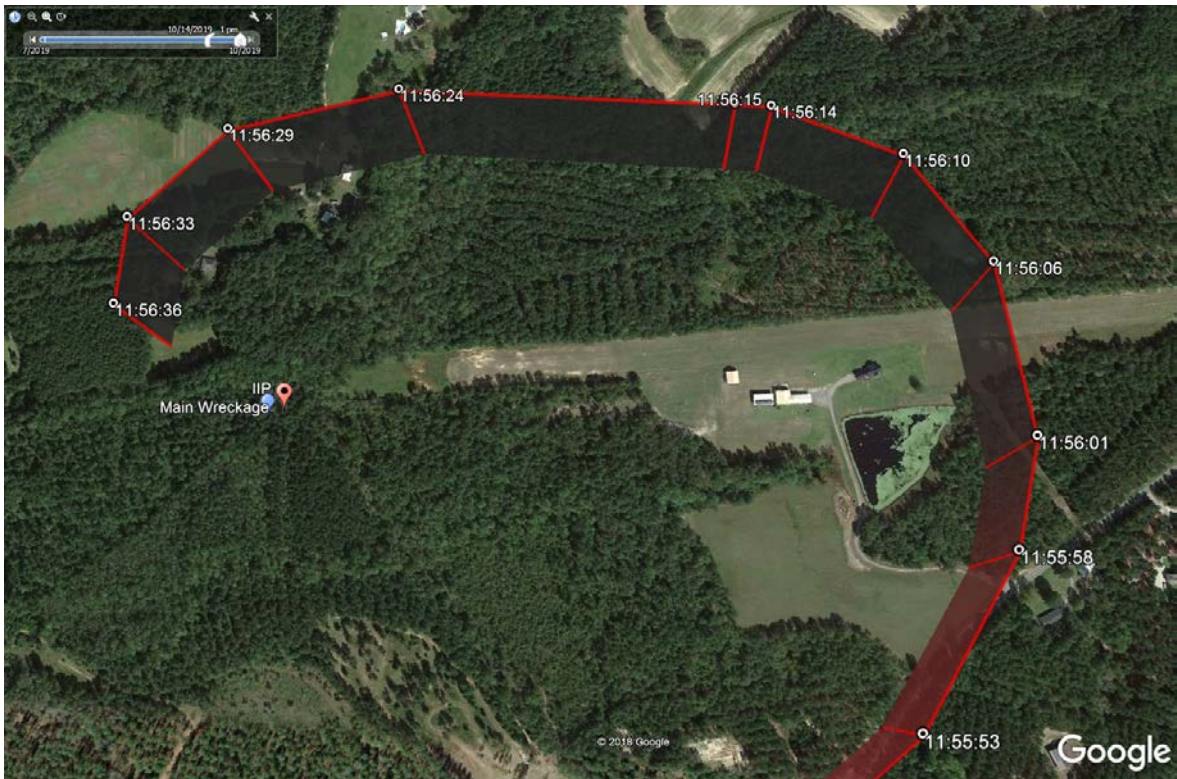


Figure 4: Overhead view of accident flight traffic pattern entry

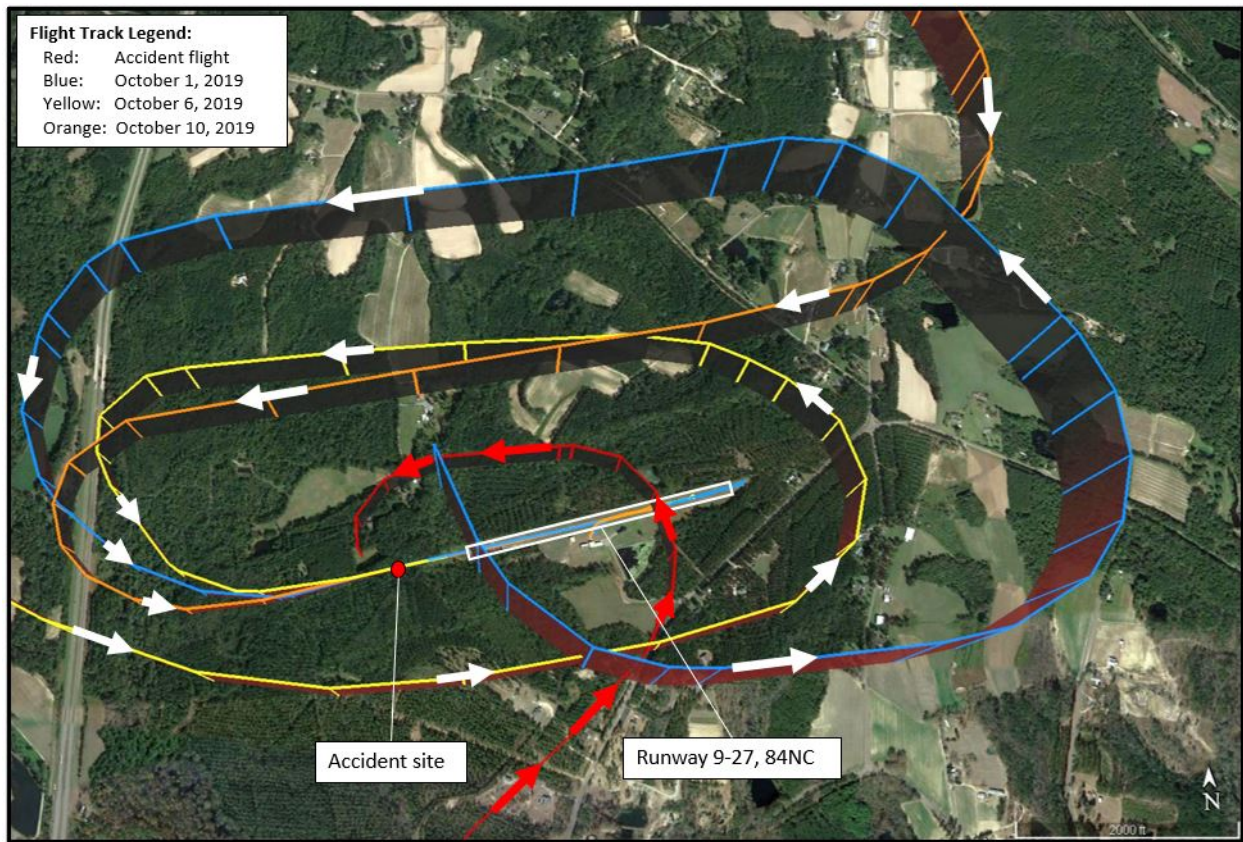


Figure 5: The Accident Flight as Compared to Three Previous Flights (Accident Flight in Red)

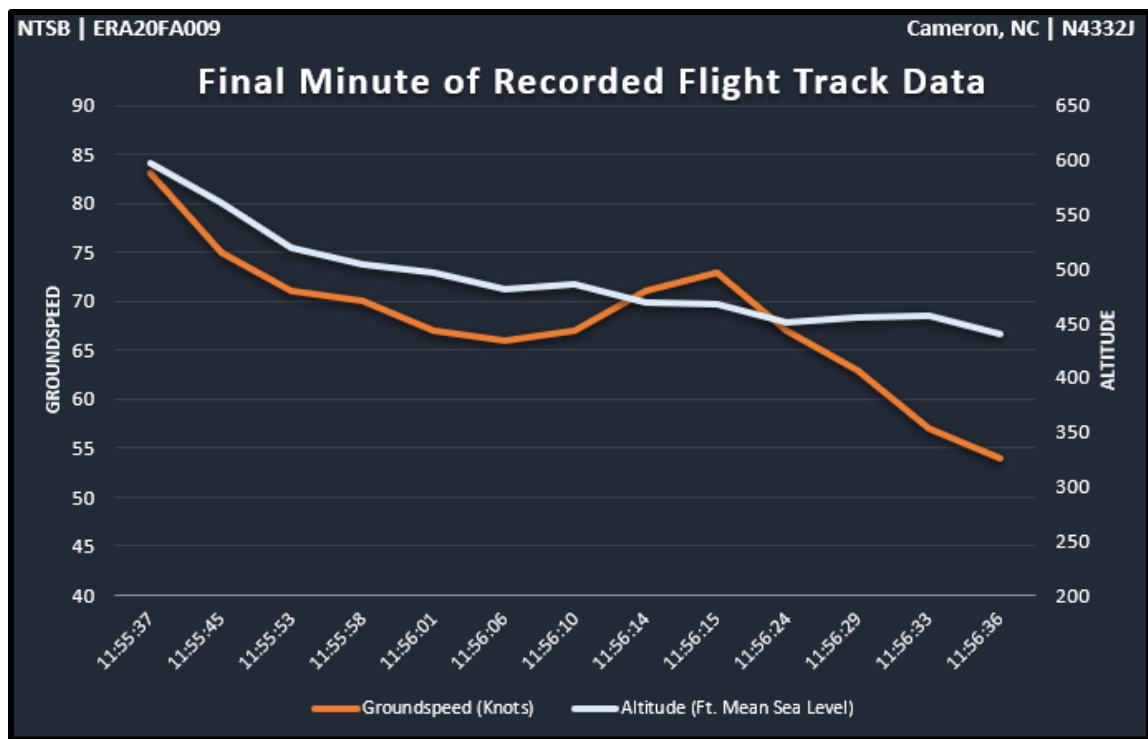


Figure 6: Final minute of recorded flight track data, groundspeed and altitude