

NATIONAL TRANSPORTATION SAFETY BOARD
Vehicle Recorder Division

January 22, 2021

Global Positioning System Device

Specialist's Factual Report
By Christopher Babcock

1. EVENT SUMMARY

Location: Moriarty, New Mexico
Date: June 29, 2019
Aircraft: LS-4A
Registration: N7LR
Operator: Private
NTSB Number: WPR19LA181

On June 29, 2019, about 1500 mountain daylight time, an LS-4A experimental glider, registration N7LR, landed off field about 10 miles south southwest of the Moriarty Municipal Airport, (0E0), Moriarty, New Mexico, and sustained minor damage. The pilot was fatally injured. The glider was registered to and operated by the pilot under the provisions of Title 14 *Code of Federal Regulations* Part 91 as a personal flight. Visual meteorological conditions prevailed, and no flight plan had been filed for the local flight that departed 0E0 about 1340.

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:	NavITer Oudie IGC
Serial Number:	201500901953

3.1. Device Description

The NavITer Oudie IGC is a handheld GPS unit marketed to the glider segment. It can display aircraft location on a moving map, aeronautical data, and navigation information. It also records flight data for use in gliding competition.

3.2. Data Recovery

The device did not appear to have sustained any damage during the accident and the data was recovered by mounting the internal microSD card in a forensic card reader (Figures 1-2). The entire 32GB microSD card was forensically imaged for analysis.



Figure 1. Front of GPS device, as received.



Figure 2. Rear of GPS device and microSD card, as received.

3.3. Data Description

The data extracted from the SD card included 137 track logs from May 13, 2016, through June 25, 2019. The accident flight did not appear to be recorded on the SD card. The 32GB image of the card was examined for header information that might indicate a recording was taking place during the accident flight but was corrupted due to a potential abnormal shutdown of the unit. No such header was found. A GoPro video from a prior flight from an unknown date was recorded as well.

The data extracted from the device's internal memory included 142 track logs from May 6, 2016, through June 29, 2019, including one that appeared to be from the accident flight. Figure 3 shows the track history from the flight overlaid on a Google Earth image of the area. Figure 4 shows the last minute of the accident flight. Figure 5 shows parametric data for the accident flight and Figure 6 shows parametric data from the last 10 minutes of the accident flight.

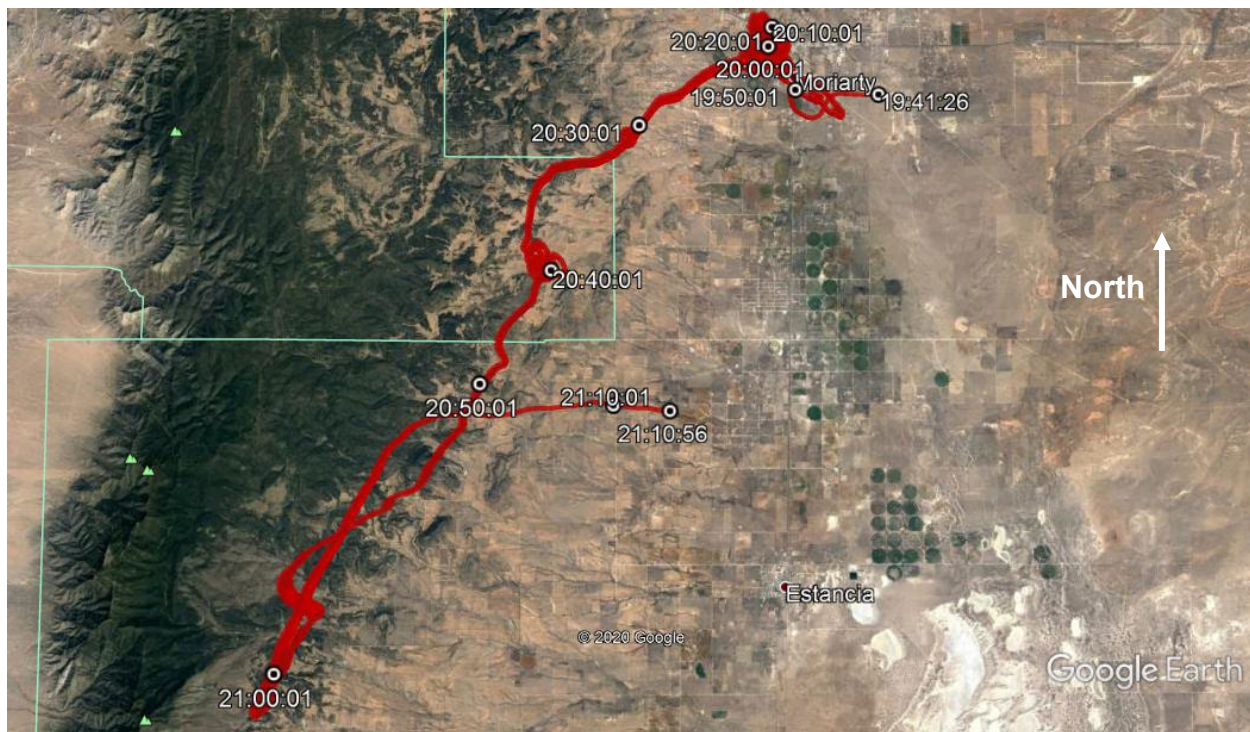


Figure 3. Flight track of the accident flight. Times in UTC.



Figure 4. Flight track of the last minute of accident flight. Times in UTC.

Rolladen-Schneider LS-4A, N7LR

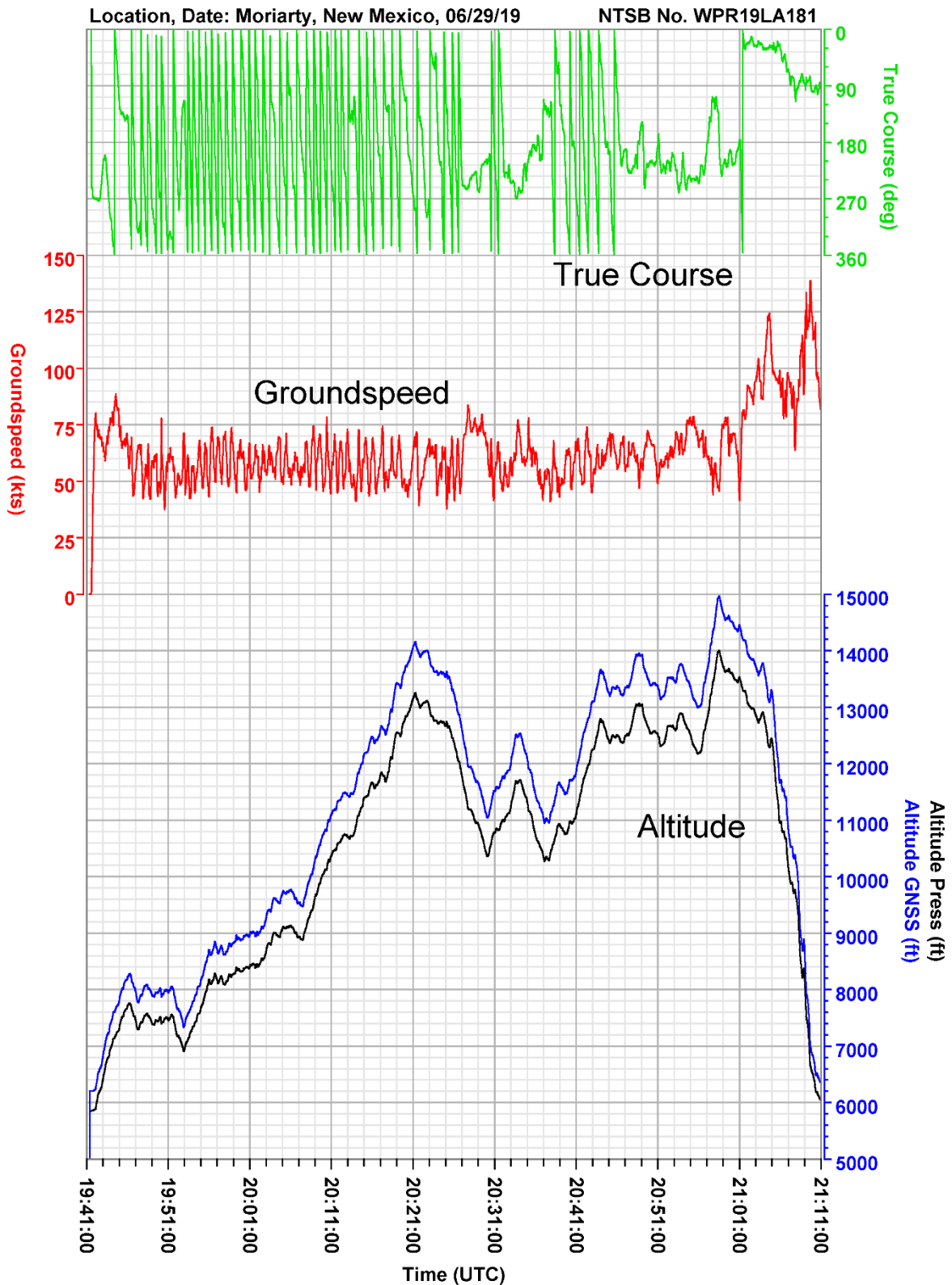


Figure 5. Recorded flight data from accident flight.

Rolladen-Schneider LS-4A, N7LR

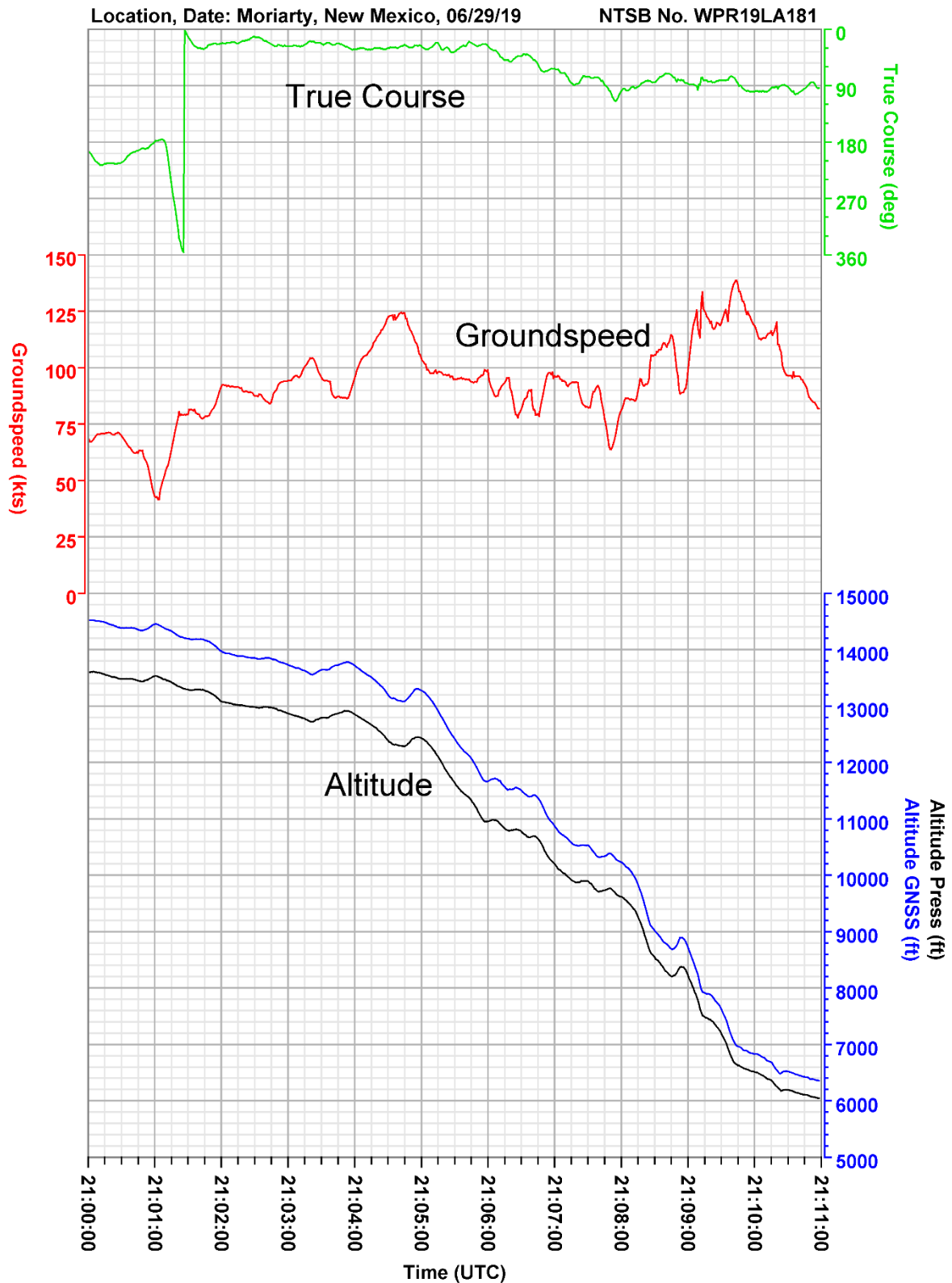


Figure 6. Recorded flight data from last 10 minutes of accident flight.