

NATIONAL TRANSPORTATION SAFETY BOARD

Vehicle Recorder Division

Washington, D.C. 20594

March 25, 2016

Global Positioning System Device

Specialist's Factual Report

By Jane Foster

1. EVENT SUMMARY

Location: Chattanooga, TN
Date: June 25, 2015
Aircraft: Peterbilt Tractor
Registration: IXP5DB9X07D672468
Operator: Cool Runnings Express
NTSB Number: HWY15MH009

For a summary of the accident, refer to the *Crash Summary Report*, which is available in the docket for this investigation.

2. DETAILS OF INVESTIGATION

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

Device Manufacturer/Model: Global Wave MT3000
Serial Number: 00419230VTI6253

2.1. Device Description

The MT3000 consists of a single, sealed, mechanical enclosure containing antennas and all other electronics. The MT3000 is capable of being powered from batteries or from a 12V or 24V vehicular power supply. The MT3000 is externally mounted on trucks or tractors. Data is reported at a rate configured by the customer based on a combination of distance, time, or events such as arrival and departures.

2.2. Data Recovery

Upon arrival at the Vehicle Recorder Laboratory, an exterior examination revealed the unit had sustained negligible damage (see figure 1). The recorded data was retrieved from TransCore Link Logistics.



Figure 1. Photo of MT3000 Terminal.

2.3. Data Description

The data extracted included 359 data points from June 1, 2015¹ through June 29, 2015. The accident event was recorded starting 04:33:03 PM EST and ending 08:30:57 PM EST on June 25, 2015. In addition, the drive from June 22, 2015, to June 25, 2015 was determined to be pertinent to this investigation and is included in this report.

2.4. Parameters Provided

Table 1 describes data parameters recorded by the GPS device.

Table 1: GPS Data Parameters

Parameter Name	Parameter Description
Date	Date for recorded data point (MM/DD/YYYY)
Time	Time (EST) for recorded data point (HH:MM:SS)
Latitude	Recorded Latitude (degrees)
Longitude	Recorded Longitude (degrees)
Location	Recorded distance from nearest city (miles)
Battery Voltage	Amount of power supplied to the terminal (Volts)
External Data	Refers to internal codes for the type of report pulled

¹ All dates and times are referenced to Eastern Standard Time (EST).

2.5. OVERLAYS AND TABULAR DATA

Figure 2 is a graphical overlay generated using Google Earth for the motor vehicle accident event. The data starts at 06:21:32 PM EST on June 25, 2015 and ends at 12:31:28 AM EST on June 26, 2015. The weather and lighting conditions in Google Earth are not necessarily the weather and lighting conditions present at the time of the recording.

Figure 3 is a graphical overlay generated using Google Earth for the southbound journey of the truck from June 22, 2015, 01:01:45 AM EST to June 24, 2015, 08:30:58 PM EST.

Figure 4 is a graphical overlay generated using Google Earth for the stopover in Florida of the truck. This shows the initial movement of the truck on the day of the accident event, June 25, 2015 from 12:30:58 AM EST to 07:45:58 AM EST.

Figure 5 is a graphical overlay generated using Google Earth for the northbound journey of the truck. The data begins on June 25, 2015 at 01:01:35 AM EST and ends on June 29, 2015 at 4:31:27 AM EST.

Tabular data used to generate figures 2 through 5 are included as Attachment 1. This attachment is provided in electronic comma-delimited (.CSV) format.

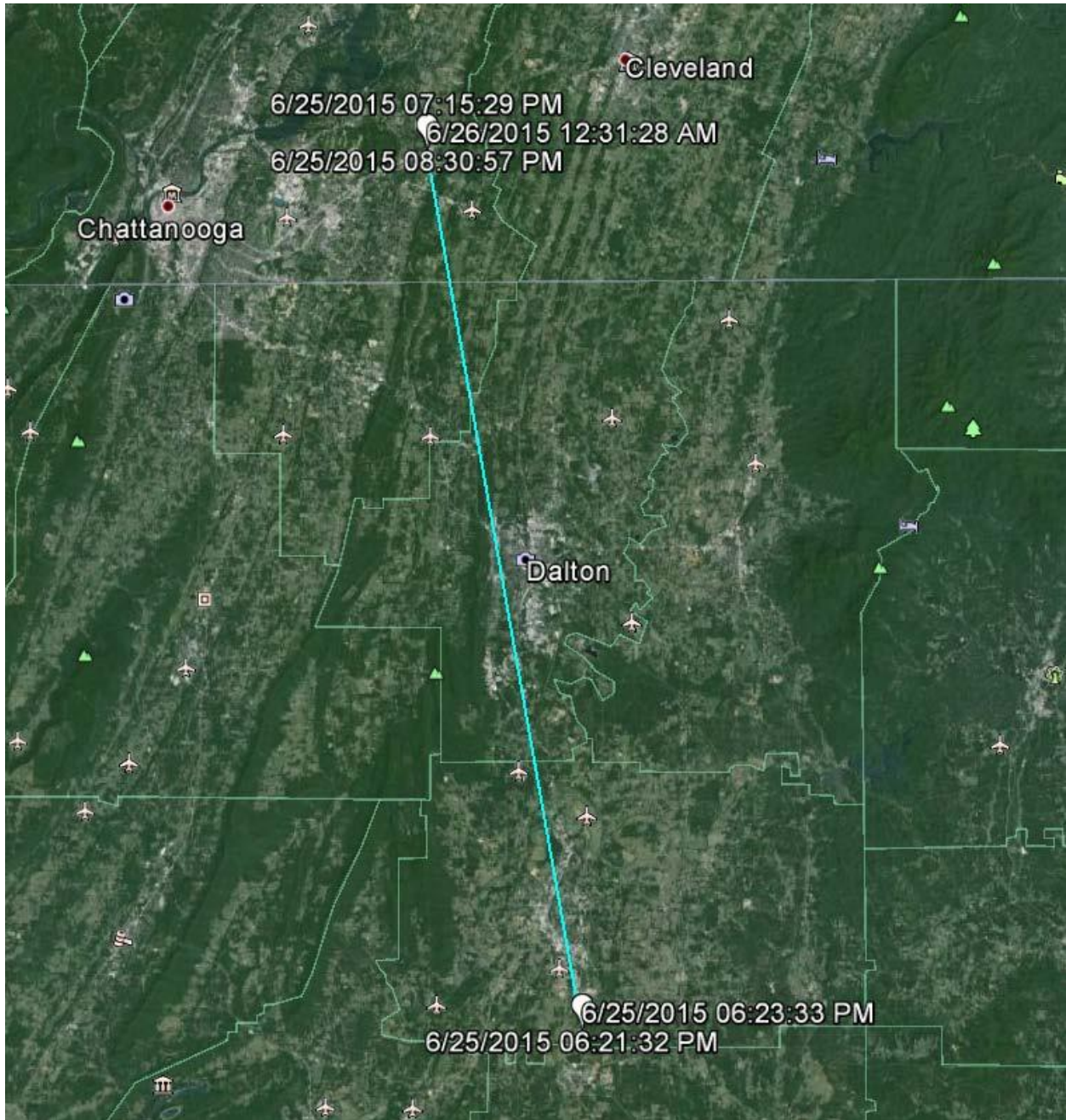


Figure 2 : Figure 2 is a graphical overlay generated using Google Earth for the motor vehicle accident.

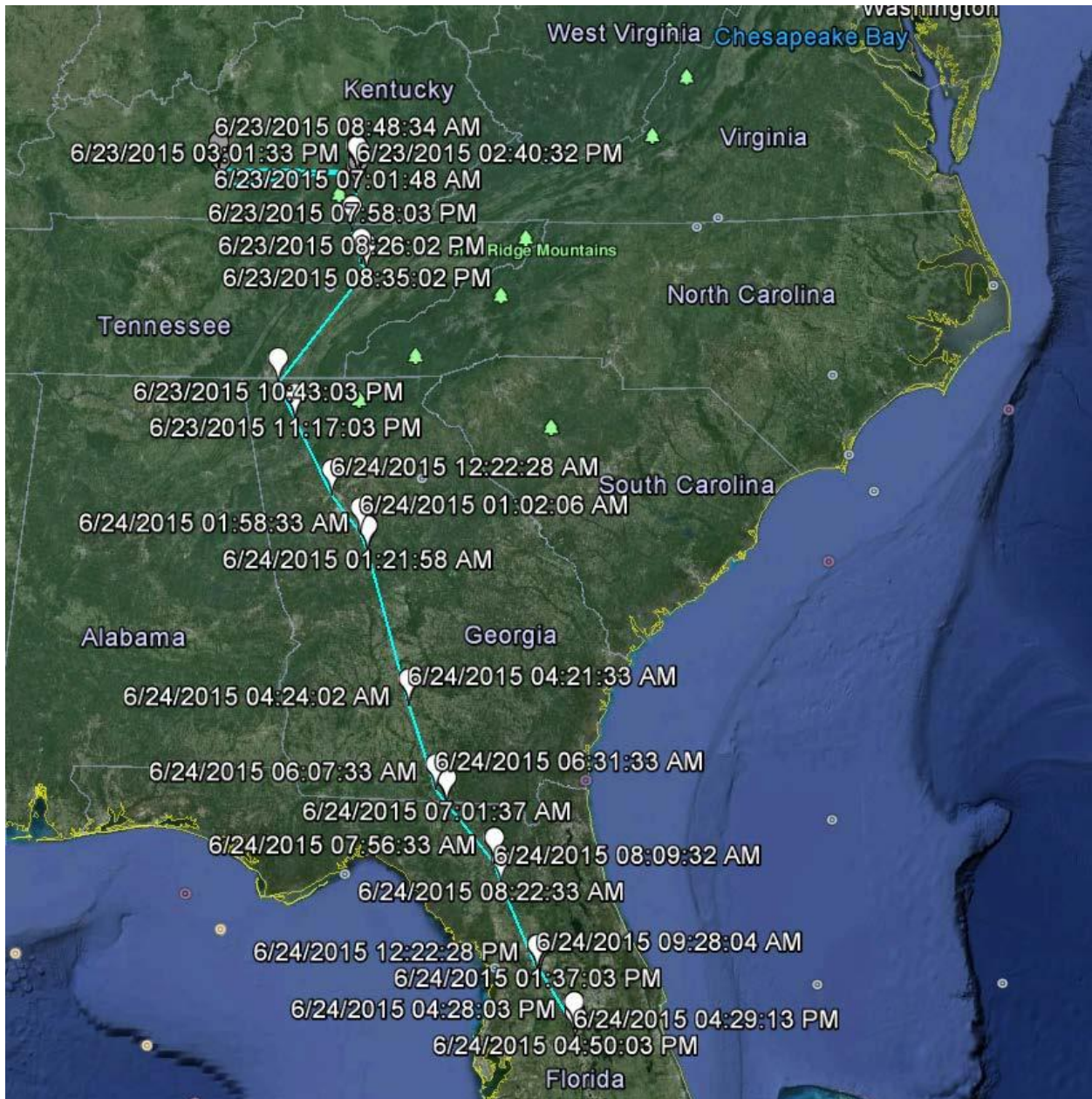


Figure 3 : Figure 3 is a graphical overlay generated using Google Earth for the southbound journey of the truck.

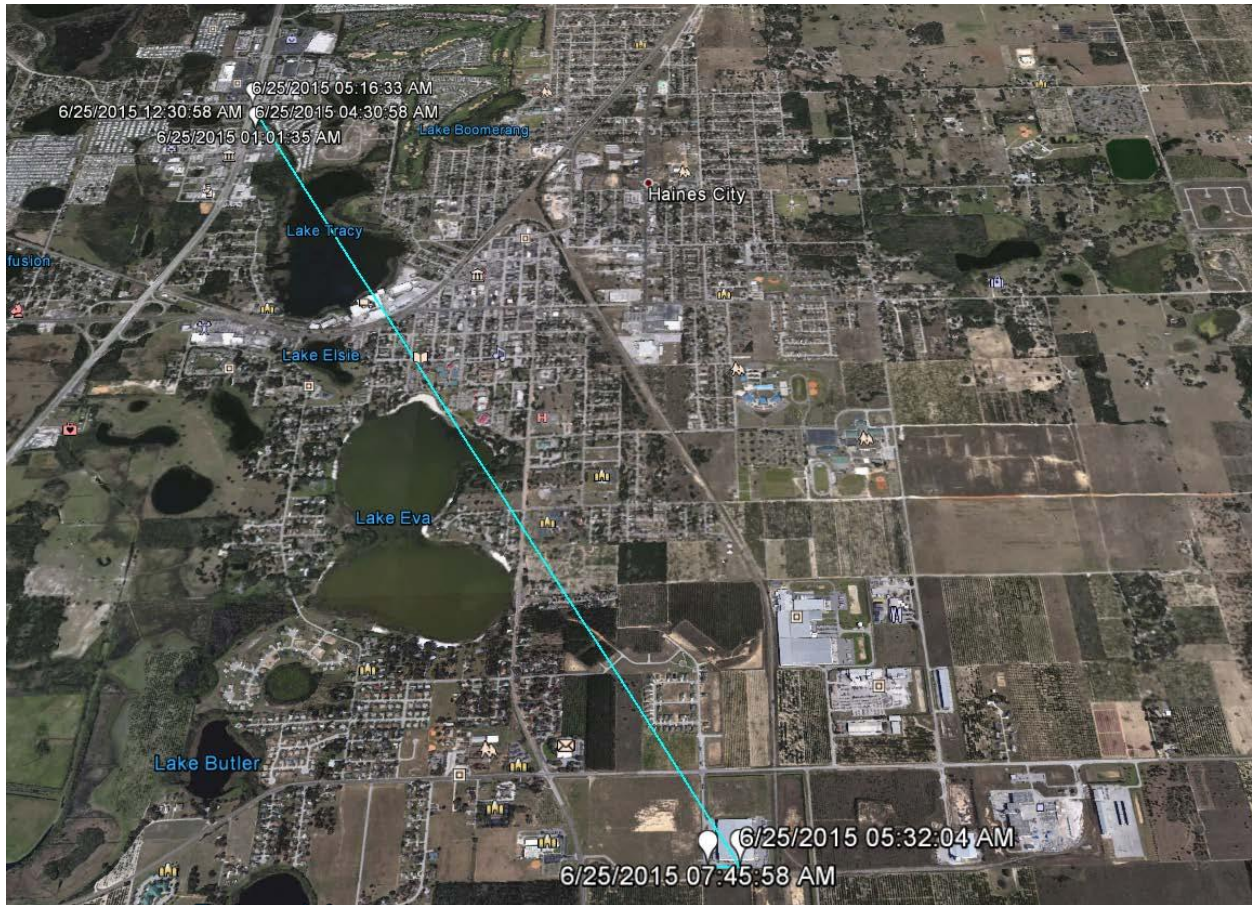


Figure 4 : Figure 4 is a graphical overlay generated using Google Earth for the stopover in Florida of the truck.

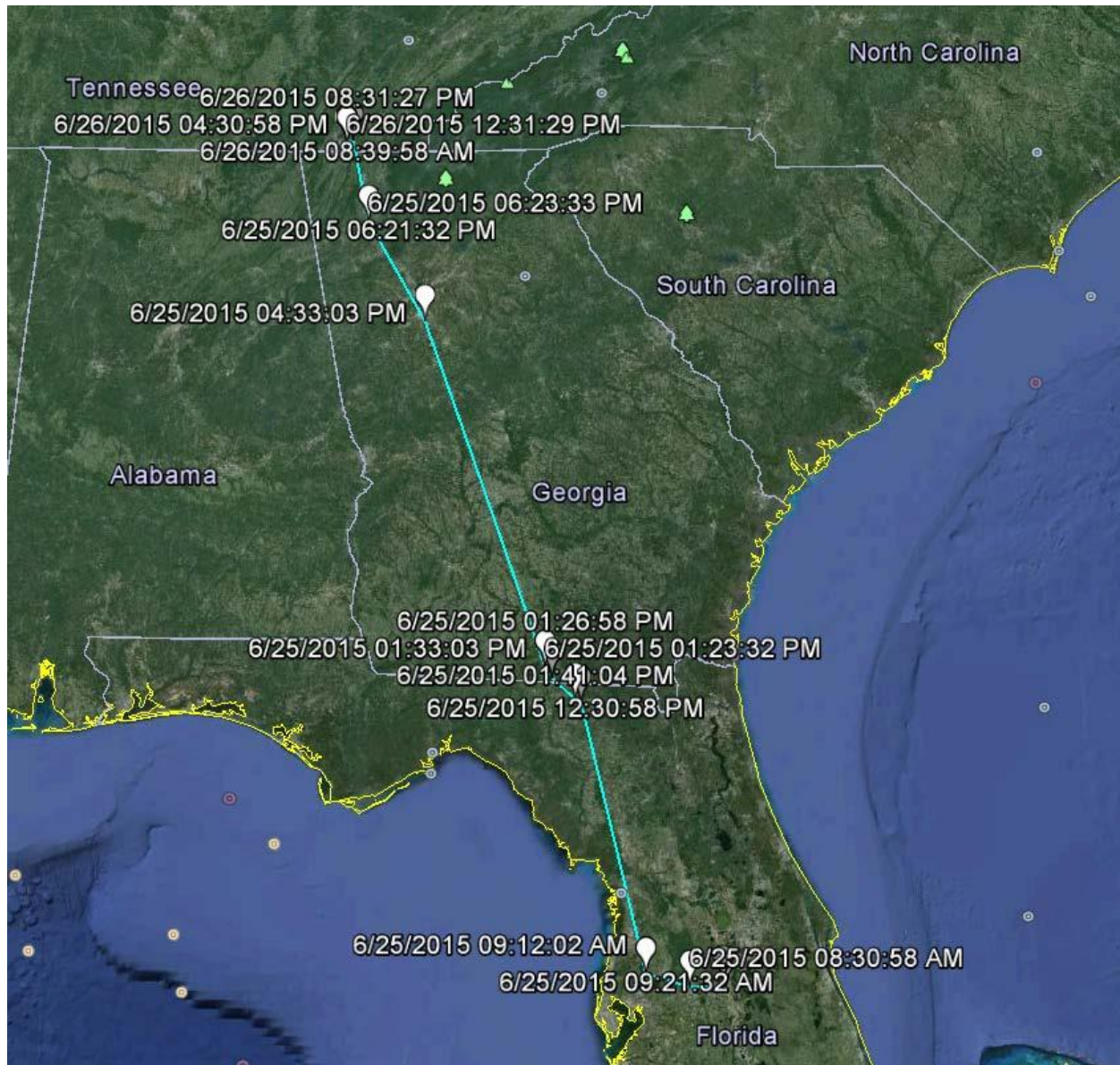


Figure 5 : Figure 5 is a graphical overlay generated using Google Earth for the northbound journey of the truck.