

NATIONAL TRANSPORTATION SAFETY BOARD

Vehicle Recorder Division
Washington, D.C. 20594

January 28, 2013

Mobile Phone Devices

Specialist's Factual Report
By Ben Xu

1. EVENT

Location: Ellicott City, Maryland
Date/Time: August 21, 2012 / 0002 EDT
Train: CSX Freight Train U813-18
Operator: CSX Corporation
NTSB Number: DCA12MR009

2. ACCIDENT SUMMARY

On August 21, 2012, about 12:02 a.m. eastern daylight time, CSX freight train U813-18 derailed 21 of its cars on a bridge over MD 144 (Frederick Road) in downtown Ellicott City, Maryland. Two non-crewmembers were fatally injured in the derailment.

3. DETAILS OF DEVICE INVESTIGATION

The Safety Board's Vehicle Recorder Division received the following mobile phone devices:

Device 1 Model: Samsung SCH-I515
Device 1 Serial Number: 990001136444643
Device 2 Model: LG-VN251
Device 2 Serial Number: 111CYLH1155216

Both the Samsung and LG devices were in good condition (Figures 1 and 2, respectively). The devices were inspected and data was downloaded using NTSB laboratory hardware and software.

3.1. Mobile Phone Device Description

Mobile phone devices generally have the capability to store logs of incoming and outgoing calls, including time/date and duration. Information regarding text messages, such as time/date and content, may also be available. Depending on the specific phone model, the user may have the option to turn off logging and/or clear the device's memory. Depending on the software applications on the device, other data such as photos, videos, and GPS location information may be recorded.

3.2. Mobile Phone Data Timing

By default, timing information recorded by the phone is based on the phone's internal clock, which is synchronized to the phone provider's tower using the local time zone.

3.3. Device 1: Samsung SCH-I515

Examination of this device showed the last outgoing call was placed at 15:15 on August 20, 2012. The last outgoing text message was sent at 23:21 on August 20, 2012.

3.4. Device 2: LG-VN251

Examination of this device showed that the last outgoing call was placed at 22:48 on August 20, 2012. The last outgoing text message was sent at 23:40 on August 20, 2012.



Figure 1: Device 1 - Samsung SCH-I515 Phone (S/N 990001136444643)



Figure 2: Device 2 - LG-VN251 Phone (S/N 111CYLH1155216)