

FINAL REPORT OF INVESTIGATION A&I E20130

March 9, 2020
Collision (Major)

W-0029

Adopted by the Washington Metrorail Safety Commission at its meeting on June 18, 2020.

Washington Metrorail Safety Commission
777 North Capitol Street, NE, Suite 402
Washington, DC 20002



FINAL REPORT OF INVESTIGATION A&I E20130

SMS 20200309#86931

Date of Event:	3/9/2020
Type of Event:	Collision (Major)
Incident Time:	08:52 hrs.
Location:	Vienna Station, Track 1
Time and How received by SAFE:	08:57 hrs. SAFE On-call Phone
WMSC Notification Time:	09:52 hrs. Via Email Notification
Responding Safety Officers:	WMATA SAFE: Yes WMSC: No Other: N/A
Rail Vehicle:	Train ID 910, 3K 6-Car Consist lead Car 3130
Injuries:	Yes
Damage:	None
Emergency Responders:	SAFE, FCFRD, MTPD, RTRA, ERT, ATC and CMNT

Executive Summary

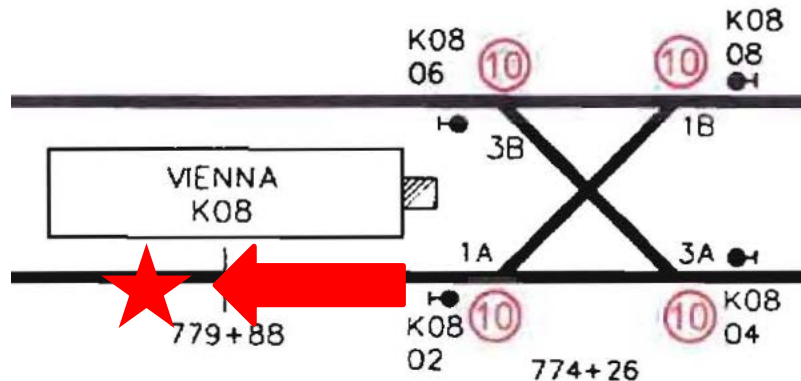
On Monday, March 9, 2020, at 08:57 hrs., SAFE received a notification from the Rail Operations Control Center (ROCC) that at approximately 08:52 hrs., at the Vienna Station, Track 1 a person was struck by an Orange Line Train ID 910 3K 6-Car Consist Lead Car 3130. Based on Closed Circuit Television (CCTV) review, the customer intentionally placed themselves within the dynamic envelope of the consist fouling the roadway. The ROCC de-energized third-rail power in the affected area. The Train Operator (T/O) performed a walk-around. Revenue service was suspended between West Falls Church Station and Vienna Station with established alternate bus shuttle services. The T/O was removed from service for post incident testing and subsequent interview by SAFE. Car Maintenance (CMNT) Road Mechanic (R/M) personnel performed an under-car visual inspection and deemed the consist safe for movement and transported it to West Falls Church Yard with no speed restrictions. Regular revenue rail service was restored between Vienna Station and West Falls Church Station at 11:26 hrs.

Note: WMATA notified WMSC On-call Phone and left a voice message at approximately 09:15 hrs. Crisis Management Center (CMC) was also notified on March 9, 2020, at 09:52 hrs., via email.

Incident Site

The incident area was located at the Vienna Station, Track 1

Field Sketch/Schematics



Investigation

Based on review of the CCTV playback of the Vienna Station platform, it revealed the following information:

- The customer was traveling alone
- As the train entered the station, the customer stepped into the dynamic envelope, intentionally placing himself in the path of the approaching consist
- There were no signs of life identified, and Fairfax County Fire and Rescue Department (FCFRD) performed a recovery operation.

SAFE performed an inspection of the station after the incident. There were no adverse safety concerns that contributed to the event. All station Emergency Trip System (ETS) and Public Address (PA) systems were reported operational.

Office of Car Maintenance (CMNT)

The CMNT personnel performed an exterior and interior inspection of the affected car and reported damage to the Train to Wayside Communication (TWC) antenna on lead Car 3130.

Vehicle Program Services (CENV)

CENV completed the analysis of the downloaded Vehicle Monitoring and Diagnostic System (VMDS) and Event Recorder (ER). Details from the data analysis are as follows:

Incident timeline:

- 08:51:03 hrs. – The consist was traveling at 27 MPH, in approach to Vienna Station. It detected the F2 Marker with the master controller (MC) in Coast.
- 08:51:23 hrs. - The consist slowed down to a speed of 21 MPH and detected the F3 Marker. The MC was rapidly transitioned through B1-B3-B4-B5 and held in B5 momentarily.
- 08:51:34 hrs. - At a speed of 18 MPH, the Train Line (TL) 82 went low, and the brake pipe dumped. The consist traveled an additional 47 feet past the F4 Marker before it stopped at 08:51:40 hrs. VMDS data retrieved showed the master controller dead man was released and console mushroom button depressed shortly after. No air horn or buzzer use was recorded.

The train responded as expected, and its performance was within design specification. No operational anomalies were noted on the VMDS fault log during the reported incident time.

Closed Circuit Television

After a review of CCTV footage, SAFE determined there were no slip/trip hazards associated with this event. The customer intentionally entered the roadway, placing themselves within the dynamic envelope parameters of the train.

Weather

At the time of the incident, the temperature was 55°F, and SAFE has concluded that weather was not a contributing factor in this incident (Weather source: National Oceanic Atmospheric Administration (NOAA) – Location: Fairfax, VA.)

Conclusion

Base on the salient facts as part of this investigation, SAFE concludes, there were no outside factors that contributed to this event. SAFE personnel inspected the station upon arrival and after the event. SAFE personnel did not identify any tripping or slipping hazards; the station was well lit, the Radio/PA system was fully operational, and the Emergency Trip Station (ETS) box was operating properly.

Additionally, CENV and CMNT performed a post-incident inspection of the affected-consist, and no operational anomalies were identified.

Considering all the facts gathered from this investigation, SAFE has no further information to disclose regarding E20130; this was an MTPD related incident, and SAFE recommends its closure.

Corrective Action

None