

FINAL REPORT OF INVESTIGATION A&I E20043

January 23, 2020

Collision (Major)

W-0033

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 E20043**SMS 20200123#85934**

Date of Event:	1/23/2020
Type of Event:	Collision (Major)
Incident Time:	17:16 hrs.
Location:	Courthouse Station, Track 1
Time and How received by SAFE:	17:17 hrs. SAFE On-call Phone
WMSC Notification Time:	18:25 hrs. WMSC On-call Phone/19:12 hrs. Email
Responding Safety Officers:	WMATA SAFE: Yes, SAFE 209 WMSC: No Other: N/A
Rail Vehicle:	Train ID 616 3K 6-Car Consist lead Car 3072
Injuries:	Yes
Damage:	None
Emergency Responders:	ACFD, MTPD, RTRA, CMNT and ACPD

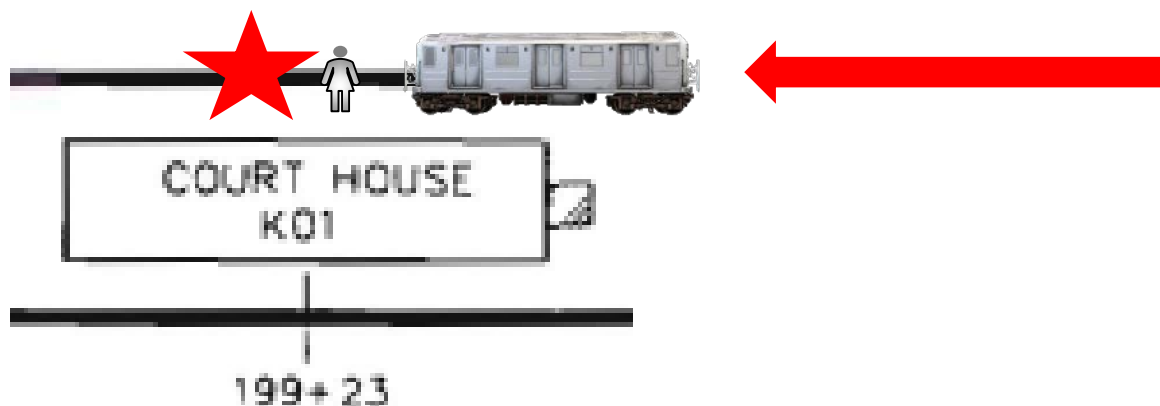
Executive Summary

On Thursday, January 23, 2020, at 17:17 hrs., SAFE received a notification from the Rail Operations Control Center (ROCC) that at approximately 17:16 hrs., a person was struck by an inbound six (6) car consist, Silver Line Train ID 616 at Court House Station, Track 1. Arlington County Fire Department (ACFD) personnel arrived on the scene. The customer was removed from the roadway and transported with unknown injuries to George Washington University Hospital (GWUH). Immediately following the accident event, 3rd rail power was de-energized, and service was suspended. A single-track operation was initiated as Orange Line trains operated through Court House Station utilizing Track 2 while bypassing the station in both directions. The consist was removed from service for post-incident investigation at West Falls Church Yard.

Note: Crisis Management Center (CMC) was also notified on January 23, 2020, at 19:12 hrs. via email

Incident Site

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



Investigation

Based on CCTV review, it was revealed that at approximately 17:13 hrs., a customer appearing to have a medical emergency subsequently walked off the Court House Station platform, Track 1, onto the roadway and into the path of an oncoming train. Prior to the accident event, CCTV footage showed the person waiting on the station platform and using an electronic device. At approximately 17:15 hrs., the customer is seen shaking abnormally, bumping their hand into a passing customer, and then taking several short jerking steps towards the platform edge. The platform edge lights can be seen flashing, announcing the approach of an incoming train. As the customer is walking to the platform's edge, another customer reaches out and tries to stop them by grabbing onto their scarf. However, the forward motion of the customer caused the customer to fall into the roadway and in front of a moving train consist. At approximately 17:16 hrs., 3rd rail power was de-energized. ACFD arrived on the scene at 17:19 hrs. Single tracking operations commenced at 17:24 hrs., between Foggy Bottom and Clarendon Stations, Track 2. At approximately 17:45 hrs., the injured customer was removed from the roadway and transported to GWUH. CCTV further revealed the injured customer sitting upright and appearing conscious on the gurney while using their cellular. At 18:35 hrs., the third rail power was re-energized between Clarendon and Courthouse Station, Track 1. The consist was transported to West Falls Church Yard for post-incident inspection and investigation by MTPD and CMNT.

Office of Car Maintenance (CMNT)

The CMNT personnel performed an exterior and interior inspection of the affected car and found no damage.

Vehicle Program Services (CENV)

CENV completed the analysis of the downloaded Vehicle Monitoring and Diagnostic System (VMDS) and Event Recorder (ER). The data analysis shows that the Train Operator released the "Deadman" on the Master controller (M/C) and depress the Emergency Brake Mushroom (E/B) at the time of the incident.

Details from the data analysis are as follows:

Incident timeline:

- 17:13:49.540 hrs. – After servicing Clarendon Station, the consist achieves all doors closed
- 17:13:54.436 hrs. – The consist lost zero speed as it moves with Master Controller (MC) in P5 position
- 17:14:48.668 hrs. – The Emergency relay was de-energized.
- 17:14:54.780 hrs. – The consist comes to a complete stop approximately 109ft towards the center of the platform.
- 17:16:36.428 hrs. – The consist was keyed down.

The consist operated as designed.

Closed Circuit Television

After a review of CCTV footage, SAFE determined that there were no slip/trip hazards associated with this event. The person appeared to experience a medical emergency that appeared to contribute to the customer falling onto the roadway within the dynamic envelope of the train.

Weather

At the time of the incident, the temperature was 45°F, and SAFE has concluded that weather was not a contributing factor in this incident (Weather source: National Oceanic Atmospheric Administration (NOAA) – Location: Arlington, VA.)

Conclusion

Based on the salient facts as part of this investigation, CCTV footage, SAFE concludes, the person appeared to have had a medical emergency and walked onto the roadway fouling the dynamic envelope of the train.

SAFE further concludes, there were no adverse safety concerns that contributed to the incident based on the post-accident station safety inspection performed by SAFE and the RTRA Station Manager (S/M). Additionally, the station safety inspection revealed that the station was well lit, the PA system was fully operational, and the Emergency Trip Station (ETS) box was operating properly based on post-incident inspection.

In closing, 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 E20043; this was an MTPD related incident, and SAFE recommends its closure.

Immediate Mitigation to Prevent Re-Occurrence

N/A

Corrective Action

No Corrective Actions required as a mitigation for this event due to what appeared to be a customer having a medical emergency, falling onto the roadway, and fouling the dynamic envelope of the train.