



Rhode Island State Police
Collision Reconstruction Unit
Case # 20-298-CRU

Executive Summary

On October 19th, 2020, the Rhode Island State Police was tasked with assisting the Providence Police Department and the Rhode Island Attorney General's Office with the reconstruction of a crash where the operator of a Yamaha Zuma scooter sustained serious injuries. The primary focus of this investigation was to determine whether Providence Police Cruiser # 24 struck the Yamaha scooter, precipitating the crash event. Members of the State Police, to include Lieutenant J. L'heureux of the Collision Reconstruction Unit, Detective Lieutenant J. Grassel and Detective A. Cybowicz of the Forensic Services Unit, and Corporal A. Kennett of the Traffic Safety Unit were assigned to this investigation.

The members of the State Police investigative team worked with members of the Providence Police Department to understand the circumstances leading up to this event and obtain all relevant information to assist with the crash investigation.

During the investigation, the members of the State Police were given full access to both the Providence Police Cruiser in question and the Yamaha scooter. The State Police investigative team was also given full access to the stop sign and post that were struck by the Providence Police Cruiser, the helmet and clothing of the Yamaha scooter operator, all the photographs of the collision scene, the body worn camera footage of the responding police officers, the witness statements, the cellular phone video footage taken by bystanders, the fixed surveillance footage from the Advanced TeleSystems Group Inc. building, the police radio transmissions, and the Bosch Crash Data Retrieval System report.

As part of the investigation, the members of the State Police investigative team examined the scene of the crash, photographed and measured the Providence Police Cruiser, the Yamaha scooter, and the stop sign and its post. The members conducted additional forensic examinations of the vehicles and the stop sign using magnification and macrophotography. The members examined the vehicle contours, damage profiles, and corresponding vehicle alignments. The members conducted a speed analysis and time and distance calculations. The members broke down the cellular phone video footage and fixed surveillance camera footage into individual video frames and linked three video angles together, synchronizing them over the same elapsed time. The members created scaled diagrams of the crash sequence to view the scene from additional perspectives. The Rhode Island Crime Lab conducted a separate forensic examination of the stop sign and the helmet of the Yamaha scooter operator, and it provided its findings to the investigative team.

The Rhode Island State Police investigation revealed that the Yamaha scooter was traveling south on Elmwood Avenue and turned west onto the southwest sidewalk of Bissell Street. The Yamaha scooter traveled along the side of the brick wall of the building at 1245 Elmwood Avenue. As the Providence Police Cruiser attempted to follow the Yamaha, the operator of the Cruiser performed an emergency braking and steering maneuver, however, the front of the Cruiser struck a vertical stop sign post on the corner. The stop sign and post broke from its mount in the sidewalk and was projected forward and downward towards the brick wall. During this time, the left side of the Yamaha scooter struck the brick wall along the south edge of the sidewalk in a minor sideswipe manner. As the stop sign and post continued downward, the center of the stop sign, in line with its metal post, struck the operator of the Yamaha scooter on the back right-side of his helmet. The contact with the signpost separated the operator from the scooter and both he and the Yamaha fell over onto the sidewalk and came to rest. The Providence Police Cruiser stopped approximately six feet after striking the stop sign and came to rest on the sidewalk of Bissell Street, to the east of the Yamaha scooter and its operator.

After an extensive examination of the scene, the vehicles, the damage profiles, the forensics, and the video footage, the Rhode Island State Police have determined that the Providence Police Cruiser did not strike the rear of the Yamaha scooter or its operator at any point during the crash sequence.

The causation of this crash was determined to be the Providence Police Cruiser striking the vertical stop sign post and projecting it downward onto the helmet of the Yamaha scooter operator traveling ahead of it.

The following report will discuss each step of the investigative process that led to these findings.