NEW YORK STATE
PUBLIC TRANSPORTATION SAFETY BOARD
RAIL SAFETY SECTION
ABBREVIATED REPORT

CASE NUMBER: 8158

DATE OF ACCIDENT: August 13, 2004

CARRIER: MTA – Metro North Railroad

TYPE OF ACCIDENT: Collision

On Friday, August 13, 2004 at approximately 7:10 a.m., the engineer of southbound Metro North Railroad commuter train #610 passed a stop signal and struck the bumper block at the end of station track #109 in the Grand Central Terminal, Manhattan. The collision caused the bumper block to topple, thereby lifting the lead truck of head car #8204 high enough above track level so that the car roof struck and damaged the overhead electrical conduits. The train also struck the pedestrian walkway at the end of track #109. Of the approximately 630 customers on board at the time of the accident, only three passengers were treated and released for minor injuries by Emergency Medical Services.

The Accident:

Train #610, consisting of eight M-1 coach cars and being operated by the engineer from lead car #8204, departed from Metro North Railroad’s South East Station on the Harlem Line at approximately 5:47 a.m., bound for Grand Central Terminal. The eight car train The engineer reported that he performed the required pre-trip brake tests and took no exception to the equipment, except for a minor problem with the public address system volume being too low. The trip south to Grand Central Terminal was normal and uneventful. The event recorder data of the entire run of train #610 shows the train was operated properly without speed or other operating rule violations prior to the bumper block collision.

Train #610 made its second-to-last scheduled stop at 125th Street in Manhattan on time and continued southbound through the Park Avenue tunnel on track #2. Once the train crossed south of 59th Street, the train entered restricted speed territory and traveled at a speed no greater than 10 mph. The route assigned to train #610 by the Rail Traffic Control was south on track #2, to GCT Lower Level for track F, then to platform on station track #109.

As train #610 was arriving at the platform, a Metro North Railroad mechanical foreman was walking to his office, which was located near the end of track #109. The foreman stated he observed the train arriving and noticed that the train was not stopping where it should have, and he watched as the train crashed into the bumper block. He then notified Rail Traffic Control to report the accident. The head car toppled over the bumper block, lifting the lead truck into the air above the rails. The roof of the car struck the overhead conduits that ran perpendicular to the station tracks and contained electrical and public address wiring. Other than bent conduit, there was no other damage to the overhead structure. As the train continued forward, the lead truck came down on the road bed, past the end of the running rails. The lead car traveled a distance of
approximately twenty-five feet from the end of the rails until the front of the car came into contact with the cement pedestrian walkway at the end of track #109. Other than the lead car which ran off the end of the rail, no other cars in the train de-railed. A brief smoke condition occurred after the contact shoes came in contact with ground, causing an electrical arc. The crew estimates that the doors to the train remained closed for approximately a minute after the accident, until the assistant conductor keyed open the doors at the direction of Metro North mechanical personal who were now gathering on the station platform. At this time, the customers began to exit the train and within five minutes, all of the customers had exited the train.

Event Recorder Data:

The event recorder download, analyzed later that day showed that at the time of the impact with the bumper block, the train was traveling at 11 mph. Also, in the moments leading up to the collision, the engineer did not apply any brakes. The mechanical foreman, who witnessed the collision, stated that after the collision, he observed the engineer leave the operating cab and asked him if he was okay; to which the engineer replied “yes”. The mechanical foreman then said the engineer left the area and walked up a staircase that was adjacent to the pedestrian walkway.

Interviews:

Post accident interviews of the crew of train #610 were conducted by the Superintendent of Operations on the day of the accident with a MTA Police Detective observing. The three crew members were interviewed separately. The first interview was with the engineer who, when questioned about the accident, stated “I really don’t know what happened. I must have blacked out. I remember thinking that the conductor wanted me to stop the train by the staircase (approximately two car lengths north of the bumper block). I saw the staircase, and then I don’t remember what happened until I saw people looking at me and asking me if I was OK”. The engineer stated that at no time while operating the train did he feel ill or faint nor was he on any medication. After the accident, he said he went to the bathroom, and then to track 25 (Track 25 is the name given to an office manned by Metro North employees in GCT that controls rush hour problems and emergencies.). When questioned on his activities prior to reporting for duty on August 13th, the engineer responded that he had approximately six hours of sleep, lying down around four to five o’clock that afternoon. The engineer’s last work physical was conducted in March 2004 and he was considered to be in good physical condition. When asked if he had ever experienced a loss of consciousness prior to this occurrence, the engineer responded that this was the first such occurrence. Additional questions regarding his activities as he approach the terminal bumping block were repeatedly replied to with “I don’t recall”.

The next interview was with the conductor, who said he was riding in the north end of the train when the train arrived at GCT. He stated that he felt a jerk, a bigger jerk, and then a sudden stop. He tried to contact the engineer on the radio and the PA, but received no reply. Not knowing what had transpired, he stated he did not want to open the doors. The conductor sent the assistant conductor to the head end to investigate. Shortly after the assistant conductor left to investigate, the doors on the train opened and the conductor stepped onto the platform and proceeded to walk to the south end of the train to see what had happened. He said he saw smoke, and customers were asking him what had happened, to which he answered he did not know. When he got to the front of the train, he could see that the head car was off the rail and
into the bumping block. He said he called the RTC on his radio and reported a smoke condition on track #109. He further recalled seeing the assistant conductor aiding one of the passengers and then saw the engineer, but did not get a chance to talk to him.

The assistant conductor was interviewed last. He stated that as the train arrived in GCT, he felt a big hit, and heard a bang. Customers were asking him what happened, to which he replied he did not know. He stated he looked out the window, and saw Metro North employees on the platform signaling for him to open the doors, so he did. The assistant conductor exited the train and walked south on the platform. He saw the engineer, he asked him if he was ok, and the engineer told him that he was. The assistant conductor next asked the engineer what happened, and the engineer replied he didn’t know. The assistant conductor then said he aided a customer who had a cut on his head.

Damage:
The damage to car #8204 included damage to the coupler head, the pilot, the track sensors, the L-1 shoe mechanisms, the truck traction motor, the truck air bag, car body damage to the left front side of the car and to the top of the car where it struck the conduits and brackets. The bumper block on track #109 was destroyed. The damage to track and surrounding area included bent electrical conduit and support brackets, a damaged fiberglass foot ladder (used by the MNR maintenance department) which was chained to the fence for storage at the end of track #109. Track #109 was restored to normal service at 2:24 p.m. on the afternoon of the accident.

Post Accident Testing:
The engineer and conductor were taken to Bellevue Hospital for post accident FRA drug and alcohol screening. Both employee test results came back negative. The engineer did not complain or claim any medical condition after the accident and there were no exceptions taken to his physical appearance either prior to or immediately following the accident.

Injuries:
Three customers were treated at the scene by NYC EMS for minor injuries and released. The most severe injury was a cut forehead.

Engineer’s History:
The engineer was promoted to Train Service Locomotive Engineer on July 14, 1999. He was suspended on three different occasions prior to this accident; twice for speeding and once for running a stop signal. The first incident occurred on May 13, 2000 when the engineer was charged with exceeding the maximum speed limit and damaging the catenary wire. As a result, the engineer signed a waiver and agreed to accept a 30 day suspension. The second incident occurred on July 5, 2000 when the engineer passed a signal displaying stop. After a formal investigation, the engineer was given a six month suspension and decertified as a Train Service Locomotive Engineer. The engineer served his suspension and was recertified as a Train Service Locomotive Engineer on July 31, 2001. The third incident occurred on March 1, 2002 when the engineer was again charged with speeding. The down load of his train’s event recorder showed that the engineer exceeded the maximum authorized speed by 20 mph at five different locations on the Harlem Line. After a formal investigation, the engineer was dismissed by Metro North Railroad for his actions. The dismissal was later overturned by a mediation arbitrator and the engineer was decertified and suspended for one year beginning on March 17, 2003. The engineer served the suspension time and was recertified
as a Train Service Locomotive Engineer on July 31, 2004.

For his actions on the morning of the August 13, 2004 accident, the engineer was immediately decertified as a Train Service Locomotive Engineer. He was later charged with “failure to control speed of train; violation of terminal stop indication; and violation of restricted speed” and was dismissed in all capacities by the Railroad.

Conclusion:

The Public Transportation Safety Board staff finds that the most probable cause of this accident was the train engineer’s failure to maintain control of the train as it approached the end of the authorized section of station track #109 at the Grand Central Terminal. The Public Transportation Safety Board staff concurs with the disciplinary actions taken by Metro North Railroad with regard to the engineer’s actions on the morning of the 13th of August, 2004 and makes no further recommendations regarding this accident.

At the request of the Public Transportation Safety Board, a copy of this case will be served on the arbitrator for comment. Finally, the Board also wishes to be notified should the decision to terminate this employee be scheduled for arbitration.

NAME OF INVESTIGATOR: Robert Maraldo       DATE SUBMITTED: October 28, 2004

SIGNATURE:______________________________
Jerry Shook, Director
Rail Safety Bureau