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

CASE NUMBER: 8404

DATE OF ACCIDENT: February 28, 2005

CARRIER: MTA – New York City Transit

TYPE OF ACCIDENT: Bumper Block Collision

ACCIDENT SYNOPSIS:

On Monday, February 28, 2005, at approximately 4:50 a.m., the train operator of the 0448 interval "S" (TSQ/G-S) 42nd Street Shuttle, ran a fixed signal displaying stop and struck the bumper block at the end of the #3 pocket track at the Grand Central Station. The impact destroyed the front coupler on car #1956, and caused the front axel of the #1 truck to rise off the tracks and derail. The train operator, who was operating from the cab on the eastbound end of the train, claims to have lost consciousness as he was entering the station. Three passengers who claimed to be on board the train at the time of the accident reported that they were injured. Two claimed back and neck injuries and the third refused medical attention. The train operator also claimed he suffered back and neck injuries. All those taken to Bellevue Hospital were transported by Emergency Medical Services.

New York City Transit operates four car shuttle trains under 42nd Street between the Times Square Station and the Grand Central Station in Manhattan. NYCT Shuttle trains operate under One Person Train Operation rules (OPTO). The train crew consists of two train operators, positioned in the cabs at each end of the train which facilitates movement by never having to change operating positions. OPTO trains have no conductors. The 42nd Street Shuttle makes only two stops and each half mile trip takes approximately 90 seconds. The train reaches a top speed of approximately 30 mph before the train operator must begin his deceleration procedures. The bumper block located at the end of the pocket track is made of cement shaped with a 45 degree wedge with an anti-climber pad and spring anchored on the top in the center facing the train.

Preceding the accident, the train operator left the Times Square Station at approximately 4:48 a.m. Just before entering the station, the train passes a series of signals designed to reduce speed and time the approach into the station at no more than 10 mph. If the speed is greater then 10 mph, a wayside tripping device will strike a cars trip cock resulting in an automatic brakes-in-emergency application. No strike marks were found on any of the wayside tripping devices associated with these signals. The last fixed stop signal (#1681) has a fixed stop arm tripping device which is located near the end of the track limits. This tripping device did show evidence of being struck by a trip cock on car #1956 (evident by missing paint on the trip arm). The stop arm of the fixed signal is located just 18 feet from the bumper block. The consist went into brakes-in-emergency just before the #1 end of car #1956 impacted with the bumper block, at a speed of approximately 10 mph.

The impact caused the anti climber on the #1 end of car #1956 to ride up the 45 degree angle of the front of the bumper block and remain suspended above the rail. Both the #1 and #2 wheels on the front axle were derailed approximately three inches above the rails. Damage to the #1 end of car #1956 included the coupler drawbar, coupler head electrical portion, and the center section of the anti-climber.

The anti-climbers between the other three cars of the train were touching, meaning that the shear pins in the H2C couplers had sheared. This is a designed feature of the H2C coupler to help absorb the forces of excessive impacts. Three passengers claimed that they were on board the train at the time of the accident. Two claimed back and neck injuries and the third refused medical attention. The train operator also claimed he suffered back and neck injuries. All those taken to Bellevue Hospital were transported by Emergency Medical Service.

In his post accident statement, the train operator stated that as his train was entering the station, he became disorientated and could not remember any events until the train operator from the west end of the train was helping him out of the east cab. In his post accident statement, the train operator from the west end, who was not involved directly with the collision, stated that from his position at the rear of the train he could tell the train was entering the Grand Central Terminal and estimated the speed to be approximately 10 mph. He noticed that the train had passed the normal stop location and he was attempting to contact the other train operator by signaling him with a long buzzer on the intercom panel when he heard a load bang and felt the train jerk to a stop. He stated that he keyed open a crew door at his end of the train and walked the platform to the front of the train and witnessed train operator still in his cab in the east end. He then keyed the passengers off the train while the east end train operator went to make contact with the control center via a telephone located in the Rapid Transit Operations (RTO) Crew Room. Both train operators were required to submit to Post incident Drug and Alcohol testing. The results were negative for both crew members. Post accident signal testing revealed nothing that was contributory factor to the accident.

A copy of the telephone recordings from the morning of the accident was reviewed by PTSB staff and revealed that the train operator involved in the accident had called the Control Center at approximately 5:00 a.m. to report the collision with the bumper block. As his telephone call was being transferred to the appropriate Subdivision Desk Superintendent, the train operator is heard speaking to another individual in the RTO crew room, and makes the following statement, "Yeah, I fell asleep at the throttle. I don't have a job now. I don't think I'm going to keep this job after tonight. They are going to reclassify me."

The train operator's normal days off are Friday and Saturday. He worked 12 hours overtime on Friday and was off on Saturday. This was the second day of the work week for the train operator. The train operator reported for his Monday shift at his normal time, 11:30 p.m. on the evening before the accident. The train operator has worked for the NYCT since 1987, and has been a train operator since April of 1993. Since becoming a train operator, he has accumulated five lateness disciplinary violations resulting in two suspensions totaling four days. He has one AWOL disciplinary violation which resulted in a one day suspension. He also has three disciplinary violations which involve train operation; specifically for overrunning a station and for a signal overrun. The above mentioned disciplinary violations were accepted by the employee except for his last two disciplinary violations involving another lateness which occurred on November 14, 2004 and a charge of Improper Performance of Duty on Nov. 23, 2004 which he is appealing. The

improper performance charge was the result of the train operator exceeding the speed limit through an interlocking, causing an automatic brake-in-emergency application activated by a wayside wheel speed detector. The train operator was given a 25 day suspension in accordance with NYCT's Progressive Discipline schedule.

Damage in this accident to the R62A car equipment was not limited to the head car (#1956) which struck the bumper block. The three rear cars (#1937, 1953, and 1941) all required repairs to the H2C couplers. Damages included the drawbars, coupler head pneumatic connections and replacement of shear pins. Additionally, the head car had damage to the anti-climber and a complete coupler replacement. The total amount to repair the four car consist was approximately $100,000. The damage reported to track (bumper block) as a result of this accident was minimal.

The NYPD arrested two of the three persons claiming neck injuries on out-standing warrants. Police also reported that the two entered their train after the accident and falsely claimed to be injured. Since the accident, the train operator has not been back to work, claiming he is suffering from a service related injury. The train operator was suspended from duty by the Division of Rapid Transit Operations on April 5, 2005. The Statement of Facts on the Disciplinary Notification charges the train operator with the following: "On 2/28/05, while operating the 0448 "S" TSQ/G-S, entering Grand Central Station you operated the train improperly by overrunning the stop sign and the fixed stop and then colliding with the bumper block. This reckless operation caused injuries to five customers (sic) and yourself. In addition it caused property damage to both equipment and track."

The NYCT Office of Labor Relations RTO/DCE Disciplinary Notification recommended penalty for the train operator is dismissal. The train operator is appealing this disciplinary action as well.

CONCLUSION

The Public Transportation Safety Board staff finds that the most probable cause of this accident was the train operator falling asleep at the controls resulting in his failure to maintain control of his train and overrunning the stop sign and the fixed stop; eventually colliding with the bumper block of station track #3 at the Grand Central Station. The Public Transportation Safety Board staff concurs with the progressive discipline proposed by New York City Transit with regard to the train operators actions on the morning of February 28, 2005 and makes no further recommendations regarding this accident.

NAME OF INVESTIGATOR: Robert Maraldo DATE SUBMITTED: April 27, 2005

SIGNATURE:_____

Jerry Shook, Director
Rail Safety Bureau