PUBLIC TRANSPORTATION SAFETY BOARD
ABBREVIATED BUS ACCIDENT REPORT

1. CASE: 9007
2. PROPERTY NAME: MTA Bus Co.
3a. ACCIDENT TYPE: Mechanical Failure
3b. Accident Severity Index: 0.0
4a. DATE: June 30, 2006
4b. TIME: 3:10 pm
5. ACCIDENT LOCATION: Brooklyn Battery Tunnel at Brooklyn side
6. TOWN/CITY/BOROUGH: Brooklyn
7. SUMMONS: None
8. BUS NUMBER: 731
8a. YEAR: 1998
8b. MAKE: Orion
9. NUMBER OF INJURIES: 0
10. FATALITIES: 0
11. HOURS OF SERVICE: 8 hrs and 33 min in last 24 hrs/59 hrs and 15 min in last 7 days
12. SYNOPSIS:

At approximately 3:10 pm, MTA Bus Company (MTA BC) bus #731 was moving in the #1 travel lane northbound in the Brooklyn Battery Tunnel when the left rear outer wheel separated from the rear axle. The wheel rolled forward into the #2 travel lane and came to rest against the curb. No injury claims were reported. The bus sustained no damage. The bus driver claimed a mechanical failure. The NYC Police responded to the accident and no summonses were issued.

In the vicinity of the accident site, the northbound tube is a 25 foot wide, one way road divided by a full barrier yellow pavement marking, accommodating two northbound travel lanes. Stopping is prohibited in the tunnel. The roadway is illuminated by standard electrical lighting. The weather was clear and roadway dry. The posted area speed limit is 30 mph.

Bus #731 is a 1998 Orion transit bus with a seating capacity of 40 passengers. A review of the bus records indicated that Preventive Maintenance Inspections (PMI) are performed at Spring Creek Depot at regular 4,000 (+500) mile intervals. The most recent PMI was completed on June 9, 2006. The bus had traveled 1,275 miles at the time of the accident. A post accident inspection of bus #731 was conducted by the Public Transportation Safety Board (PTSB) staff in conjunction with NYCT and MTA BC on July 3, 2006. The inspection revealed that the left rear outer wheel became loose and then separated from the axle due to the loss of the clamp load by the wheel set. Further investigation indicated that the mating surfaces of the left rear wheels were not properly cleaned. MTA BC had implemented new procedures, prior to the incident, regarding the proper way to rebuild the hubs and drums and ensure the mating surfaces were properly cleaned. The frictional capacity depends on the surface condition, with such items as mill scale, oil, paint, or special treatment affecting the value of the coefficient of friction. The maintainer, who performed the defective job was out on a long term disability when the new procedure was implemented and he did not receive a proper upgrade of training that he had missed while absent.

The bus driver was initially hired by Command Bus Company on January 22, 1997, and completed the company’s new bus operator training program. A review of the bus driver’s Department of Motor Vehicles records for the last three years showed no violations or suspensions. New York State Vehicle & Traffic Law, Article 19-A records were complete and up-to-date. A review of the driver’s MTA BC record for the last three years showed one minor
preventable collision accident on 04/27/06, resulting in a warning. A post accident drug and alcohol test administered to the bus driver 3 hours and 8 minutes after the accident was negative. The delay in administering the drug and alcohol test was due to the bus driver being detained at the scene for the purpose of investigation.

In an interview with the PTSB staff, the bus driver indicated that the bus was moving with an approximate speed of 15 mph when he felt a thump from the rear of the bus. He looked at his left mirror and observed the left rear outer wheel of the bus separate and roll away from the bus. The driver stopped the bus immediately and called the Command Center for assistance.

The Public Transportation Safety Board staff finds that the most probable cause of the accident was the loss of the frictional capacity of the left rear dual wheel assembly due to improper cleaning of the mating surfaces. Contributing to the cause of the accident was the failure of the maintainer to conduct a proper repair and failure of MTA-BC management to ensure employees returning from time away from the job are up to date with all training upgrades.

MTA BC reviewed the accident on 08/21/06 and found it non-preventable on behalf of the driver. The bus driver’s performance was evaluated as satisfactory and he was returned to passenger service.

The actions of the maintainer were reviewed and found to be preventable and he was retrained and no disciplinary action was taken. MTA-BC management issued a bulletin to all maintenance staff to ensure that all employees returning from extended absences are reviewed and retrained in all appropriate upgrades.

Based on the action taken by the MTA BC regarding this accident, the Public Transportation Safety Board staff makes no recommendations.

INVESTIGATOR: M. Palanker

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CHIEF, ACCIDENT INVESTIGATION SECTION         DATE

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DIRECTOR, PCSB, NYSDOT                        DATE