PUBLIC TRANSPORTATION SAFETY BOARD
ABBREVIATED BUS ACCIDENT REPORT

1. CASE: 9281
3a. ACCIDENT TYPE: Mechanical Failure
4a. DATE: March 3, 2007
5. ACCIDENT LOCATION: Story Avenue at Boynton Avenue
8. BUS NUMBER: 5311
9. NUMBER OF INJURIES: 0
11. HOURS OF SERVICE: Not related

2. PROPERTY NAME: MTA NYCT
3b. Accident Severity Index: 0.00
4b. TIME: 2:37 pm
7. SUMMONS: None
8a. YEAR: 2000 8b. MAKE: New Flyer
10. FATALITIES: 0

12a. SYNOPSIS: Case #9281
At approximately 2:37 pm, MTA New York City Transit (NYCT) bus #5311 was standing in a bus stop loading and discharging passengers when an unidentified motorist informed the bus driver of a smoke condition in the engine compartment. The bus driver evacuated all passengers and called the Command Center for assistance. At that time a school security agent took the school’s fire extinguisher and put the fire out before the on board fire suppression system activated. No injury claims were reported. The bus sustained moderate damage. FDNY was not called and did not respond to the accident.

Both, bus #5311 and bus #5328 are 2000 New Flyer articulated transit type buses with a seating capacity of 62 passengers. A review of the bus records indicated that Preventive Maintenance Inspections (PMI) are performed at Gun Hill Depot at regular 3,000 mile intervals and the most recent on bus #5311 was completed on January 23, 2007, and on bus #5328 was completed on January 31, 2007.

12b. SYNOPSIS: Case #9284
At approximately 3:05 pm, MTA New York City Transit (NYCT) bus #5328 was stopped in a bus stop when the bus driver was informed by a pedestrian of flames emanating from the rear of the bus. The bus driver evacuated all bus passengers and called the Command Center for assistance. At that time a school security agent took the school’s fire extinguisher and put the fire out before the on board fire suppression system activated. No injury claims were reported. The bus sustained moderate damage. FDNY was not called and nor did respond to the accident.

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The buses had traveled 2,993 miles (bus #5311) and 2,539 miles (bus #5328) at the time of the accident. A post accident inspection of the buses was conducted by the Public Transportation Safety Board (PTSB) staff in conjunction with NYCT personnel.

A review of the maintenance records revealed that on December 12, 2006 (work order #1138213) a burned starter and its cables were replaced on bus #5311 and the bus was returned to service. The post accident inspection revealed that the fire in the engine compartment on both buses was caused by an electrical short between the starter positive cable and the adjacent chassis ground cable. Further investigation revealed that the ground cable was improperly routed and secured by the manufacturer, allowing the positive and ground cables to chaff against each other and short to ground. Due to constant engine vibrations the ground cable chaffed and shorted out against the positive starter cable, causing the fire.

The driver of bus #5311 was hired by MTA NYCT on May 31, 1994 and completed the standard “New Bus Operator Training Program”. A review of the 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 NYCT record revealed one preventable collision accident on 02/01/05, resulting in a review by Bus Safety Training School due to being the first accident in 12 month, and one non-preventable collision accident on 6/09/05.

In an interview with the PTSB staff the driver of bus #5311 indicated that the bus was standing in a bus stop loading and discharging passengers when an unidentified motorist notified him of a smoke condition in the engine compartment. The bus driver evacuated all passengers and called the Command Center for assistance. At that time the bus’s fire suppression system activated and extinguished the fire. FDNY was not called.

The driver of bus #5328 was hired by MTA NYCT on January 18, 1999 and completed the standard “New Bus Operator Training Program”. A review of the driver’s Department of Motor Vehicles records for the last three years showed one “speed in zone” violation on 12/08/05, convicted on 1/06/06, resulting in a penalty of $45 and 3 points on the record. New York State Vehicle & Traffic Law, Article 19-A records were complete and up-to-date. A review of the driver’s MTA NYCT record revealed two non-preventable collision accidents: the first one on 06/03/05 and the second on 12/02/05.

In an interview with the PTSB staff the driver of bus #5328 indicated that the bus was stopped in the bus stop on East Tremont Avenue at Ericson Place, when the bus driver was informed by a pedestrian that flames are emanating from the rear of the bus. The fire was extinguished by a school security agent at the scene before the on board fire suppression system activated.

A post accident drug and alcohol test was not administered to both bus drivers due to the nature of the accidents.
The Public Transportation Safety Board staff finds that the most probable cause of the two fires was the improper routing and securing the chassis ground cable by the manufacturer.

The MTA NYCT reviewed the two bus fires on March 9, 2007 and determined that the most probable cause of these fires was an improperly secured chassis ground cable that chaffed and eventually shorted to the battery positive cable at the starter.

In an attempt to prevent any recurrences, MTA NYCT issued a Maintenance Directive “Articulated Buses, Starter Cable Chaffing Concern”. Subsequently, the campaign was initiated and work orders were created to perform the re-routing and re-securing on all New Flyer Articulated Coaches in the fleet.

Based on the action taken by the MTA NYCT regarding these fires, the Public Transportation Safety Board staff makes no recommendations.

**INVESTIGATOR: Mikhail Palanker**

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CHIEF, ACCIDENT INVESTIGATION SECTION  DATE

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DIRECTOR, PCSB, NYSDOT  DATE