PUBLIC TRANSPORTATION SAFETY BOARD
ABBREVIATED BUS ACCIDENT REPORT

1. CASE: 9387
2. PROPERTY NAME: Rochester-Genesee Regional Transportation Authority
3a. ACCIDENT TYPE: Fire
3b. Accident Severity Index: .0
4a. DATE: June 13, 2007
4b. TIME: 7:50 am
5. ACCIDENT LOCATION: Intersection of Lyell Ave. & Fairgate St.
6. TOWN/CITY/BOROUGH: Rochester
7. SUMMONS: No
8. BUS NUMBER: 406
8a. YEAR: 1995
8b. MAKE: Nova
9. NUMBER OF INJURIES: None
10. FATALITIES: 0
11. HOURS OF SERVICE: Not Related
12. SYNOPSIS:

At approximately 7:50am, Rochester-Genesee Regional Transportation Authority (RGRTA) bus #406 was traveling westbound on Lyell Avenue when the bus operator heard a loud popping sound from the rear of the bus and noticed smoke pouring through the vents into the bus. The bus operator immediately stopped and secured the bus then evacuated 16 passengers to safety. The operator called dispatched for assistance. The Rochester Police and Fire Departments responded to the scene.

The environment did not play a role in this incident.

Bus #406 is a Nova forty five foot transit type bus with a seating capacity for forty-seven passengers. A review of the bus records showed that Preventive Maintenance Inspections are performed at regular 6,000 mile intervals or 90 days in accordance with the RGRTA System Safety Program Plan and the manufacturer’s recommended service intervals. The most recent (PMI) was completed on May 21, 2007 and the bus had traveled 4,272 miles at the time of the accident. There were no safety or recurring defects noted in the 60 days prior to the accident that were considered causative to the accident.

A post fire inspection was performed on June 18, 2007. The inspection revealed the most probable cause of the engine fire was the positive battery cable coming in contact with the steel braided hydraulic line from the fluid reservoir to the cooling fan motor causing a short to ground. The position of the battery cable caused it to chafe against the steel braided hydraulic line which burst and ignited causing the fire. It was undetermined if the positive battery cable was improperly positioned due to poor design of the engine compartment or human technician error (cable lug not properly tightened). The only repair found near the origin of the fire was a starter replacement on September 13, 2006.

In response, RGRTA maintenance staff did a campaign and inspected sixty-eight Nova buses in their fleet for improper positioning of the positive battery cable, wiring at the starter, and that the cable from the alternator was in proper position above the steel braided hydraulic line. Five of the sixty-eight buses were found with the same problem and required the cables to be repositioned above the steel braided hydraulic line.
In addition, all RGRTA maintenance staff were informed of the issues and instructed in the correct procedure. A procedure is now in place to insure the Nova bus fleet will be checked during each PMI for loose cable lugs and the positive cable is in the proper position.

The bus operator was hired on January 30, 1984 after completing the standard new bus operator training program. A review of the bus operator's Department of Motor Vehicle records for the last three years showed no suspensions or violations. New York State Vehicle & Traffic Law, Article 19-A records were found in-order and up-to-date. A review of the operator's RGRTA record for the past three years revealed one preventable accident (12/06/2004-verbal) and four non-preventable accidents (11/7/2005, 7/11/2006, 10/19/2006, and 4/17/2007). A post accident drug and alcohol test was not administered to the bus operator due to the nature of the accident.

In an interview with the PTSB staff the bus operator stated he was traveling westbound on Lyle Avenue when he heard a popping noise. The operator stated approximately 3-5 seconds after the popping noise the fire alarm came on and he observed smoke entering through the rear of the bus. The operator said he pulled over immediately and evacuated fifteen passengers to safety. The operator stated he notified 911 by cell phone that his bus was on fire, then called radio controller stating that his bus was consumed with smoke.

The Public Transportation Safety Board staff finds that the most probable cause of the bus accident was the positive battery cable coming in contact with the steel braided hydraulic line causing a short to ground.

RGRTA reviewed the accident on June 19, 2007 and found the accident to be non-preventable with respect to the bus operator. The maintenance department was unable to conclusively identify the technician who was responsible for the cable being improperly positioned, as this could not be solely attributed to the last starter replacement on September 13, 2006. The Accident Review Committee rated maintenance preventability as undetermined. After review of the fire incident RGRTA policies have been reviewed and changed to include on each PMI checking for chafing battery cables, loose cable lugs and improper position of the positive battery cable.

Based on the actions taken by RGRTA in this case, the Public Transportation Safety Board staff makes no further recommendations.

INVESTIGATOR: M. F. Gluskin