At approximately 7:43am, Rochester-Genesee Regional Transportation Authority (RGRTA) bus #326 was stopped at Jefferson and Steard Street to pick up five passengers. A pedestrian was walking past the bus and noticed smoke and sparks coming from the rear of the bus and notified the bus operator. The operator proceeded to the rear of the bus and noticed smoke coming from the engine compartment. The bus operator turned the engine off, evacuated six passengers and notified dispatch of smoke coming from the rear engine compartment. The Rochester Fire Department arrived at the scene and extinguished the fire. The operator and bus passengers claimed no injuries. Bus #326 was towed to the Rochester maintenance facility and secured.

The environment did not play a role in this incident.

Bus #326 is a 2000 New Flyer 60 foot articulated transit type bus with a seating capacity for 60 seated and 35 standing 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 July 9, 2008 and the bus had traveled 2,118 miles at the time of the bus fire. 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 October 22, 2008 by an outside consultant firm and RGRTA Deputy Director of Vehicle Maintenance. The inspection revealed the most probable cause of the engine fire was the main power cable that shorted to ground at the Vander Box (which converts 24 volts to 12 volts). Excessive corrosion penetrated the protective coating on the cable which broke off from the point it enters the bulkhead adjacent to the Vander Box. It was undetermined as to why the power cable had excessive corrosion and caused a short.

In response, RGRTA maintenance staff did a campaign on nine New Flyer articulated buses (same year, manufacture, RTS Bus numbers 321-330). The cables were visually inspected for any external corrosion and manually tested for cable strength. There was no indication of a similar problem with the other nine buses. RGRTA management has instituted an inspection process at 24,000 mile intervals to ensure the electrical (power) cables at the Vander Box are checked.

The bus operator was hired on February 25, 2002 after completing the standard 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 two non-preventable accidents (5/29/2008) and 4/14/2005). A post accident drug and alcohol test was not administered to the bus operator due to the nature of the incident.

In an interview with the operator he stated he was on a layover at Jefferson Avenue. The operator said a pedestrian walked by the bus and informed him of sparks and smoke coming from the rear of the bus. The operator said that he then proceeded to the rear of the bus and saw smoke coming from the engine compartment. He said he evacuated the 6 passengers, shut the bus down, and turned the power breaker switch off.

The Public Transportation Safety Board staff finds that the most probable cause of the bus fire was a short in the main power cable due to corrosion.

RGRTA reviewed the accident on October 31, 2008 and found the accident to be non-preventable with respect to the bus operator. After review of the fire incident RGRTA policies have been reviewed and changed to include an inspection of the main power cables at the Vander Box for external corrosion and manually test for cable strength on each 24,000 mile PMI.

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

INVESTIGATOR: M. F. Gluskin

CHIEF, ACCIDENT INVESTIGATION SECTION

DIRECTOR, PCSB, NYSdot