At approximately 2:30 pm, Central New York Regional Transportation Authority (Centro) bus # 2517 had just picked up passengers in Emerson Park and was proceeding to exit the park when the operator was looking into his right outside side mirror and noticed smoke coming from the rear engine compartment and into the interior of the bus. The operator called dispatch and spoke to the lead mechanic on duty and informed him that the fire suppression system had activated. The operator secured the bus, and evacuated 5 passengers to a safe location. The operator moved the bus across the street approximately 50 feet then turned the engine off and waited for a mechanic and replacement bus to arrive. The bus operator and 5 passengers claimed no injuries. Bus #2517 was towed to the Centro of Cayuga facility and secured. The bus and bus operator records were reviewed and found to be complete, in order, and up-to-date. The environment did not play a role in this incident.

Bus #2517 is a 2004 New Flyer transit type bus with a seating capacity of thirty nine passengers (low floor). Preventive Maintenance Inspections (PMI) are conducted every 4 months or 6,000 miles in accordance with the System Safety Program Plan and the manufacturer’s recommended service intervals. In addition, all Centro buses undergo a critical safety inspection every 3,000 miles. The most recent PMI was completed on March 12, 2009 and the bus had traveled 6,020 miles at the time of the fire. There were no safety or recurring defects noted in the 60 days prior to the bus fire that were considered causative to the bus fire. However, records indicate that on May 12, 2009 a maintenance inspection performed on bus #2536 (New Flyer) found a starter cable chafing and sparking on a hydraulic line. As a result a campaign was initiated on all fifty two (52) New Flyer buses. Prior to completion of the campaign, May 20, 2009 #2517 was involved in a fire resulting from a chafing starter cable. The maintenance department accelerated their campaign completing all New Flyer buses by May 24, 2009 (27 buses required repositioning of the starter cable or repair). New Flyer was reportedly contacted by Centro, but no response from New Flyer was received.

A post accident inspection of bus #2517 was conducted by the Public Transportation Safety Board (PTSB) staff in conjunction with Centro maintenance staff on May 26, 2009. The most probable cause of the fire was the positive starter cable chafing on a hydraulic line which caused sparks and a small fire. The fire suppression system was instrumental in extinguishing the fire. It was determined that the fire caused damage to the starter cable and loom.
All other wiring harnesses and loom were not affected by the fire. The PTSB staff requested Centro to verify that the system worked according to manufacturers specifications. Centro maintenance staff confirmed that the audible alarm and the dash indicator worked as designed.

The bus operator was hired by Centro on August 24, 1993 and completed the standard “Bus Operator Training Program”. A review of the driver’s New York State Department of Motor Vehicle’s records 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 Centro accident records for the last three years showed one preventable accident (Verbal Warning 4/14/09). 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 PTSB staff, the operator stated he had picked up four students at Auburn High School continued around the traffic circle in Emerson Park and stopped to pick up one male passenger. The operator looked in his right outside mirror and noticed smoke coming from the rear engine compartment and top of the bus. The operator stated he thought his brakes were overheating or a fuel injector was bad. The operator said he slowed to 5mph looked into his rear view mirror and noticed smoke coming into the bus. The operator stated he stopped the bus evacuated the five passengers to a safe location, engaged the parking brake, and cut the power. The operator stated he informed dispatch of the incident and spoke to the lead mechanic explaining that the fire suppression system had activated, and a white power came through the ventilation system. The operator stated the lead mechanic asked if the bus would start. The operator said yes, then moved the bus across the street approximately 50 feet and proceeded to turn the power off and wait for a mechanic and a replacement bus to arrive. Two volunteer firemen were passing by the scene and asked if the operator needed assistance. The operator said he told them everything was under control. The operator said to the PTSB staff that he didn’t hear the warning buzzer or see the dash light come on.

In response to the incident, Centro management determined that the bus operator and lead mechanic did not follow company policies and procedures. Both employees were retrained and issued written warnings regarding this incident.

The Public Transportation Safety Board staff finds that the most probable cause of the fire was the starter cable chafing on a hydraulic line.

Contributing to the starter cable chafing was the improper routing and securement of the starter cable by the manufacturer. Other transit systems using New Flyer buses were contacted and alerted to the issue of the improperly routed electrical cable.

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

INVESTIGATOR: M. F. Gluskin

___________________________________________
CHIEF, ACCIDENT INVESTIGATION SECTION

___________________________________________
DIRECTOR, PCSB, NYS DOT

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DATE

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DATE