At approximately 7:00 a.m., the operator of Ulster County Area Transit (UCAT) bus #23 was traveling westbound on Route 28. The operator stated that the engine/transmission lost power and he smelled burnt rubber. The operator pulled the bus into a parking area, shut the engine down, and engaged the parking brake. There were no passengers onboard. The operator disembarked the bus, and noticed smoke coming from near the transmission. The operator also noticed a wire/hose under the transmission which looked like it had melted. The operator could not radio dispatch or use his cell phone as he was in a rural area with no radio or cell service available. The operator proceeded to leave the bus unattended, without chocking the wheels or placing of triangles and walked approximately one mile to the Shandaken Fire House to call UCAT dispatch. Simultaneously, a passerby placed a call to 911 reporting a UCAT bus was fully engulfed in flames. As the bus burned, the air brake canisters melted which caused the brakes to release and the bus to roll backwards from the parking area. The bus rolled across Route 28 and into a culvert to its final rest. The local police, fire and Ulster County Sheriff’s Departments responded to the scene. The bus operator claimed no injuries. The bus was towed to Kingston, N.Y and secured.

The environment did not play a role in this incident.

Bus #23 is a 1997 Thomas (35’) transit type bus with a seating capacity of thirty two passengers. Preventive Maintenance Inspections (PMI’s) are conducted every 5,000 miles, in accordance with UCAT System Safety Program Plan. The manufacturer’s recommended PMI interval maximum is 6,000 miles. The most recent PMI was completed on October 03, 2006. The bus had traveled 2646 miles since the last PMI at the time of the accident. A post accident inspection of bus #23 was conducted by PTSB staff in conjunction with UCAT Director of Maintenance and a Ulster County Fire Investigator. The inspection revealed that it is most likely that the fire started in the battery compartment. It was determined that the positive cable insulation chaffed to the bare wire allowing it to arc against the battery box.
The cable passes through the left rear panel of the battery box and connects to the starter. The hole which the cable passes through, two inches in diameter, was missing a body cable grommet which prevents chaffing of the cable. The starter was inspected and no signs of fire damage were detected. Bus #23 was not equipped with a fire suppression system.

The bus operator was hired by UCAT on February 27, 2006, and completed their standard bus operator training program. A review of the driver’s New York State Department of Motor Vehicle’s records for the past three years showed no violations, convictions or suspensions. New York State Vehicle & Traffic Law, Article 19-A records were complete and up-to-date. The bus operator had no previous accidents with the company. 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 bus operator indicated he was traveling on Route 28 westbound when the engine/transmission lost power and he smelled burnt rubber. The operator stated he pulled the bus into a parking area, shut the engine down, and engaged the parking brake. The operator stated he disembarked the bus, and noticed smoke coming from near the transmission and noticed a wire/hose under the transmission which looked like it had melted. The operator said he could not radio dispatch or use his cell phone as he was in a rural area with no radio or cell service available. The operator proceeded to leave the bus and walked approximately one mile to the Shandaken Fire House to call UCAT dispatch.

UCAT management reviewed the incident and found it to be preventable on behalf of the maintenance deficiencies.

In response, UCAT implemented a fleet wide campaign on (16) UCAT buses which began January 4, 2007 and completed the campaign on February 14, 2007. The inspection included:

- Check all battery cables leading from the batteries to their end connections for chaffing.
- Check for the presence of a body cable grommet.
- Wrap all cables with double insulating material.
- Where cables go through the wall of the battery box, add an additional piece of rubber material to prevent chaffing.

All UCAT maintenance personnel have been instructed to include a thorough inspection of the battery compartment and components at each preventive maintenance inspection interval. UCAT management is in the process of updating new procedures for maintenance.

Additionally, UCAT determined that the bus operator did not follow proper emergency procedures and guidelines due to his failure to properly secure the bus with wheel chocks and protect it with triangles. The incident was rated preventable on February 8, 2007, and the bus operator was given remedial training.
The Public Transportation Safety Board staff finds that the most probable cause of the fire was a missing body grommet.

Contributing to the fire was the failure of the maintainer to detect the missing body cable grommet during the preventive maintenance inspection.

Additionally, contributing to the cause of the fire was UCAT’S inadequate preventive maintenance practice to identify worn or missing parts when conducting a PMI and take appropriate action.

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

INVESTIGATOR: M. F. Gluskin

CHIEF, ACCIDENT INVESTIGATION SECTION

DIRECTOR, PCSB, NYSDOT