On April 25, 2007, at approximately 6:30 a.m., Hudson Transit Lines, Inc. (HTL), a Coach USA company, bus #70977 was traveling from Monroe to Route 17 East when the bus driver experienced a problem with a rear tire. The bus driver stopped the bus and stepped out to inspect the bus. During the inspection, the bus driver observed that the left tag axle wheel was missing and called the dispatcher for assistance. No injury claims were reported. The bus sustained slight damage. The bus traveled 12 miles from the garage prior to the incident.

In the vicinity of the accident site, Route 17 is a two-way road divided by a grass median, accommodating two eastbound and two westbound travel lanes. The environment did not play a roll in the accident. At the time of the accident it was daylight and the weather was dry and clear. The posted area speed limit is 55 mph.

Bus #70977 is a 2000 MCI coach bus with a seating capacity of 55 passengers. A review of the bus records indicated that Preventive Maintenance Inspections (PMI) are performed at HTL at regular 8,000 mile intervals, and the most recent was completed on April 4, 2007. The bus had traveled 1,751 miles at the time of the accident. A post accident inspection of bus #70977 was conducted by the PTSB staff in conjunction with New Jersey Department of Transportation staff on April 25, 2007. The inspection of the bus showed that the left rear tag axle wheel/rim broke and fell away from the vehicle. The inspection showed remains of the flange part of the rim attached to the hub assembly that were held in place by 9 of 10 lug nuts. It was noted that the nuts were loose. One lug nut was missing with the broken stud. Inspection of the remaining pieces revealed evidence of pre-existing rim cracks extending between stud holes and radiating from the center of the rim to several stud and hand holes.

The bus driver was hired by HTL on May 19, 2000, and completed the 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 HTL record revealed two non-preventable collision accidents for the last three years. A post accident drug and alcohol test was not administered to the bus driver due to the nature of the accident.
In an interview with the HTL staff the bus driver stated that he performed the pre-trip inspection of bus #7097 and everything was fine. While driving from Monroe to Route 17 East he said he experienced a condition like a flat rear tire. The bus driver stopped the bus and stepped out to inspect the bus. During the inspection, he discovered the left tag axle wheel missing and called the dispatcher for assistance.

The Public Transportation Safety Board staff finds that the most probable cause of the accident was a failure of the loading capacity of the left tag axle rim due to pre-existing fatigue cracks.

Contributing to the accident was the failure of the maintenance staff to identify, during the last PMI, the fatigue cracks on the left tag axle rim.

The second contributing factor was the failure of the bus driver to identify, during the pre-trip inspection, the cracks on the left tag axle rim.

Hudson Transit Lines, Inc. reviewed the accident on September 11, 2007, and found it to be preventable. The bus driver was issued one day suspension and he was retrained on how to perform a pre-trip inspection. The HTL reissued the company’s DVIR Policy to all drivers and supervisors.

The Maintenance Department of HTL has done the following:

1. More thoroughly inspect all of wheel rims during the PM Program.
2. Retrain of shop personnel on rim preparation before installation on a coach.
3. Instruction to Good Year Tire Representative on his obligations to inspect all wheel rims during mounting and dismounting of tires.
4. Acquisition, implementation, and use of torque wrenches for all installations of wheel studs and nuts.

Based on the action taken by HTL regarding this accident, the Public Transportation Safety Board staff makes no recommendations.

INVESTIGATOR: Mikhail Palanker

CHIEF, ACCIDENT INVESTIGATION SECTION

DIRECTOR, PCSB, NYS DOT