At approximately 7:48 pm, MTA New York City Transit (NYCT) bus #523 traveling eastbound on Sanford Avenue was approaching 165th Street when the bus driver noticed white smoke emanating from the left rear of the bus. Then he observed flames, stopped the bus, evacuated all passengers and called the Command Center. FDNY responded to the accident and extinguished the fire. No injury claims were reported. The bus sustained extensive damage.

In the vicinity of the accident site, Sanford Avenue is a two-way road divided by a full barrier yellow pavement marking, accommodating one eastbound and one westbound travel lane. One Hundred Sixty Fifth Street is a two-way road divided by a full barrier yellow pavement marking, accommodating one northbound and one southbound travel lane. Both roadways are straight, level and asphalt paved. Parking is permitted at the curbs. At the time of the accident it was dark, the weather was overcast and the roadway was dry. The posted speed limit is 30 mph.

Bus #523 is a 1994 Orion transit bus with a seating capacity of 39 passengers. A review of the bus records indicated that Preventive Maintenance Inspections (PMI) are performed at Casey Stengel Depot at regular 3,500 mile intervals, and the most recent was completed on October 23, 2006. The bus had traveled 2,629 miles at the time of the accident. A post accident inspection of bus #523 was conducted by the Public Transportation Safety Board (PTSB) staff in conjunction with NYCT staff on November 16, 2006. The post accident inspection revealed that the fire in the engine compartment was caused by an unpredictable failure of the fan motor drain oil line, causing oil to spray against the hot turbocharger and ignite. Subsequently the flames damaged the insulation of the DC cable, causing it to short to the grounded “P” clamp and the A/C discharge line. The refrigerant oil from the damaged A/C system additionally fed the fire.

The bus driver was hired by the MTA NYCT on July 7, 1986, and completed the standard “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 MTA NYCT record revealed one preventable collision accident on 10/28/06 resulting in no discipline due to being a not major accident. 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 PTSB staff the bus driver indicated that while moving eastbound on Sanford Avenue he observed white smoke in the rear of the bus and started to smell smoke inside the bus. He stopped the bus, evacuated all passengers, and after inspecting the bus called the Command Center. FDNY responded to the accident and extinguished the fire.

The Public Transportation Safety Board staff finds that the most probable cause of the accident was an unpredictable failure of the fan motor drain oil line due to a manufacturing defect.

The MTA NYCT reviewed the accident and determined that the route cause of this fire was hydraulic oil that leaked from the coupling (fitting) of the cooling fan motor’s steel braided drain line onto the turbocharger and ignited.

INVESTIGATOR: Mikhail Palanker

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CHIEF, ACCIDENT INVESTIGATION SECTION  DATE

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DIRECTOR, PCSB, NYSDOT  DATE