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Press Release

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[NYC Transit](#)

IMMEDIATE

Following Phase 1 Expert Panel R179 Review, NYC Transit to Begin Returning Cars to Service in Coming Weeks

Outside Expert Panel, Including Former NASA, FRA & FTA Officials, Worked Through Summer to Review and Address Bombardier Issues

Panel Will Continue Phase 2 Work to Address Lessons Learned and Develop Quality Assurance Recommendations for Future Rail Car Procurements

[See Photos of the R179 Cars](#)

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MTA New York City Transit Interim President Sarah Feinberg today announced that the first phase of a comprehensive review of its R179 fleet has been completed and that the 318-car fleet will begin its return to service in the coming days. The review panel, comprised of outside experts, was tasked with reviewing previous production quality issues and incidents with the cars provided by Bombardier Transportation Group spanning from May 2019 to June 2020, and recommending appropriate steps for NYC Transit to return the cars to service.

The panel has met 15 times in the months following a June incident, in which a northbound A train became separated between the sixth and seventh cars of a 10-car train as it entered the Chambers Street station. In its recommendation, the panel ultimately determined that all known production quality issues with the cars provided by Bombardier had been adequately addressed by New York City Transit. The panel will continue its work and issue new recommendations in the months ahead to further enhance quality reassurance requirements and processes for current and future rail car procurements and lessons learned.

"I am grateful to this talented group of outside experts – they have completed a review of the R179 cars and developed a return-to-service plan that includes rigorous performance monitoring," **said Sarah Feinberg, Interim President New York City Transit.** "We are actively working to institute these new procedures. I'm proud of the team that thoroughly reviewed these issues and am grateful to them for their work to keep New Yorkers safe."

The panel is chaired by Robert Lauby, former Associate Administrator for Railroad Safety and Chief Safety Officer for the Federal Railroad Administration. Other panelists include Carolyn Flowers, Former Acting Administrator for the Federal Transit Administration and current Managing Principal at InfraStrategies LLC, Dr. J. Victor Lebacqz, Former Associate Administrator for Aeronautics Research at NASA; and Dr. Thomas Kurfess, Professor of Mechanical Engineering at Georgia Tech.

The panel reviewed the three prior quality issues with the R179 cars since their delivery began in 2016, including primary side collision welding anomalies, door operations and drawbar draft gear assembly. The R179 panel recommends that NYC Transit return the R179 fleet to revenue service by adopting a comprehensive return-to-service process, including testing and careful performance monitoring to gradually restore confidence in the R179 fleet.

The process is divided into three distinct steps -- Preparation, Simulated Service, and Performance Monitoring -- and is fully described below:

Preparation

- NYC Transit, LTK and Bombardier shall identify all pending software/firmware upgrades for the fleet and determine which upgrades are essential for the safety of critical systems.
- Pending software/firmware revisions must be tested by Bombardier in the lab, static tested in the shops, and tested in simulated service before installing the upgrade on the fleet and releasing the R179 cars for revenue service.
- The door Complex Programmable Logic Device (CPLD) firmware upgrade (a tertiary safety feature for door controls) meets this criterion and shall be tested by Bombardier, tested in simulated service, and approved by NYC Transit prior to installing the upgrade on the R179 fleet.
- NYC Transit shall perform pre-inspection and/or periodic maintenance on each R179 subway car and train set per NYC Transit existing maintenance practices before running the cars in simulated service and returning the cars to revenue service. Pre-inspection and/or periodic maintenance shall include confirmation that correct versions of software and firmware are installed on each R179 car.
- The R179 subway cars with upgraded software/firmware and with appropriate inspection and maintenance performed by NYC Transit will define a baseline condition that shall, at a minimum, remain in place during the transition of the entire R179 fleet to revenue service. Additional software/firmware upgrades or changes to the baseline configuration of the R179 cars (other than routine maintenance or replacement of consumables) shall not be authorized unless the upgrade or change in configuration is needed to address a safety issue – and then, only with concurrence of the NYC Transit Chief Mechanical Officer.

Simulated Service

- The first eight R179 eight-car trainsets (20% of the fleet) shall be run in simulated service in accordance with NYC Transit's simulated service strategy document to confirm proper operation of all train systems including software and firmware upgrades. Simulated service shall run for eight hours, without a disqualifying failure. NYC Transit shall determine the definition of a disqualifying failure.
- If the 8-hour simulated runs conducted on the first eight trainsets do not indicate systemic issues with the R179 equipment, then simulated service run times for the remaining trainsets shall be reduced from eight hours to one round trip, without a disqualifying failure.
- Each R179 trainset shall be released for unrestricted revenue service after successful completion of the 8-hour or round-trip simulated service run, as appropriate.
- The R179 trainsets shall be returned to revenue at a rate where NYC Transit staff can sustain scheduled maintenance, simulated service, and failure monitoring throughout the program.

Performance Monitoring

- NYC Transit shall track and record significant failures experienced in the R179 fleet and report the failures daily to the Panel members by email.
- NYC Transit shall issue a weekly report and establish a weekly meeting with the R179 Panel to discuss R179 fleet performance. At a minimum, weekly reporting shall include a summary of prior reports for the week and identify any concerns or trends for discussion during the panel meeting.
- NYC Transit shall also report Mean Distance Between Failure (MDBF) and Mean Distance Between Component Failure (MDBCF) monthly or as available.
- Monitoring of R179 car performance shall continue until confidence in car performance is restored.

The panel will continue its work and issue new recommendations in the months ahead to further modify quality reassurance requirements and processes for current and future rail car procurements and lessons learned.