The Bulletin

Electric Railroaders' Association, Incorporated

Vol. 57, No. 7 July, 2014

The Bulletin

Published by the Electric Railroaders' Association, Incorporated, PO Box 3323, New York, New York 10163-3323.

For general inquiries, contact us at bulletin@erausa.org. ERA's website is www.erausa.org.

Editorial Staff:
Editor-in-Chief: Bernard Linder
Tri-State News and Commuter Rail Editor: Ronald Yee
North American and World News Editor: Alexander Ivanoff
Contributing Editor: Jeffrey Erlitz

Production Manager: David Ross

SECOND WORLD'S FAIR OPENED 50 YEARS AGO

The World's Fair Anniversary Festival, which was held at the site of both fairs on May 18, commemorated the 50th and 75th anniversaries of the 1939 and 1964 fairs. The celebration began at 1 PM at the Unisphere in Flushing Meadows-Corona Park featuring 50-cent carousel rides and puppet shows. In the evening, the festivities concluded with a concert by the Queens Symphony Orchestra followed by fireworks.

Before the 1964 fair opened, Flushing Line stations were painted various shades of blue and silver with orange handrails and ten-car platforms were extended to accommodate eleven-car trains. To provide the increased service, NYC Transit ordered 430 cars. This fleet included 390 R-36 married pairs numbered 9346-9523 and 9558-9769 and 40 R-33 single units numbered 9306-45. Cars were painted blue and cream as shown on pages 4 and 5. These cars were probably the most attractive cars ever operated on the transit system. Several years later, they were painted red and were nicknamed "Redbirds."

As soon as the new cars were placed in service, the 350 R-12s, R-14s, and R-15s were transferred to the main line. Because the entire fleet of R-33s and R-36s was not yet in service (see table below), single-unit R-17s and married pair red R-33s were transferred to the Flushing Line about March, 1964. Effective April 20, 1964, 36 eleven-car trains (396 cars) were scheduled for the AM rush. Eleven-car trains operated all day and evening and were cut to 5 and 6 cars for midnight service. The R-17s and red R-33s were returned to the main line about August, 1964 after all the new cars were in service.

R-33 9306-45

DATE	NUMBER OF CARS IN SERVICE
September, 1963	23
October, 1963	40

R-36 9346-9523, 9558-9769

DATE	NUMBER OF CARS IN SERVICE
September, 1963	4
October, 1963	52
November, 1963	90
December, 1963	128
January, 1964	164
February, 1964	218
March, 1964	280
April, 1964	342
May, 1964	362
June, 1964	372
July, 1964	390

RED R-36 9524-57

DATE	NUMBER OF CARS
July, 1964	6
August, 1964	34

The red R-36s were operated on Manhattan and Bronx main lines.

When the World's Fair opened, ❼ schedules were revised, and non-rush hour service was increased.

Super expresses, whose running time was only 20 minutes, ran between Times Square

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TOWARD UNDERGROUND (AND UNDERWATER) ROLLING STOCK: THE ALL-STEEL REVOLUTION
by George Chiasson
(Continued from June, 2014 issue)

FROM DUBIOUS TO UBIQUITOUS, PART TWO: THE EVOLUTION OF STEEL COACHES

As described in the previous issue, by 1901 the American railcar building industry was poorly positioned to respond to the groundbreaking requirements that were presented by both the abuilding Manhattan subway (better known as the Interborough Rapid Transit Company) and the Pennsylvania's then-proposed New York Terminal project. Faced with this grim reality, one of the major decisions undertaken by President Cassatt was to internally fund the design, development and, if necessary, even the production of all-steel rolling stock that would be necessary to bring about the desired overall objective of running the Pennsylvania's passenger trains through the Hudson and East River tunnels into Manhattan. As events transpired, the railroad became more of a guiding force than self-supplier (as it had already been for decades in the production of its own steam motive power and passenger coaches), which over time enabled five trusted steel fabricators to embrace the Pennsylvania's self-generated designs and incorporate them into their enormous production capabilities. As things played out by 1930, there were literally thousands of pieces of railroad-owned, all-steel rolling stock wandering about the Pennsylvania's huge railway system, though by that time such was more in the name of industry standardization than a response to the urgency of operating steel cars into New York.

In 1902, within months of the railroad's public announcement of its intention to create the New York Terminal, the Pennsylvania Steel Car Trust was formed to create a corporate structure for the necessary processes of conception, design, development, and (possibly) production of the then-customized rolling stock that would ultimately be required. As one of PRR's myriad, wholly-owned "shell" corporations, the Trust was allocated an initial capital fund of $10 million, a lofty sum for the time, and given to the virtual charge of the Pennsylvania's crack engineering department. As its first manifestation, the Trust was the conduit through which the Pennsylvania and the Interborough coalesced during 1903 to bring about the "Gibbs" steel subway motor cars described in the previous issue, upon which the Long Island Rail Road (through its corporate parent, PRR) took hold as a means of equipping its initial group of electrified lines. Some time after the Pennsylvania announced its long-term intention to purchase some 1,500 steel cars for systemwide use on October 6, 1905, the New York Terminal's Board of Engineers also adopted a formal plan of design and implementation as regards the all-steel rolling stock necessitated for its ongoing enterprise. Some 11 overall railway functions were identified which would each require specialized vehicles, spread across two distinct operating environments (long distance and urban/suburban), and all of which would combine to call for the development of no less than 17 separate sets of equipment specifications, independent of the electric motive power that might be needed to propel them. It was clear that the Pennsylvania's equipment engineering staff and by extension the car builders of choice (of which the only one selected thus far was American Car & Foundry) were going to be busy, and it was equally clear that the initial Trust was probably going to need a good bit more in funding than that initial $10 million!

First to be calculated by the Pennsylvania's engineering staff was just how realistic the stated objective of all-steel railroad equipment, in its various configurations, would be. In fact, by this time the work previously completed on the IRT rapid transit prototype in 1903 and 1904, along with the production orders it subsequently generated, had substantially resolved many of the outstanding issues regarding an efficient method of steel body construction, and those solutions were waiting to be applied to whatever future designs would evolve. Real world priorities being what they were, the Pennsylvania's primary focus was on a vehicle that could be applied as quickly as possible to the railroading environment as it then existed. What gradually emerged from Altoona were a pair of prototypes whose characteristics retained the size, shape, and form of the traditional wooden railroad coach then so omnipresent in mainline railroading, yet incorporated the already successful structural principles that were utilized on the MP-41 M.U. rapid transit motor.

The first of these conceptual prototypes, "P-53" coach 1650, was basically a steel version of a then-typical "P"-class wooden car, of which the Pennsylvania had accumulated a fleet of thousands in many a variation. Its passenger cabin of 53 feet 7¾ inches used a pioneering system of electric lights and was supported on truck centers of 40 feet 3 inches, stretching out to a total length of 62 feet 5¾ inches at its diaphragms, set against a standard platform width of 9 feet 10⅛ inches. Much as on the "Gibbs" MP-41 cars, 1650's steel body was fabricated using specially-shaped structural members which were vertically framed into nine sections of

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Toward Underground (and Underwater) Rolling Stock

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four different lengths, including the two vestibules. In a manner also similar to the MP-41, the seven body sections beneath the window line were sheathed by heavy steel panels, which in turn were externally riveted together through 6-inch bridge plates. Smallish, standard-sized window sash was grouped in a 1+3+3+3+3+3+1 fashion, but the unit's greater overall height in relation to the MP-41 (14½ feet as opposed to 12 feet even) resulted in a much broader letterboard above, as well as a generous "railroad" roof line that was itself accented by a total of 17 ventilation transoms made of frosted glass. The roof was of similar construction as the MP-41s had been, having an aluminum shell covered in canvas skin, its flashing and attached accoutrements also made of aluminum, which included seven pairs of ventilators spaced evenly along the length of its crown. Access was obtained through narrow openings of about 2½ feet at each end vestibule, which in turn were equipped with swing doors for enclosure and standard traps to permit both high- and low-level loading. Like the process originated on the IRT prototype of 1903, the main cabin was structurally reinforced from each end toward the middle, with the greatest distribution of its weight nearest to the kingpins. And an extremely "weighty" beast it was, too, with a completed car body that rang up the scales at 95,400 pounds, or almost twice that of its comparable wooden predecessor.

Almost immediately after work had commenced on the first prototype (1650), a parallel effort was initiated on a slightly longer version of the same car, carrying the number 1651 and bearing the Pennsylvania Railroad classification of "P-58" to indicate it had a 58-foot cabin. This second coach body was fabricated using similar technology but in a slightly different manner, producing a frame of 12 steel-sheathed, equidistant sections measuring 6 feet each, which were spliced together through riveted 6-inch bridge plates. As a result of the more numerous but shorter body sections the sash line was grouped in panes of two each as opposed to three as on the P-53 prototype, and was capped off with single panes centered in the end sections for a total of 18 on each side of the car. Above the windows the same wide letterboard and roof line was applied as on 1650, although there were 18 elliptical-shaped transoms in the clerestory instead of the usual rectangular, though each was still composed of frosted glass. The end vestibules were identical to those on prototype 1650 in virtually every manner, sporting only a slightly different decorative pattern on the swing panels, but the weight was yet again far higher than the average wooden "P" series coach of previous times at 103,550 lbs. Nevertheless, the P-58 prototype drew immediate favor from the Pennsylvania's hierarchy during its construction, and was given favor in budgeting and materials such that it was actually rushed to completion on June 11, 1906. This was almost two years ahead of sister P-53 prototype 1650, on which work proceeded at a much slower pace and was not finished until 1908, if only as an academic exercise. As built, the P-58's body measured 67 feet 5¾ inches in overall length and was capable of seating 72 passengers, versus 64 on the 53-foot prototype coach.

When presented at the Master Car Builders' convention in Atlantic City the day following its "roll out" at Altoona, 1651 was touted as the world's most advanced railway car—even its upholstered seats were fireproof! For the next several weeks it was run in test service on the Paoli Local out of Philadelphia's Broad Street Station, where it eventually melted into the railroad's oversized revenue fleet and remained in operation until 1930. As things turned out, the P-58's evolution was not carried out in a vacuum either, as its basic design precepts were adopted with only slight variation (and in shorter length) by the New York Central's "Electric Traction Committee" in 1905 and '06 to yield that company's first production order for all-steel electric multiple-unit cars through builder ACF. Somewhat like the Pennsylvania and Long Island Railroads, NYC was faced with a mandatory elimination of steam locomotives into its Grand Central Terminal starting in 1908, and the construction progress of initial electrification was somewhat outstripping its ability to develop and provide the required all-steel, electric-powered rolling stock in a responsive, timely fashion. In 1907 one other P-58 coach (number 1401) was "produced" (actually almost handcrafted) by American Car & Foundry for the Long Island Rail Road, this single car enabling that company to familiarize itself with the novel fabrication procedures that were required for all-steel car construction, such that they would become routine when wholesale production of the Pennsylvania's steel car fleet was started.

Given ongoing progress with the New York terminal project, and the heady success that it had in the leading-edge field of constructing steel railway car bodies by the middle of 1906, the Pennsylvania next brought serious consideration to its wholesale implementation and resultant production, but with a couple of additional modifications. In the early years of the 20th century, Altoona Shops had begun turning out an extended version of its standard wooden coach (Class "PL"), which weighed in at an astounding 106,000 pounds, an immense tonnage for that time. Like new rolling stock emerging for rapid transit lines elsewhere (such as IRT's "Composite" cars, which were studied at a distance by PRR engineers) the car body was enclosed at the vestibules, measured 78 feet in overall length, and seated 80 passengers. Its frame was composed of twelve sections, which altogether yielded an incredible 22-sash window line, and had long kingpin centers of

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Second World's Fair Opened 50 Years Ago

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R-12 interior.
Bernard Linder collection

R-14 5903 at 103rd Street, April 7, 1954.
Bernard Linder collection

R-15s 5974 and 6234 in Corona Yard with World's Fair Lo-Vs.
Bernard Linder collection

R-15 5965 in Corona Yard, November 21, 1958.
Bernard Linder photograph

R-15s 6225 and 6212 at 45th Road-Court House Square, June 7, 1954.
Bernard Linder collection

R-15 interior at Coney Island, October 26, 1964.
Bernard Linder photograph

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Second World's Fair Opened 50 Years Ago

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R-33 single unit 9323 in Corona Yard.
Bernard Linder collection

R-36s 9452-3 at 52nd Street-Lincoln Avenue, April 11, 1964.
Bernard Linder collection

R36 9744 ("State of Missouri") at 69th Street, November 2, 1968.
Bernard Linder photograph

R36 9748 ("Commonwealth of Massachusetts").
Bernard Linder collection

R36 9762 ("State of Vermont").
Bernard Linder collection

R36 9443 at Smith-9th Street.
Bernard Linder collection

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Commuter and Transit Notes

No. 308

by Ronald Yee and Alexander Ivanoff

METROPOLITAN TRANSPORTATION AUTHORITY

For the first time ever, MTA began issuing *MetroCard*s with Spanish language ads starting June 7. Advertisements first appeared on the reverse of *MetroCard*s in 2012. (***Metro E-news***, June 6)

MTA is warning the public about an official-looking website, lostpropertynyc.com, which implies that it contacts MTA on behalf of customers who have lost possessions on MTA subways, commuter trains, and buses as well as aboard taxis and at the three area airports. The site asks for personal information, then uses that information to generate a $50 bill to be paid online by credit card, a scam that opens the door to credit card fraud and identity theft. "There is no charge to submit a claim to any of the MTA's lost and found units" said MTA Police Chief Michael Coan. MTA's real lost and found offices are accessible at http://bit.ly/1jzOlPE (***NBCNewYork.com***, June 13)

MTA Board changes: New York City Transportation Commissioner Polly Trottenberg replaces former City Budget Director Mark Page, former NYC Transportation Commissioner Iris Weinshall replaces Mark Lebow, and Metro-North Commuter Rail Council member Neal Zuckerman replaces the Council's Jim Blair as a non-voting member. (MTA press releases, June 20)

MTA METRO-NORTH RAILROAD

As of May 30, 2014, 348 of the 405 M-8 cars (380 married-pair and 25 single trailers) are in service with an additional 18 cars currently under inspection/acceptance testing by Kawasaki Rail Car, Incorporated. As for the car numbering system of the M-8 fleet, they are as follows: 9100-1 to 9420-1 married pairs; 9460-9476 (even numbers) single cars; 9500-1 to 9518-9 married pairs; 9530-9631, 9532-9633, etc., to 9542-9643 married pair units for bar cars (sic); 9560-90 (even numbers) single cars; 9600-1 to 9622-3 married pairs. It does seem overly complicated, but there is a semi-method to the madness. The single trailer cars are split into two series to represent cars owned by New York and Connecticut; the pairs that are married 9500s with 9600s are Connecticut Department of Transportation-owned units designated for bar car conversion at some point in the future should that option be funded (the cars are being delivered as coaches); and the odd split of married pairs 9500-19 and 9600-23 represent car ownerships by MTA and CDOT respectively on the final option order. This degree of car numbering complexity has its roots in the designation of ownership of the original (1973) 144-car M-2 fleet that spanned from 8400-8600s (8400s MTA, 8500s CDOT, 8600s being the numbers of the original 20 bar cars split evenly between MTA and CDOT) and then 8700 (CDOT) and 8800 (MTA)-series cars in the 1975-6 option order of 100 cars. (W. Zucker, R. Yee)

New timetables went into effect on Metro-North on Sunday, May 11. They were designed to improve service and more accurately reflect travel times with the mandatory speed reductions at critical locations such as at curves and bridges. Despite these speed restrictions, 83% of peak period New Haven Line customers will see an improvement in travel times due to the completion of a catenary and bridge replacement project between Southport and Bridgeport that restores four-track operations and permits greater dispatching flexibility. The Danbury Branch will once again have four through trains to and from Grand Central Terminal. The Harlem Line will see running time reductions of four minutes inbound and two minutes outbound as a result of the completion of the track work along Park Avenue in the Bronx, finally allowing all four tracks to support 75 mph operation with full train service restored at Melrose and Tremont. On the Hudson Line, running times will generally be two minutes shorter inbound and three minutes longer outbound to more accurately reflect the speed restrictions along the line at Yonkers and Spuyten Duyvil. (Metro-North, May 11)

Due to a fire that destroyed a switching center hut just west of Cos Cob on Saturday, May 10, the interlocking known as CP-229 is now under local manual control by a Signal Maintainer stationed there during peak periods working with the Rail Traffic Controller. Operational flexibility has been partially restored along the 10-mile stretch of track between Stamford and Harrison. However, a return to full operational flexibility may possibly take a year. A rescue locomotive will be on standby near this section of the line to expedite the removal of any train that breaks down in this area. (***Darien Patch***, May 27)

As the May 11 schedule had already been issued and did not readily accommodate the new restrictions on train dispatching, a new schedule will be issued on July 7 on the New Haven Line to reflect this long-term change as well fine-tune the changes made in the May 11 timetables. It will also reflect the resumption of normal operations on the Danbury Branch, which had been hampered since late 2013 with significant delays stemming from "stop and warn" grade crossing procedures at all grade crossings while signal circuit issues were addressed and corrected by the contractor that had installed them. Because of this, time slots on the Harlem Line between Woodlawn Junction and Grand Central Terminal will require minor changes to the Harlem Line schedules as well. In summary, for the AM Peak, Train

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#1317, the 6:50 AM all-stops local from Stamford to Grand Central Terminal, will depart Stamford six minutes later at 6:56 AM. This change will restore a connection with Train #1513, the 5:48 AM from New Haven, which arrives at Stamford at 6:52 AM and saves up to 28 minutes for customers. From a dispatching standpoint, the schedules of three other trains will be changed to accommodate this service improvement: Train #1315, the 6:55 AM semi-express from Stamford, will operate five minutes earlier, departing Stamford at 6:50 AM, Train #1219, the 7:29 AM from New Rochelle, will operate seven minutes earlier, departing at 7:22 AM, and Train #1319, the 7:28 AM from Harrison, will operate three minutes later, departing at 7:31 AM with no change to the arrival time at Grand Central Terminal. Train #1525, the 6:20 AM train from New Haven to Grand Central, will add stops at Old Greenwich, Riverside, and Cos Cob, but will no longer stop at the Port Chester and Rye stations to relieve an overcrowding situation. In the PM Peak, Train #1570, the 6:35 PM from Grand Central Terminal to New Haven, will depart Grand Central four minutes earlier at 6:31 PM to relieve a crowding issue. On the Harlem Line, Train #616, the 6:46 AM from Goldens Bridge to Grand Central Terminal, will depart from the White Plains station two minutes earlier at 7:16 AM, Train #316, the 7:11 AM local from North White Plains to Grand Central Terminal, will operate six minutes later, and Train #516, the 7:34 AM express from North White Plains to Grand Central Terminal, will operate one minute later and arrive in Grand Central two minutes later. Additional cars have been added to trains that have experienced consistent standee conditions following the May 11 schedule changes. (Metro-North, June 05)

Metro-North reported that it has completed most of the priority items on its 100-day action plan to improve safety. A re-emphasis on safety over on-time performance has been the focus of the railroad since a series of derailments, wrecks, and fatalities starting with the May 17, 2013 derailment and collision east of the Fairfield Metro station and culminating with the fatal wreck at Spuyten Duyvil on December 1, 2013. However, the railroad still has to install alerter systems on railcars not yet equipped. ***Metro*** magazine reports that 21 of the 32 objectives of the 100 Day Action Plan are fully implemented, with seven others in progress, and the remaining two will be addressed upon the release of independent reports by outside entities. (***CBS News/Associated Press***, June 11; ***Metro Express E-newsletter***, June 13)

Metro-North will install track geometry measurement systems on one P-32-AC-DM Genesis locomotive, one Bombardier cab control coach, an M-7, and an M-8. With these four units, the ability to inspect all three lines will be possible. Passive recordings will be made of all tracks these cars travel over and enhance the railroad's ability to detect and address track defects in a timely manner. (***Journal News***, May 23)

Metro-North was criticized and fined by the Occupational Safety and Health Administration (OSHA) for disciplining seven employees for being absent from work on direction by their personal physicians. The railroad revised its policies in April, 2014 to address such situations. (***New York Post***, June 4)

One of only two remaining "swing" bridges on the Northeast Corridor, the bridge known as "WALK" located in South Norwalk, Connecticut, has been failing to close properly on an increasing frequency, causing hours-long delays in Amtrak and Metro-North service. The need to acquire funding to replace this 118-year-old structure has become a re-election year crisis for Connecticut Governor Dannel P. Malloy. The sole strategy proposed thus far is to apply for $349 million of the $3 billion in federal Hurricane Sandy storm resiliency funds to begin the process of replacing this bridge with a new bascule bridge that is estimated to cost $465 million. Three other bridges with ages averaging 109 years require replacement as well but are currently not in as critical a state. In the meantime, emergency repairs to WALK bridge lasting several weeks will limit bridge openings to just a few that must be arranged in advance. (***CT Mirror***, ***AP***, June 13)

The first stage of the first fare hike since 2011 took effect on Sunday, June 15, on Rockland County buses and by August will increase UniTicket fares on the Tappan ZEExpress bus connections to Metro-North's Tarrytown station. The bus portion of the weekly fares will go from $13 to $20, with monthly fares increasing from $40 to $60, the first such cross-river fare increase since 2009. (***Journal News***, June 13)

CONNECTICUT DEPARTMENT OF TRANSPORTATION

Member Jack May sends a report that URS Corporation, a consultant hired by the Connecticut Department of Transportation, is exploring the option of utilizing Diesel Multiple Unit (DMU) trains on a possible 20-mile rail line linking Waterbury with Berlin, Connecticut. At Berlin, passengers would be able to connect with an augmented Amtrak service on the New Haven-Hartford-Springfield Line. (Jack May, June 12)

MTA LONG ISLAND RAIL ROAD

In a similar conclusion to that of the first Presidential Emergency Board (PEB), the second PEB has sided mostly with the position of the unions representing LIRR's employees by recommending the 17% pay increase, with work rule and benefits changes that the labor organizations had been seeking. MTA has taken a position of offering pay increases, benefits, and work rule changes similar to that agreed upon by TWU representing most subway and bus employees at NYC Transit. However, this PEB has identified key differ-

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ences between what TWU had settled for and what it is offering LIRR employees, citing higher health care costs that would be borne by employees. (***ChiefLeader.com***, May 23)

In a ploy to exert additional political pressure on New York Governor Andrew Cuomo in an election year, the unions representing LIRR employees have hinted that it may postpone a potential strike from July 19 to sometime after Labor Day, ostensibly to protect the interests of businesses dependent on summertime vacation travel to the eastern end of Long Island. There is a 6% gap between the union demands of a 17% wage increase vs. an MTA offer of 11% over the same six-year contract period. (***New York Daily News***, May 29)

A non-profit group released the findings of a study involving the economic impact of adding a third track to the double-tracked mainline between Floral Park and Hicksville. The group claims that the $1.1 billion to add almost 10 miles of additional track to relieve a long-standing bottleneck on LIRR could boost the economy of Long Island by well over a billion dollars 10 years after its completion. (***Long Island Press***, May 7)

Vornado, the landlord controlling the franchises governing the retail establishments on the 33rd Street passageway between 7th and 8th Avenues at New York Penn Station, is not renewing the leases of fast food establishments in an attempt to go upscale. (***Crain's New York Business***, May 26)

A record 36,000 people utilized LIRR services to and from Belmont Racetrack in hopes of witnessing the first Triple Crown-winning horse in 36 years. By 7 PM, with their hopes dashed, the trip home was no dash either. Instead, it turned into a slow crawl with some riders waiting in queues that were over two hours long. To LIRR's credit, it quickly responded by adding 14 more trains in addition to the scheduled 38 Belmont Special trains originally designed to handle an anticipated 21,000 riders, something NJ Transit did not do during the Super Bowl when more people than expected rode its trains. (***New York Daily News***, June 9)

NJ TRANSIT

NJ Transit received $66.8 million in federal funding to recover some of the costs of storm-related damages to the system from Hurricane Sandy. The funds will also go toward the construction of a new emergency operations communications center, replacing a trailer located inside a garage that was used during the storm. (***Progressive Railroading***, May 29)

NJ Transit announced the start of a new weekend rail service featuring through trains between New York Penn Station and Bay Head on the North Jersey Coast Line utilizing the dual-powered ALP-45-DP locomotives. They will operate as electric locomotives drawing power from overhead catenary from New York Penn Station to Long Branch, New Jersey, and switch to diesel for the run south to Bay Head. These trains will offer a 25-minute reduction in travel times and supplement existing hourly shuttle services between Long Branch and Bay Head. Four new round trips will operate on Saturdays, Sundays, and holidays from June 28 through September 1 to serve the weekend "Jersey Shore" traffic with round-trip rail ticket/beach admission packages that save customers $6.50. Two round trips will be directed at serving daytime beach travelers while the other two trips will serve the early morning and late evening markets. (NJT press release, June 10)

Sometime earlier this year, NJT has quietly changed the time period of ticket validity on Hudson-Bergen Light Rail from 90 minutes to just 60 minutes with no public notice. NJT claimed the change was made to keep riders from using a single ticket to ride round-trip or make short stopovers for shopping trips. Local politicians as well as the riding public are outraged at the total lack of public notice, citing travel times from one end of the system to the opposite end requiring 59 minutes. (***Hudson Reporter***, June 8)

PORT AUTHORITY TRANS-HUDSON RAILROAD

PATH received $166.9 million in federal funding to cover damages by Hurricane Sandy. In addition to expenses already incurred in restoring service after the storm, the funding will also provide for salt residue removal from the tunnels that were flooded with seawater. A total of $235 million was received from the federal government with some of it going toward NJ Transit (see above) as well as hardening the Hudson-Bergen and Newark light rail systems from future storms. (***Asbury Park Press***, May 29)

PATH issued a new timetable on May 4, replacing the January 26 timetable issued for the Super Bowl. (R. Yee, June 15)

AMTRAK

Member Randy Glucksman reports that Amtrak issued its Summer/Fall timetable effective June 9. Copies are available at New York Penn Station. The cover features the new ACS-64 locomotive 600 hauling Amfleet I coaches on the Northeast Corridor. (R. Glucksman, May 27)

Amtrak is planning to vastly improve the Wi-Fi capacity on its *Acela* services and is exploring what infrastructure improvements would be needed to achieve it. (***Computerworld Singapore***, June 10)

OTHER TRANSIT SYSTEMS

BOSTON, MASSACHUSETTS

MBTA has awarded a contract for 24 "Type 9" light rail vehicles to CAF-USA for $118 million. These cars are being ordered to meet the car fleet needs when the Green Line is extended in 2019 to Cambridge, Somerville, and Medford. Nearly half of the funding is coming from federal sources. The car bodies will be manufactured in Spain and the shells shipped to CAF's facility at

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Elmira, New York where final assembly and testing will be performed. Delivery of the 24 cars is expected between the end of 2017 and the end of 2018. The Type 9s will be 70% low-floor with four wheelchair accommodations to meet current ADA requirements as well as four "perch" seats in the center section. (***StarGazette.com***, June 10)

CAF's operations in New York State have grown significantly, with CAF employing 800 Elmira-area residents. New buildings have been erected at the Chemung County facility to accommodate working on multiple light rail vehicle projects at one time — Kansas City, Cincinnati, Houston, and now Boston.

The new Boston cars will have the same amenities found in new transit equipment across the country: computer-controlled lighting and HVAC.

MBTA instituted what may be the toughest regulations in the nation regarding personal electronic devices. While on duty, no Operators of road and rail equipment may have on their possession any personal electronic device, even if they are completely turned off. The penalty for violating this rule is automatic termination of employment. This is far more restrictive than current Federal Railroad Administration regulations governing railroads across the nation. These Draconian rules were instituted after a spate of accidents on MBTA involving Operators illegally using cellphones while operating their vehicles. (***Boston Daily***, June 16)

PHILADELPHIA, PENNSYLVANIA

SEPTA launched its second annual "Make the Safe Choice" safety day with a focus on distracted commuting, customers who become preoccupied with their smartphones, etc. and do not pay attention to their surroundings, often resulting in trips and falls as well as inadvertently walking into areas they should not be in, such as past the yellow warning lines near platform edges or onto the tracks. (***Metro***, May 29)

President Obama signed an executive order ending a one-day work stoppage on Saturday, June 14, by SEPTA regional rail system employees represented by TWU Local 234, IBEW, as well as other unions, forcing workers to return to work Sunday, June 15. A Presidential Emergency Board (PEB) will convene to try and mediate a settlement of the labor-management dispute that has left workers without a contract for five years. A difference of 3% pay increase as well as retroactive benefits and pension contributions are the major points, with the union requesting binding arbitration, something at which SEPTA management has balked. This first PEB will provide 120 days to reach an agreement. If none is reached, a second PEB can be convened, providing another 120 days to come to an agreement. If no contract is agreed upon, the workers will be free to strike again. (***Philadelphia Inquirer***, June 15)

SEPTA commenced 24-hour weekend service on June 15 through Labor Day as part of a pilot program on the Market-Frankford and Broad Street Lines. Trains will operate on a 20-minute headway between midnight and 5 AM. Fares will be collected from passengers by the Train Operator prior to boarding trains with cashiers assisting the process at high-volume stations. (Railway Age, June 4)

WASHINGTON, D.C. AREA

Streetcars are making a comeback in the U.S., even if it is a little uneven. Washington, D.C.'s system has been plagued with delays, and on May 28 the D.C. Council voted to cut funds from the streetcar project from Mayor Vincent C. Gray's proposed budget.

According to the ***Washington Post***, many people will keep in mind that the Metro broke ground in 1969, the first stretch of the Red Line opened in 1976, and the last part of the originally planned system opened in 2001. Another aspect to the recent news on light rail is that ***Trains Magazine*** has run a story in its July, 2014 issue focusing on the under-development streetcar lines across the U.S. ***The Washington Post*** ran two articles in late May, detailing the pitfalls of the development of the new D.C. streetcar system.

Moving it from a concept to reality has taken years, including three Mayors. Transit advocates have encountered many challenges to the streetcar program, such as the long-term funding revision put forward by D.C. Council Chairman Phil Mendelson. Back in 2010, when Gray was Council Chairman, he came in for some sharp criticism from streetcar fans during an effort to cut the program's funding to help close a $550 million gap in the D.C. budget.

Mayor Fenty's transportation director, Gabe Klein, led the lobbying effort to avoid the cutback, which Klein said at the time would "essentially kill the program." As Mayor, Gray became a cheerleader for the streetcars, and a strong opponent of the cuts proposed by Mendelson.

Part of the issue has been skepticism due to various delays. At the current time, the streetcar does not have a start date, and there are also complications in regards to fare collection and physical structures that need to still be completed. However, the streetcars are being tested along their initial route on H Street and Benning Road NE, and the District Department of Transportation is well into developing future routes that are meant to be part of a 22-mile network.

Council members are supportive of the streetcar program, but skeptical the money in Gray's program will actually get spent in the time allocated, not to mention that members of the D.C. Council believe that the mayor's streetcar proposal is too grand. ***WTOP*** reported on June 6 that the streetcar will open late this year at the earliest. But that still doesn't solve other problems — DDOT has yet to announce what the fare will be, or

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Commuter and Transit Notes

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how it will be collected. Components of the line, including the car barn for maintaining the vehicles, have yet to be completed.

However, the two candidates for the November mayoral election are streetcar advocates. Muriel Bowser, who won the Democratic mayoral nomination in April, and her opponent, David A. Catania, have both stated their support of the project.

The broader, 37-mile streetcar system will cost $3.2 billion by 2025, according to the administration's latest calculations, but after the council's budget vote it will receive only $938 million. In the end, the issues with the streetcar can be simply described as this: a conflict between a Mayor and a City Council. (***Washington Post***, May 28; ***WTOP 103.5 FM***, June 6)

MEMPHIS, TENNESSEE

More rough news, this time in Memphis: The Memphis Area Transit Authority will stop running all trolleys as of Wednesday, June 11, as the agency decides how best to renovate or replace its fleet of 15 trolleys. MATA Interim President Tom Fox said he made the decision after experts from the American Public Transportation Association recommended in a preliminary report that MATA overhaul the existing trolleys or replace them, either with newly restored "heritage" trolleys or more modern-looking streetcars.

The trolleys that went into service on the Main Street Mall in the early 1990s were vintage street cars from Portugal and Australia that had been restored. Some of them are 100 years old. The experts reviewed the trolleys — some in use since the service began in 1991 — following an April fire on a trolley car, the second fire in six months on the Madison Avenue Line.

Fox estimated it will take three to six months for the agency to make a decision that involves the cost of each option. In the interim, MATA will run new hybrid electric shuttle buses along the trolley routes.

Restoring the existing trolleys in service would be the least expensive option, while going to more modern-looking streetcars, while less aesthetic but more practical, would be the most expensive. (Local Memphis via Al Holtz, June 10)

CINCINNATI, OHIO

Member Sandy Campbell reports that construction of the Cincinnati Streetcar has begun and that several sections of track have already been laid. Rather than use girder rail, a flangeway is created by placing PVC pipe next to the rail before concrete is poured. Workers lift out the pipe once the concrete has cured to a certain strength. Progress and updates can be found at http://bit.ly/1lVhZng (Sandy Campbell, June 16; Cincinnati-OH.gov, June 16)

CHICAGO, ILLINOIS

In response to three incidents involving two alleged episodes of excessive speed and another where an Engineer failed to stop for a red signal within a two week period, the Federal Railroad Administration (FRA) has launched a 45-day investigation of Metra similar to the "Deep Dive" safety assessment that was performed on Metro-North Railroad earlier this year. The focus will be on operating crews with speed checks of trains, locomotive event recorder spot-checks, and review of training and certification procedures. (***Chicago Tribune***, June 6)

KANSAS CITY, MISSOURI

A groundbreaking ceremony was held on May 22 to mark the launch of construction on a 2.2-mile starter tram line linking River Market with the city center and Union Station.

Construction is due to be completed by mid-2015 on the Kansas City Downtown Streetcar and commercial operations are expected to begin by the end of the year. The line will have 16 stops and the LRV fleet will be maintained at a depot near the River Market terminus.

Following the groundbreaking ceremony the City Council immediately voted to approve $8 million in funding to prepare the next phase of the project, which could involve extending the line by up to eight miles. Omaha-based engineering consultancy HDR will be awarded a $3.7 million contract to plan an extension along Main Street, which would run south from Union Station to 51st Street. Burns & McDonnell Engineering will carry out a $4.3 million study into extending the line east from the city center. (***International Railway Journal***, May 23)

SAN FRANCISCO, CALIFORNIA

A three-day sickout by MUNI operators ended on Thursday, June 6. All routes returned to normal service levels. During the first and second days of the sickout only 200 of the system's 600 vehicles were in service, with 440 being in service on the third day. The sickout was triggered by a proposed labor contract that was overwhelmingly rejected by the membership. (Al Holtz, June 5)

Not only did the world of literature and civil rights lose an icon with the passing of Maya Angelou on May 28, but San Francisco's first African American streetcar Conductor as well.

Dr. Angelou, who died at age 86 at her home in Winston-Salem, North Carolina, was born Marguerite Johnson in St. Louis and spent her first years in Arkansas. At 14, she dropped out of school to become a streetcar Conductor. When she went to get an application, Dr. Angelou said, the staff refused to give her one. Her mother encouraged her to persevere.

"I saw women on the streetcars with their changer belts," she told Oprah Winfrey. "That, and they had caps with bills on them. And they had form-fitting jackets. I loved the uniforms. So I said, 'That's the job I want.'"

Rick Laubscher, president of Muni's historic preservation partner, pointed out Dr. Angelou's role in breaking color barriers for San Francisco transit operators. "She

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helped open the door to good, middle-class employment for thousands of African-Americans who didn't have the opportunity before," Mr. Laubscher said. "That's a much different legacy than her legacy as an author or poet, but an important legacy nonetheless." (***Mass Transit Magazine***, May 29)

LOS ANGELES, CALIFORNIA

Los Angeles transit officials, in conjunction with Metrolink and Amtrak, are planning to construct through tracks that will extend past the current bumping posts at the south end of Union Station, over the 101 freeway, and connect with existing Metrolink tracks. As part of a $350 million track improvement project slated for Union Station, this would put an end to the time-consuming back-up moves for trains entering or leaving the station and permit the through-routing of trains, eliminating the need to transfer between connecting train services, potentially saving travelers up to 20 minutes. (***Los Angeles Times***, May 27)

TORONTO, ONTARIO, CANADA

Mayoral candidate John Tory has put forth a proposal named "One Toronto," with its centerpiece being a new 32.9-mile, 22-station SmartTrack Line that would utilize GO Transit rail routes and connect four Toronto Transit Commission rapid transit lines at Dundas West and Main Street on the Bloor-Danforth Line, Union Station on the Yonge Street Line, and Mount Denis on the Eglinton Crosstown Line currently under construction. He also calls for the extension of the Bloor-Danforth Line over the existing Scarborough LRT Line. Competing mayoral candidates have called into question the cost and funding sources for this CA$8 billion plan. (***CBC News***, May 27)

WINNIPEG, MANITOBA, CANADA

On June 3, VIA announced that for operational reasons, train service between Winnipeg and Churchill had been suspended until further notice. Train #692, operating between Thompson and The Pas on June 4, was the last train of this service to operate. (VIARail.ca, June 3)

EDMONTON, ALBERTA, CANADA

Canada announced on May 26 that it will allocate C$150 million (Us$138 million) towards the expansion of the light rail network in Edmonton through the New Building Canada Fund's Provincial-Territorial Infrastructure Component (PTIC). The funds will go towards the construction of the C$1.8 billion ($1.66 billion) southeastern section of the Valley Line from Mill Woods Town center to 102nd Street in the city center. The 13.1-kilometer (8.1-mile) line will have 25 stations and is initially expected to carry around 31,500 passengers per day. Construction is expected to begin in 2016 with the aim of commissioning the line in late 2020.

The additional funding brings the total federal commitment to the project to C$400 million (US$368 million), including C$250 million (US$230 million) from PPP Canada. The Alberta provincial government is providing C$250 million towards the project through its Green Trip public transport fund, C$150 million (US$138 million) in additional funding and a C$200 million (US$184 million) interest-free loan. The remaining C$800 million (Us$736 million) will come from municipal government sources. (***International Railway Journal***, May 28)

VANCOUVER, BRITISH COLUMBIA, CANADA

VIA introduced its new "Prestige Class" sleeping car as well as new and refurbished cars such as Dining, Manor, Chateau Park, Skyline, and Economy at its Vancouver Rendezvous travel industry event. Also presented were the Business Class cars recently introduced on the Quebec City-Windsor Corridor. The Prestige Class sleeping cars offer 50% larger rooms, private washrooms with shower, 60% larger windows, flat-screen TV with video selections, and in-room mini-bar and concierge service. (VIARail.ca, May 29)

SALVADOR, BRAZIL

Limited public services began on the first phase of the metro network in Salvador, Brazil, on June 11, just two days before the city was due to host its first fixture in the 2014 soccer World Cup.

Initially services operate on the 7.6 kilometer (4.7 mile) five-station Lapa-Retiro section of Line 1 between 12 PM and 4 PM with trains running at 10-minute intervals and free travel for passengers. However, on match days access was limited to soccer fans with tickets.

Frequencies and operating hours will be increased incrementally with the aim of launching the full timetable by September. Services will be extended over the remaining 4.3-kilometer (2.7-mile) section of Line 1 phase 1 between Retiro and Pirajá in January, 2015.

Construction began in 2000, but the project has suffered repeated delays as a result of contractual disputes and political wrangling, which ultimately resulted in the Bahia state government taking over responsibility for completing the line.

At the start of this year the state government signed a PPP contract with Brazilian infrastructure concessionaire CCR for the construction and operation of the second phase of the network. This includes the 24.2-kilometer (15-mile) east-west Line 2 from the city center to the airport and the 5.6-kilometer (3.5-mile) section of Line 1 between Acesso Norte and Pirajá. The contract also includes preparations for the extension of Line 1 to Águas Claras. The extension is expected to take 3½ years to build, and CCR will operate the network for 27 years. (***International Railway Journal***, June 11)

EDINBURGH, SCOTLAND

Nearly six years after construction began, Edinburgh finally launched its first modern light rail line on May 30 when the 13.5-kilometer (8.4-mile) route was inaugurated by dignitaries including Scottish Transport Minister

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Keith Brown and Edinburgh City Councilor for Transport Lesley Hinds.

Public services are due to start on May 31 on the 16-station line from York Place in the city center to Haymarket, Murrayfield Stadium, and Edinburgh Airport.

The project has been beset by issues including major contractual disputes and a funding crisis that delayed the project by nearly three years and led to the cancellation of the section of the route between York Place and Leith.

Even with the reduced scope of the project, costs soared from an estimate of £375 million (US$636 million) in 2003 to £521 million (Us$883 million) when construction contracts were signed in 2008 and a final revised budget of £776 million (US$1.3 billion) was agreed on in 2011. With interest payments on a 30-year loan taken out by Edinburgh City Council to cover the funding shortfall expected to reach around £200 million (US$339 million), the final bill will be nearly £1 billion (US$1.69 billion).

Services are operated by a fleet of 43-meter (141-foot)-long Urbos LRVs supplied by CAF, although only 17 of the 27 vehicles ordered are required to operate the shortened route.

Despite the enormous difficulties encountered in the first phase of the project, the City Council has not ruled out future expansion of the network. (***International Railway Journal***, May 30)

FRANCE

One of those electric traction stories that makes the traditional media has come out of France, where 1300 platforms will have to have modifications made so that the new Alstom Régiolis and Bombardier Régio 2N trainsets can accommodate platform clearances. The RFF (French Rail Network, which oversees the infrastructure for the trains) has accepted responsibility for the problem, saying it passed on inaccurate gauging data to SNCF, which managed procurement of the trains. RFF's spokesman said, "It's as if you'd bought a Ferrari and wanted to get it in your garage only to discover the garage was not quite the right size because you'd never had a Ferrari before. It can mean shaving a few centimeters off a platform or moving an electric box that is too close to the platform edge." (***The Guardian***, May 21; ***International Railway Journal***, May 21; ***The Telegraph***, May 21)

Meanwhile, Alstom is also supplying 15 Citadis Dualis for the Ile-de-France region after an SNCF exercise of option on behalf of STIF.

The order, which is part of the framework agreement signed in 2007 on behalf of the French regions, amounts to a total of €80 million (US$109 million). The delivery of the 15 Citadis Dualis tram-trains will begin in the summer of 2016 for an expected commercial operation from July, 2017, on the Epinay-sur-Seine and Le Bourget sections of the TLN line.

The Board of Ile-de-France Transport Authority (Stif) voted on June 5 to approve a €100 million (US$136 million) contribution towards a €256 million (US$347 million) project to automate Paris's second-busiest metro line. Line 4 runs 12.1 kilometers (7.5 miles) from Porte de Clignancourt to Mairie de Montrouge and carries around 740,000 passengers per day, second only to Line 1, which has already been converted to driverless operation.

Line 4 will receive the fleet of MP89 trains currently in use on Line 14, which will be released by the delivery of new trains being ordered in connection with the extension from St. Lazare to Mairie de St. Ouen.

Patronage has increased on the line following the opening of the 1.5 kilometer (.9 mile) southern extension from Porte de Orléans to Mairie de Montrouge, and a further 1.7 (1 mile) kilometer extension to Bagneux is due to open by the end of 2019.

The remaining €156 million ($212 million) will be financed by Paris Transport Authority (RATP) and the first driverless trains are due to run on Line 4 in 2020. (***International Railway Journal***, June 9)

COPENHAGEN, DENMARK

The Danish government reached an agreement with the Copenhagen City Council on May 15 to construct two extensions of the city's automated metro network. The two extensions will be branches off the Cityring circle line, which is currently under construction and due to open in 2018 and both will become part of Line M4.

The Sydhavn line will branch off the Cityring at Sonder Boulevard, utilizing part of the link to the new depot before continuing along the harbor front to reach an interchange with S-Train and mainline services at Ny Ellebjerg.

The government's main interest in the metro line is that it will relieve congestion at Copenhagen Central by way of this interchange, allowing new and diverted regional services from the west to run to the airport via the existing freight link to the Oresund Line, avoiding Copenhagen Central. The City Council is keen to see the line go ahead because it will pass through the city's disused southern docks, which are now undergoing redevelopment. Three of the line's four stations will be situated in this area.

Like the Cityring, most of the line will run in bored tunnels, with a short section of surface line on the approach to Ny Ellebjerg.

The Sydhavn Line is expected to cost DKK 6-8 billion (US$1.09–$1.46 billion).

To the north, a second branch will leave the Cityring near the Osterport station and run north to serve the Nordhavn development area. This is likely to reach the recently-opened cruise ship terminal, which currently lacks good transport links to the city center. This line will

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Commuter and Transit Notes

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mostly run on viaduct.

The initial 3-kilometer (1.9-mile) section to Orientkaj and Nordhavn has already been approved and construction is expected to begin soon, with both extensions due to be fully operational by 2023. (***International Railway Journal***, May 16)

MOSCOW, RUSSIA

The Talgo rolling stock which is currently under construction for Federal Passenger Company will replace Siemens Sapsan trainsets on the Moscow-Nizhny Novgorod route, Russian Railways announced on June 11.

The Sapsan trainsets, designated Velaro RUS by the manufacturer, are to be concentrated on the Moscow-St. Petersburg route. This will enable the provision of a regular-interval service that RZD President Vladimir Yakunin said would enable rail to compete with all modes of transport, including buses.

Three of the seven trainsets being supplied by Patentes Talgo will be equipped with gauge changing equipment for use on the Moscow-Minsk-Warsaw-Berlin route starting in December, 2015, while four 1,520-millimeter (60-inch)-gauge sets will run on the domestic routes. It had previously been envisaged that these trainsets would be used on Moscow-Kiev services.

The first trainset is currently undergoing certification and acceptance tests at the VNIIZhT circuit at Shcherbinka near Moscow, where it was inspected on June 10 by Yakunin and Patentes Talgo President José María Oriol. The trainset is expected to complete its test program in September. Two cars will also be tested at the Rail Tec Arsenal climate chamber in Vienna. (***Railway Gazette***, June 11)

CZECH REPUBLIC

In the Czech Republic, plans to raise the maximum speed on principal lines from 160 km/h (99 mph) to 200 km/h (124 mph) have been put on hold by infrastructure manager SZDC, which now believes the benefits would not justify the cost of eliminating all level crossings and upgrading signaling systems. The plan was first put forward in 2009, with the 39-kilometer (24-mile) Blazejovice-Nezamyslice section of the Brno-Perov route included in the Ministry of Transport's program for completion by 2015 at a cost of CZK 24 million (US$1.19 million). Raising speeds above 160 km/h is now planned for 2030-50. This is dependent on a decision on whether to go ahead with the proposed construction of new high speed lines, which is expected in 2017. (***Railway Gazette***, June 9)

GREECE

The Athens (Greece) metro authority Attiko Metro announced on June 5 that its new fleet of 17 Hyundai-Rotem trains for Lines 2 and 3 has been approved for passenger operation, enabling the first sets to enter service over the next few days.

The trains were ordered in 2009 in a deal worth €155 million (US$210 million) and deliveries began in 2011. Following the completion of the certification process, Attiko Metro has handed the fleet over to metro operator Stasy.

The 106-meter (348-foot)-long six-car trains will accommodate up to 1,032 passengers and have a maximum speed of 80 km/h (50 mph).

A 5.5-kilometer (3.4-mile) extension of Line 2 from Aghios Dimitrios to Elliniko was inaugurated last July, while the 1.4-kilometer (.9-mile) extension of Line 3 from Egaleo to Aghia Marina opened last December. A further 7.6-kilometer (4.7-mile) extension of Line 3 from Aghia Marina to Dimotiko Theatro in Piraeus is under construction and is due to open in 2017. (***International Railway Journal***, June 6)

XINJIANG, CHINA

Test operation began on the first section of high-speed line in China's Xinjiang Uygar Autonomous Region on June 4 with the start of trials on the 300 kilometer (186 mile) Urumqi-Shanshan section of the Urumqi-Lanzhou high-speed line.

Initial tests have been carried out using a CRH2C train operating at speeds of between 160 km/h (99 mph) and 277 km/h (172 mph). The line has a design speed of 250 km/h (155 mph).

The 1,776-kilometer (1,104-mile) Urumqi-Lanzhou high-speed line is due to open at the end of this year and will reduce the journey time between the two cities from around 21 hours to 8 hours.

The 31-station line crosses the Gobi Desert and reaches a summit of 3,607 meters (11,834 feet) above sea level in the Qilianshan No. 2 Tunnel. To protect the line from high desert winds, 462 kilometers (287 miles) of screening has been installed along the route. (***International Railway Journal***, June 5)

MUMBAI, INDIA

In India, the first phase of Mumbai Metro Line 1 was officially opened on June 8, when Maharastra Chief Minister Prithviraj Chavan flagged off the first service from Versova.

The 11.4-kilometer (7-mile) east-west line runs on an elevated alignment between Ghatkopar and Versova with 12 stations. Interchanges with suburban lines are provided at Andheri and Ghatkopar; interchanges are planned with the future metro Line 2 at D.N. Nagar and Line 3 at Marol Naka.

Construction on India's first PPP metro project began in February, 2008. A 35-year build-operate-own-transfer concession was awarded to Mumbai Metro One, a joint venture of Reliance Infrastructure, Veolia Transport, and Mumbai Metropolitan Region Development Authority.

Service runs from 5:30 AM to 12 midnight with four minute peak headways and every eight minutes off-peak. End-to-end journey time is 20 minutes.

A fleet of 16 air-conditioned four-car trainsets has

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SUBDIVISION "A" CAR ASSIGNMENTS

CARS REQUIRED JUNE 16, 2014

LINE	AM RUSH	PM RUSH	LINE	AM RUSH	PM RUSH
1	10 R-62, 310 R-62A	10 R-62, 290 R-62A	5	340 R-142	340 R-142
2	340 R-142	320 R-142	6	90 R-62A, 300 R-142A	100 R-62A, 300 R-142A
3	250 R-62	250 R-62	7	275 R-62A, 77 R-188	253 R-62A, 77 R-188
4	220 R-142, 130 R-142A	210 R-142, 120 R-142A	S (42nd Street)	10 R-62A	10 R-62A

SUBDIVISION "B" CAR ASSIGNMENTS

CARS REQUIRED JUNE 8, 2014

The following are different from the assignments published in the June, 2014 ***Bulletin***:

LINE	AM RUSH	PM RUSH	LINE	AM RUSH	PM RUSH
A	304 R-46	10 R-32, 304 R-46, 8 R-68A	L	160 R-143, 32 R-160A	152 R-143, 16 R-160A
B	48 R-68, 152 R-68A	48 R-68, 136 R-68A	Q	20 R-160A, 210 R-160B	20 R-160A, 200 R-160B
F	256 R-46, 120 R-160A	248 R-46, 110 R-160A	S (Franklin Avenue)	4 R-68*	4 R-68*
G	52 R-68	48 R-68	S (Rockaway)	12 R-46*	12 R-46*

*Last month's table was in error.

Second World's Fair Opened 50 Years Ago

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and Willets Point Boulevard when regular expresses were not running. Trains ran non-stop between Grand Central and Willets Point Boulevard. Hours of operation were as follows:

LEAVE TIMES SQUARE

WEEKDAY	SATURDAY	SUNDAY
9:46 AM-2:58 PM	9:25 AM-4:30 PM	9:30 AM-4:00 PM

LEAVE WILLETS POINT BOULEVARD

WEEKDAY	SATURDAY	SUNDAY
8:51-11:05 PM	8:00 PM-midnight	7:59-11:00 PM

Regular expresses operated towards Manhattan in the morning and towards Main Street in the evening during extended rush hours on weekdays. Locals started from Main Street or 111th Street in the AM rush and terminated at Willets Point Boulevard in the PM rush. There were several put-ins and layups at 111th Street.

Headways were as follows:

	WEEKDAYS EFFECTIVE APRIL 20, 1964			SATURDAY EFFECTIVE APRIL 25, 1964	SUNDAY EFFECTIVE APRIL 19, 1964
	Local	Express		Local	Local
Midnight	20	—	Morning	6, 5	8, 6
AM Rush	6, 3 1/3	6, 2½	Afternoon	6, 4	5, 4
Midday	6	—	Evening	4, 6	6, 5
PM Rush	4½	4			
Evening	6, 5	—			

Super expresses operated on a 5-minute headway on Saturday morning and Sunday afternoon and a 6-minute headway at other times.

The above schedule was in effect again on April 18, 1965 when the fair reopened. Schedules were revised again when the fair closed. The new schedules dated October 19, 1964 and October 18, 1965 were nearly the same as the schedules operated before the fair opened.

GG trains operated additional service with trains operating non-stop from Hoyt Street to Roosevelt Avenue on an average 30-minute headway every day from mid-morning to mid-afternoon. Running time was 23 minutes. Service began April 22, 1964 and was discontinued May 6, 1964.

The R-33s and R-36s continued furnishing reliable service on 7 until they were finally retired in 2003.

Toward Underground (and Underwater) Rolling Stock

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53 feet 4 inches supported on super-sized 6-wheel (3-axle) trucks. With its early, crude form of structural "modularity" now recognized (at least internally) as a proven method of steel car body construction, the Pennsylvania jumped at the possibility of mass producing a similarly extended version of the P-58 class prototype, and over that summer committed itself to the acquisition of the most practicable such design as soon as it was finalized. As a lead-in an all-steel "RPO" (Railway Post Office) was developed during the intervening fall and winter, which emerged as the first "M-70" class car on February 4, 1907. Numbered 6546, this prototype had a fully-enclosed body cabin of 70-foot length (78 feet overall) and physical dimensions that closely mimicked those of the "PL" class wooden coach. By June of 1907, the M-70's underlying development had come together with the railroad's publicly-expressed (and also necessary) intent to acquire new steel passenger cars, which collectively translated into the all-encompassing "P-70" steel coach specification. It was used as a basis for the Pennsylvania Railroad's first such orders with American Car & Foundry and the Pressed Steel Car Company for a total of 150 cars, these being added onto the first four standard P-70s produced at the railroad's own shops in Altoona.

As for the remaining equipment types ultimately produced for the Pennsylvania Railroad's introduction of Penn Station, there were 13 separate groups of steel cars, all specified around the "P-70" coach described above, which included the following types:

- "B-70" Baggage
- "B-74" Horse Express
- "BM-70" Baggage/Mail
- "D-70" Diner
- "D-78" Diner
- "M-70" RPO
- "PB-70" Combine
- "PBM-70" Combine
- "PC-70" Café
- "P70-DR" Dormitory
- "Z-74" Business
- "Z-68" Business

There were no Pennsylvania Railroad "Sleeper" cars per se, as such equipment was generally handled through the "Pullman Company" at that time (and the car type so named), with their rostering done separately. The Pennsy's extensive stable of more than 1,500 P-70 coaches became the backbone of its passenger car fleet in the golden age of independent, private operation. Having aged gracefully, many were rebuilt and/or reconfigured in the name of "modernization," starting in the 1930s. As comprehensive PRR passenger service declined after World War II, so too did the fleet of P-70s wither away, with the last of the unmodified, non-air-conditioned ("hot") P-70s eliminated from various PRR commuter lines serving New York, Camden, Philadelphia, the Eastern Shore, Baltimore, Harrisburg, Pittsburgh, and Chicago before 1965. Just over 200 modified P-70s (about 13% of the original fleet) survived to the merger with New York Central in 1968, where they roamed about on the greatly reduced schedules (almost exclusively focused in the Northeast) that were offered by successor Penn Central. When the New Haven was brought into this consolidation the following year, the P-70s' departure from their longtime home on the "Northeast Corridor" truly began, as PC swapped much of the New Haven's newer, streamlined rolling stock onto its own services radiating from New York, in contrast to their earlier deployment on the select Pennsylvania/New Haven "through" trains that had operated between Boston and Washington. In exchange, a quantity of Pennsy P-70s was relegated to commuter service on foreign rails in the Greater Boston and Providence areas. Further attrition occurred after the formation of Amtrak in May, 1971, which brought about the discontinuance of passenger car maintenance at the former PRR Hollidaysburg Shops. At that point the P-70 fleet's remains were fragmented into four groups: Amtrak Corridor Services (based at Bear, Delaware); and commuter operations in "New Jersey" (Bay Head Junction and Trenton), Chicago (a local from Union Station to Valparaiso, Indiana), and on Boston's MBTA (routes based at South Station and Providence). By 1972 those in New Jersey were replaced by newer, second-hand cars from western railroads Burlington Northern and Union Pacific, while the Indiana P-70s were retired in 1976 when ex-Erie Lackawanna coaches became available after the creation of Conrail.

Meanwhile, the P-70s on Amtrak and in Boston were both replaced by new, publicly-funded rolling stock (Budd-built Amfleet coaches in 1975 and push-pull cars from Pullman Standard in 1979, respectively). While this did indeed prove to be their swan song after 72 years of service, a few of the venerable (albeit heavily modified) cars did enjoy one last moment in the sun. After Conrail replaced the Penn Central as operator of numerous Northeast Corridor operations in 1976, then including New England and MBTA area commuter services, they sold a smattering of surplus P70 coaches directly to the State of Rhode Island, which affixed its "Hope and Anchor" seal to their exteriors. They were then used on a largely-forgotten local that Conrail continued to operate under a temporary court order, which plied the former New Haven Shore Line between Providence and Westerly. Unfortunately the State of Rhode Island never did develop a subsidy plan for this service and Conrail was forced to discontinue it on June 3, 1977, retiring that select class of "Rhode Island" P-70s along with it. This train was later briefly replaced

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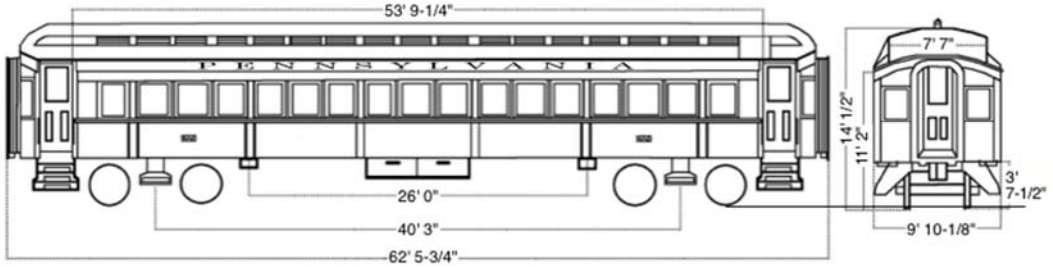
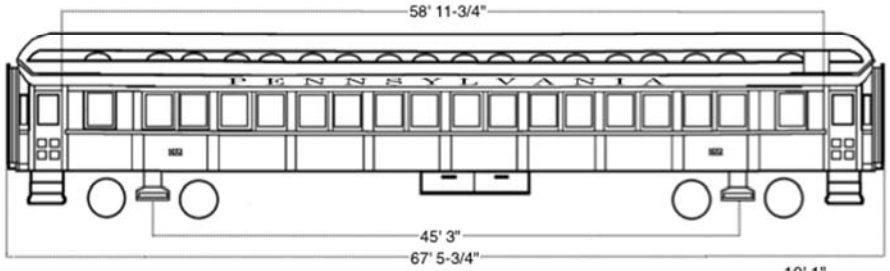
Toward Underground (and Underwater) Rolling Stock

(Continued from page 15)

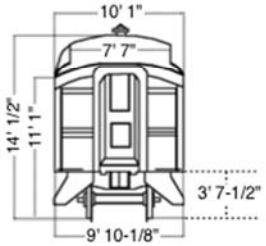
Pennsylvania Railroad
Passenger Car Class P53
Number 1650

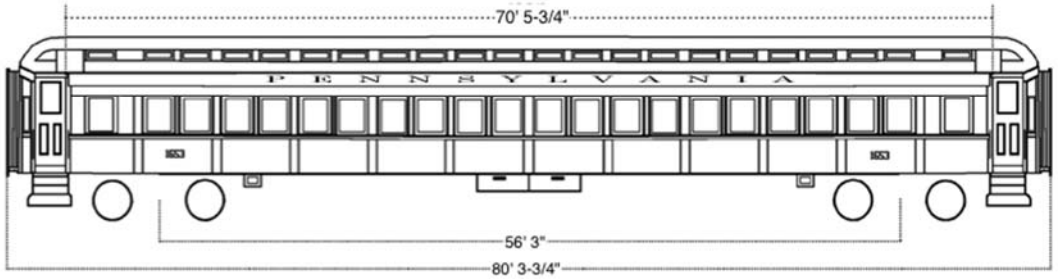


Altoona built Steel Prototype - 1908

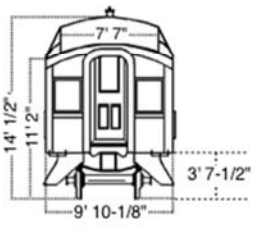


Pennsylvania Railroad
Passenger Car Class P-58
Number 1651
Altoona Built Steel Prototype - 1906





Pennsylvania Railroad
Passenger Car Class P-70
Number 1653
Altoona Built Steel Prototype - 1907



All diagrams courtesy of the PRR Technical & Historical Society (Collection of Bob Johnson)

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TRACTION TOUR TO SOUTHERN EUROPE
by Jack May
(Photographs by the author)
(Continued from June, 2014 issue)

Since my 2008 visit a new extension, marked as Line F, has joined the previous five routes. Thus riding that line was the day's first order of business. Upon arriving at Trindade, we discovered that even though the route is shown as the F on the map, service over the new extension is operated by through cars from the A Line. The new trackage, running about 4 miles, has 10 stations with a portion that includes a tunnel with one station. The remainder is on private right-of-way, with mostly gate-protected grade crossings, allowing good speeds. After returning to Trindade, we transferred to the D Line and proceeded to a great overlook of the Dom Luis I bridge — from a monastery on the southern side of the Douro. Later we rode the A Line to Matoshinos and the E to the airport, followed by the longest line, the B, to its outer terminal at Povoa de Varzim. On Tuesday afternoon we rode the entire D Line, including a short new extension. The only line we missed was the C to Ismai. The B and C were originally the most important of the narrow-gauge lines.

This part of the Metro do Porto report consists of some photos of Route D, which is probably the heaviest line on the system. Base service consists of two-car trains of Eurotrams running on a six-minute headway, which is about the same frequency as cars on the inner portion of the trunk line (which carries 4 services). This line has 8 underground stations below the modern center of Porto, from the transfer station at Trindade to Sao Bento, which hosts a surface terminal for commuter trains. The iconic view of the D shows a train of Eurotrams crossing the Dom Luis I Bridge, which, as mentioned in last month's issue, was constructed by a partner of Gustav Eiffel in 1866. The line enters the bridge directly from a portal at the southern edge of the downtown area, and after crossing the Douro, runs in the central reservation of an arterial road, ending in a cut at a major intersection. In the other direction, after coming to the surface, the line runs at the side of a quiet road through residential areas with schools and hospitals.

After our visit to Matoshinos on Tuesday, we continued outward. It should be noted that the trunk line from the east, which crosses the north-south D Line at Trindade, ends up turning northward. Both the A to Matoshinos and the C to Ismai diverge from the trunk line at level crossings, but the E Line to the airport has a grade separated junction with the B, located at the Verdes station. We made a round trip to the airport first and then rode the B out to the end of the line, the seaside town of Povoa de Varzim. We returned downtown on one of the hourly B express runs, which was a speedy, snappy ride in a Flexity Swift car.

On Wednesday morning Luis joined us at breakfast in our hotel, and we walked a couple of blocks in a light fog to a stop on Route 22. The STCP heritage system consists of three routes, numbered 1, 18 and 22. The first two are similar to corresponding services from the days when standard-gauge streetcars were the most important element in Porto's transit system. See http://www.urbanrail.net/eu/pt/porto/porto-tram.htm. The three connecting heritage lines run every half-hour, 7 days per week, starting a little after the morning rush hour. Routes 1 and 18 are single track with passing sidings, while the 22 is a one-way loop, with a short single-track stub at its outer end. At its Carmo end the 18 also traverses a one-way loop through various streets.

Like Lisbon, the tramway operated a combination of single- and double-truck Brill-type cars in its heyday, but now regular service consists of only the deck-roofed 4-wheelers, which have been equipped with magnetic track brakes. Four such units are operated each day, as Route 1 is sufficiently long to need two cars. The cars on the road on Wednesday were 131, 205, 213, and 220. All were built by the CCFP (Porto's Carris) from Brill blueprints. 131 was completed in 1910, while the others came out of the shops in the late 1930s-early 1940s. Porto also has an excellent tram museum, which is adjacent to the Massarelos carhouse, where the rolling stock for the heritage operation is maintained. But the collection has been moved into the carbarn while the museum's roof is undergoing replacement.

We rode the 22 to Carmo Loop, but did not stop for photos as it was still foggy. We bought a 24-hour pass on the car, which also allows entry to the museum (moot now that the museum is temporarily closed), as Metro do Porto Andante passes are not good on the heritage system (they are valid for travel on the STCP bus system, however). We continued on the 22 to the Batalha end, where we transferred to the funicular for a round trip, pausing at the foot for photos at the entrance to the lower level of the Dom Luis I Bridge, which also has walking space for pedestrians. We then rode the 22, 18, and 1 to Infante, where we stopped for photos, as by now the fog had lifted and the sun was shining brightly. We rode the 1 to its other end at Passeio Alegre and then back to Massarelos Depot, where we boarded the Route 18 car for a round trip. We then bade farewell to Luis, as he had an appointment. We

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Traction Tour to Southern Europe

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enjoyed his company and his knowledgeable commentary about the operation very much.

We took some more photos, and then saw a green and white four-wheeler, 191, coming from Infante on what appeared to be a school charter. We snapped it passing, thinking it would continue out to the other end of the 1, where we had already been. While waiting for its return we visited the museum store, as it was open for the sale of souvenirs and also supplied some convenient and necessary facilities to "freshen up." But when we came back out, we found out we had been fooled, as the 191 had changed ends after our photo and had gone back into the carhouse.

Our last jaunt on the heritage lines was back up the hill on the 18 to Carmo, where we stopped for some final photos. We then walked to the Sao Bento stop of the light rail system, to ride and photograph the D Line. It was fun riding the Porto 4-wheelers again. Of course one does not have to go to Porto to accomplish this, as cars of this type can be found operating in Memphis *(Editor's note: true when this was written, but in June all streetcar service in Memphis was temporarily suspended)*, on McKinney Avenue in Dallas, in Yakima, at Rockhill, Pennsylvania, and one is also in the Market Street Railway collection in San Francisco.

Later in the day, we alit from the D Line at the Aliados station to pick up the luggage we had left at our hotel, and then went on to Campanha for our 16:47 train back to Lisbon. The train ride was speedy and comfortable, and we arrived at Santa Apolonia on time at 19:52. Phil and I parted here. He would grab a bite and wait for his overnight train to Bilbao (Spain), while I would ride the Lisbon Metro to the elevated Campo Grande station, where I had booked an overnight stay at a Radisson.

Deck-roof single-truck car 191 is shown as it looked sometime after its construction in 1929 — with a cow-catcher and the green and white livery used by STCP's predecessor, CCFP (Carris), which operated the tramway until 1946.

STCP (Sociedade de Transportes Colectivos do Porto) operates Porto's bus system and its heritage streetcars. The company succeeded Carris in 1946. This emblem can be seen on the seats of a number of former Porto cars that operate here in the United States.

No bumper block at the end of Route 22 line at Batalha. Brill-type car 205 is flanked by a stairway and an elevator to the underground station of the Funicular dos Guindais.

Car 131 has just changed ends and will proceed to the car stop in front of Masserelos depot to wait for its scheduled departure time for Carmo. The Arrabida bridge over the Douro is in the background.

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Traction Tour to Southern Europe

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Upon leaving Carmo Route 22 operates along the side of an attractive downtown park. The single-truck cars share the right-of-way with railfans and bicyclists.

A two-car train of Bombardier cars on the D Line approaches the Vila do Conde station. The Santa Clara aqueduct dates from the 17th century, and is not in very good condition.

The Povoa de Varzim terminal of the B Line, the furthest out one can go on Porto's LRT system. Two Flexity Swift cars are shown.

A view at the Verdes station. The Airport line uses the center tracks, which make a sharp turn from north to west under the B Line tracks.

A Eurotram on the E Line at Porto's airport. This photo shows the escalators and elevators connecting the platforms to an underground corridor that leads directly to the arrival and departure lobbies.

The southern end of the D Line is the Santo Ovidio station, where after discharging their passengers, trains pull up to just beyond the crossover and change ends. An area to store additional LRVs is behind the photographer. Elevators and escalators connect the platforms with a mezzanine and the street above.

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Around New York's Transit System

Curtailed Weekend Service

There was no Subdivision "A" weekend service from Franklin Avenue to Flatbush Avenue and Franklin Avenue to New Lots Avenue because of repairs at the junction north of Nostrand Avenue. Service was curtailed from late Friday night to 5 AM Monday on five weekends starting Friday night, May 2, and ending at 5 AM Monday, June 2.

The following service was operated:

- 2 trains, which terminated at Franklin Avenue, were single-tracked from Eastern Parkway-Brooklyn Museum. Free shuttle buses provided alternate service south of Franklin Avenue
- 3 service was discontinued
- 4 trains operated only as far as Atlantic Avenue-Barclays Center, with free shuttle buses providing service to New Lots Avenue

G and M Service Improvements

Sunday, June 8 brought service improvements to G and M riders. On G, weekday service headways were reduced from 10 minutes to 8. To eliminate the guessing game as to where the four-car trains will stop, PA systems will make announcements. June 8 also brought a service improvement to M, where service was extended to Essex/Delancey Streets for the first time since the 1930s on weekends.

(Editor's Note by Ron Yee: For those in the know, just look for the four-car marker on G. Member Nick DiBari reports that G is all R-68 now. The R-68As on that line were reassigned.)

Utica Avenue Station is Accessible

The Utica Avenue station (AC) is now the 82nd station (21st in Brooklyn) in the New York City subway system to become fully compliant for ADA accessibility. Three elevators enable physically challenged customers to reach both platforms from street level. Tactile warning strips, ADA boarding areas, improved signage, customer assistance intercoms, and an upgrade to the fare control areas were also installed at this station.

Subway Map Designer Dies

Massimo Vignelli, designer of the 1972 angular geometric-themed NYC subway map, passed away at the age of 83. This map was meant to untangle the complexities of the subway system but was often criticized for being geographically misleading. His maps were replaced in 1979 with the current design. Vignelli also designed the signage used on New York City's subway as well as in the Washington, D.C. Metro, having a hand in naming the system "Metro." He was well known for other notable achievements including IBM, Xerox, and the recently retired AA logo of American Airlines in use since 1968.

The opening of the Hudson Yards extension of the Flushing Line to 34th Street-11th Avenue has been delayed yet again, to late 2014, owing to technical issues with the "diagonal elevator" that will link the deep underground station with the surface. The elevator issue was one of the primary causes for this line not opening as scheduled in December, 2013. Testing at the manufacturer's factory in Italy last year was unsuccessful, but MTA has decided to expedite the process by installing it and perfecting it on-site.

On May 12, NYC Transit celebrated the 25th anniversary of having its in-service trains graffiti-free. While graffiti vandals still tag a small number of railcars on layover in the yards, none are allowed to go into service and are taken out for immediate cleaning.

The R-32 fleet has been re-assigned from C to J/Z for the summer to ease the strain on their weaker air-conditioning systems.

Staten Island Railway Incident

The Staten Island Advance reported that an empty Staten Island Railway train struck the bumping block at Tottenville and derailed at 6:36 AM Thursday, May 29, slightly injuring the two-person crew. Train service was suspended between the Tottenville and Pleasant Plains stations with buses providing alternative transport. The cause is under investigation.

Commuter and Transit Notes

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been built in China by CSR Nanjing. Each trainset has a capacity of 1,500 passengers and includes seats reserved for women, elderly, and disabled passengers. The line is electrified at 25 kV 50 Hz and there is one depot at D.N. Nagar.

In a move that is becoming more and more common these days, it was announced earlier this year that naming rights for the 12 stations are to be auctioned. (***Railway Gazette***, June 9)

Toward Underground (and Underwater) Rolling Stock

(Continued from page 16)

by Amtrak's *Beacon Hill* at the start of 1980 using that carrier's equipment, and so ended the story for the seminal steel coach of the once-mighty Pennsylvania Railroad. *(To be continued)*