

The Bulletin



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The Bulletin

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This Month's Cover Photo:

BMT B-Type 2392-2391-
2390 (American Car and
Foundry, 1917) heads down
the Brighton express track at
the Avenue U station on
June 16, 2018 during the
Parade of Trains weekend.
Jeff Erlitz photograph

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the First Half of
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CANARSIE LINE REHABILITATION UPDATE - SUBSTANTIAL COMPLETION OF WORK AT BEDFORD AVENUE STATION

by Subutay Musluoglu

(photographs by the author October 22, 2020)

In the October *Bulletin* we reported the substantial completion of the rehabilitation and expansion of the 1st Avenue station on the Canarsie Line, one of the major components of the overall program to restore the line from the damage wrought by Superstorm Sandy a little over eight years ago. This month we can celebrate the completion of another important element of the Canarsie Line project, the rehabilitation and expansion of the Bedford Avenue station.

To say that this work was much-needed would be an understatement. The Williamsburg neighborhood has seen tremendous population growth since the late 1990s and the Bedford Avenue station has strained to cope with increasing passenger usage. Plans to expand the station had been in the works for several years, and the rehabilitation of the Canarsie Line's storm-damaged 14th Street Tube un-

der the East River presented the ideal opportunity to undertake a series of companion projects to improve capacity and circulation at stations all along the line, as well as at select stations at adjacent lines in northern Brooklyn and Long Island City, Queens. The program also included upgrades to the Canarsie Line's traction power supply with the construction of three new substations, one at Avenue B in Manhattan and two in Brooklyn at Harrison Place and Maspeth Avenue.

Prior to the initiation of this project, conditions at Bedford Avenue were quite cramped. The station had not been altered in any appreciable fashion since its 1924 opening. The station's western end at Bedford Avenue featured two street stairs just east of the avenue on the northeast and southeast corners respectively, oriented east along North 7th Street. From the mezzanine,



The new stair on the northeast corner of Driggs Avenue and North 7th Street, oriented north along the east sidewalk of Driggs Avenue. Note the vertical digital information display, the stair enclosure, and railing are all in a style similar to what has been installed at stations rehabilitated under the Enhanced Station Initiative.

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THE BOARD OF DIRECTORS EXPRESSES ITS DEEPEST APPRECIATION FOR 116 MEMBER DONATIONS IN SEPTEMBER, 2020

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Canarsie Line Rehabilitation Update

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access to the platform was provided by a single double-wide stairway. With Bedford Avenue being the primary north-south retail and commercial corridor and the heart of the neighborhood, these stairs were all overwhelmed for extended periods throughout the day, especially with exiting surge crowds during the PM peak period.

The station's east end at Driggs Avenue and North 7th Street was similarly undersized, even less so, featuring a single standard-width stair from the platform to a small mezzanine, and from there two street stairs to just east of Driggs Avenue on the northeast and southeast corners respectively, also oriented east along North 7th Street.

Expanding this station was challenging, and like most NYCT station rehabilitation projects, the key to performing the work was to carry it out in phases. This was made even more important when the decision was made in early 2019 to forgo the planned closure of the 14th Street Tube for 15 months in favor of an alternative plan that kept service uninterrupted while passengers continued to use the station.

The plan was to effectively double the capacity of the station. At the Bedford Avenue end, a much larger mezzanine allowed for a larger fare control area, the current mezzanine to platform stair to be relocated to the east, a second mezzanine to platform stair built further east, and two additional mezzanine to street stairways, for a new total of four street stairs. The Driggs Avenue end would receive an identical number of new stairs. The big difference was the installation of elevators at the Bedford Avenue end, with the new street elevator on the northeast corner directly adjacent to the new stair there, while the mezzanine-to-platform elevator would occupy the footprint of the 1924 platform stair, hence the need for its relocation to the east.

First, a cut-and-cover operation opened up a segment of North 7th Street, from the east building line at Bedford Avenue eastward approximately 110 feet down the street. This excavation allowed for exposing and demolishing the existing mezzanine roof, as well as providing the additional space necessary for the longer mezzanine to accommodate the two mezzanine-to-platform stairs. This excavation presented challenging utility relocation work, to say the least.

The next phase expanded the mezzanine northward to accommodate the first of the new street stairs on the northeast corner, oriented north on Bedford Avenue, as well as the void for the new street elevator. Note that this corner, on both Bedford Avenue and North 7th Street, was bulbed out to provide additional sidewalk space. Simultaneous with this phase was expansion towards the south for the second new street stair on the southeast corner, oriented south on Bedford. This corner was similarly bulbed out, on both Bedford Avenue and North 7th Street. This stair was to be the first to be completed and opened, and when it did, the existing street stair there was closed and demolished. Doing so

enabled further excavation for the enlarged mezzanine below.

Meanwhile, at the Driggs Avenue end two separate smaller cut and cover excavations were carried out simultaneously at the northeast and southeast corners of the intersection. The original 1924 stair arrangement here was slightly different, with two double-width stairs at each corner of the mezzanine, connecting to intermediate landings, from which a single-width stairway led to each corner respectively. This design is a precursor to a common feature subsequently employed at stations built in the 1930s throughout the IND system, the provision for a future second street stair from the intermediate landing. This came in very handy as the expansion project was carried out.

At the northeast corner, the excavation allowed for the mezzanine to be expanded slightly to the north, with a new diagonal stair built from the mezzanine to the same level as the intermediate landing, which was enlarged and modified. From that level the new street stair was built. Once complete, the original stair from the mezzanine to the intermediate landing was demolished, while the original landing and street stair, retained during all this work, are unified with the new work, tying everything together.

This process was repeated in identical fashion on the southeast corner with the minor exception being that the original street stair was demolished and rebuilt due to its more deteriorated state. And as the mezzanine expanded, the fare control area was reconfigured to allow the building of a second new stair, oriented to the east, from the mezzanine down to the platform. When this stair was opened, the original 1924 platform stair, oriented to the west, was closed and reconstructed in an identical style. The previous single fare array was replaced with two arrays oriented diagonally towards each corner.

A water main break earlier this year at the Driggs Avenue intersection slowed down the work somewhat, but the contractor was able to successfully recover the schedule.

Back at the Bedford Avenue end, once the new southeast corner street stair was completed and opened, and the expanded mezzanine with its two new platform stairs was ready, the time had come to close and demolish the original 1924 platform stair and use this space for the new platform elevator. This occurred in the spring of 2019, and by then the steel frame for the street elevator had begun to rise. Over the last year, the street stair on the south sidewalk of North 7th Street just east of Bedford Avenue was reopened. The street stair on the north side of North 7th Street was refurbished and not completely reconstructed.

The elevators opened on August 6 of this year, and work continued on station finishes. A ribbon cutting ceremony was held on October 19, attended by several local elected officials and MTA Construction & Development President Janno Lieber.

Another recently completed project component that

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Canarsie Line Rehabilitation Update

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should be noted was the September 12 opening of a new escalator at 14th Street-Union Square between the Canarsie Line platform and the upper east mezzanine adjacent to the IRT Lexington Avenue Line mezzanine. While this was a minor effort in the context of the overall Canarsie Line rehabilitation program, the escalator's completion should have a significant positive impact at one of the city's busiest stations.

The escalator will be operated nominally in the up direction, and by doing so it will enable much faster clearing of the platform, especially during the AM peak period when inbound **L** trains from both Brooklyn and

Eighth Avenue discharge passengers simultaneously. This creates surge conditions as passengers transferring to the Lexington Avenue Line have to struggle up a single stairway against those coming down from the IRT. The separation of these passenger flows should be a dramatic improvement.

However, it will be a while before the escalator's full potential is realized, as subway ridership continues to be at historic lows due to the global coronavirus pandemic. This applies to all the various improvements that were built under the overall program. With the exception of some remaining punch list items, the Canarsie Line Rehabilitation Program can now be considered effectively completed. It is somewhat ironic that the passengers who endured years of congested conditions are

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View looking west at the new P6 platform stair to the Driggs Avenue mezzanine at the Bedford Avenue station.



Driggs Avenue mezzanine, view looking northeast at the fare array. Beyond that is the new diagonal street stair, rising to an intermediate landing from which are two stairs to each side of the northeast corner of Driggs Avenue and North 7th Street. An identical fare array and street stair arrangement is out of view to the right. The top of the new P6 platform stair is visible at right.



View looking northeast at the corner of Driggs Avenue and North 7th Street, with the new stair on the left, and the reconstructed 1924 stair on the right. Note that the stair enclosure ends have yet to be fitted with the station name sign and additional digital displays.



The new stair on the southeast corner of Driggs Avenue and North 7th Street, oriented south along Driggs Avenue. Note the vertical digital information display, the stair enclosure, and railing are all in a style similar to what has been installed at stations rehabilitated under the Enhanced Station Initiative.

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Canarsie Line Rehabilitation Update

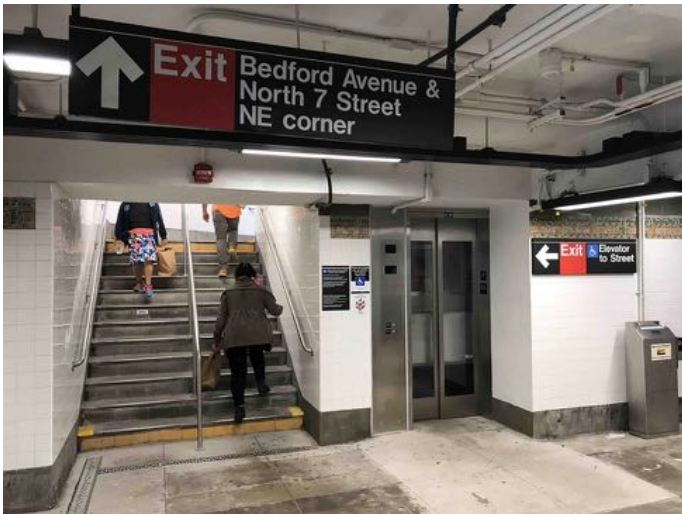
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View of the new street stair and elevator on the east sidewalk of Bedford Avenue just north of the corner of North 7th Street.



A head-on view looking north at the new elevator on the east sidewalk of Bedford Avenue at the corner of North 7th Street.



On the mezzanine level of the Bedford Avenue station, looking at the elevator landing. The new street stair up to Bedford Avenue is to the left of the elevator and out of view to the right is the reconstructed stair up to North 7th Street. Modern replicas of the Squire Vickers mosaic tile band were installed on all new walls throughout both the Bedford Avenue and Driggs Avenue mezzanines. The match lines between the 1924 originals and the 2020 replicas can be clearly seen.

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not around during this time to enjoy these improvements. Nonetheless, post-pandemic New York City will



View looking east at the expanded Bedford Avenue mezzanine, with the mezzanine to platform elevator in the center-left, and a short set of steps down to the two platform stairs, with one immediately visible to the right and the second one just visible beyond. This photo was taken from just outside the paid fare zone, as I was leaning on the railing. This entire expanded mezzanine was excavated and constructed in a cut and cover operation from the street. Note the ramp leading down to the elevator that was required to obtain the necessary headroom for the elevator's installation.

be vibrant once again with rushing commuters and the subways will be ready to cope and serve them.

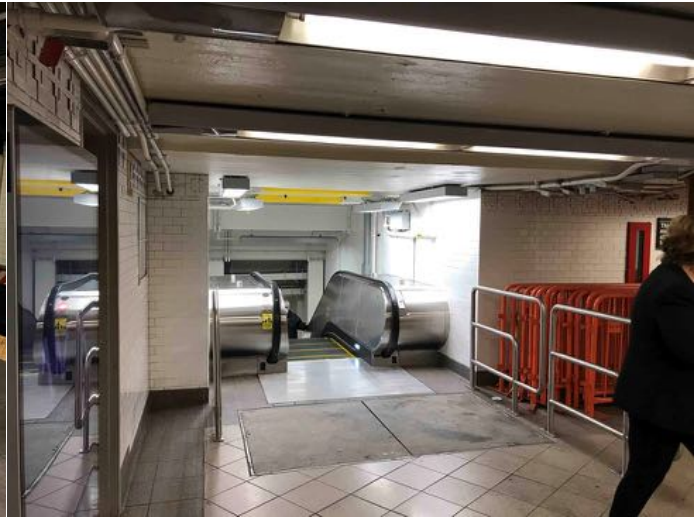
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Canarsie Line Rehabilitation Update

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On the Canarsie Line platform at the 14th Street-Union Square station, this view is looking east at the bottom landing of the new escalator leading up to the east upper mezzanine adjacent to the IRT Lexington Avenue Line mezzanine.



On the east upper mezzanine, this is the view of the top landing of the escalator coming up from the Canarsie Line platform. Just out of view to the right is the stairway down to the Canarsie Line platform, which, until the opening of this escalator, was the only direct way to and from the Canarsie Line platform to this mezzanine. The separation of the two directions of passenger flow enabled by the new escalator represents a significant improvement for passenger circulation.

TRANSIT, COMMUTER RAIL & PASSENGER RAILROAD NEWS
by Jeff Erlitz and Ron Yee

**NEW YORK METROPOLITAN AREA
MTA NEW YORK CITY TRANSIT**

MTA New York City Transit's venerable R-32 Brightliners built by the Budd Car Company in 1964-5 may have made their final runs in regular passenger service on Thursday, October 8, 2020. Internal NYCT sources reported that one set (3714-N and 3888-S) ran during the morning rush hour peak with no report of any R-32s making an appearance that afternoon. Starting the next day, Friday October 9, no R-32s were reported "on the road" until a subsequent report of the entire fleet of R-32s being transferred out of East New York Yard to 207th Street Yard for storage over the weekend of October 17-18 as more R-179s had been released for passenger service. This leaves the R-46 class (Pullman-Standard, 1975-78) as the oldest still operating on the subway. As a reminder, though, over on Staten Island, the R-44 class (St. Louis Car, 1973) equipment is still operating. (Ron Yee, October 31)



Two trains of R-32s passing at 121st Street on the IRT Lexington Avenue Line. Ron Yee photograph

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Train of R-32s northbound between Crescent Street and Cypress Hills.

Ron Yee photograph



Train of R-32s on Brooklyn approach to Williamsburg Bridge.

Ron Yee photograph



Southbound train of R-32s entering Hewes Street.

Ron Yee photograph



Train of R-32s southbound on Williamsburg Bridge.

Ron Yee photograph



Southbound train of R-32s leaving Hewes Street.

Ron Yee photograph

A new digital "Live Subway Map," a first of its kind guide to navigating the subway system in real time, was launched on October 20. The new map, which allows riders to plan trips more easily by taking into account service changes and seeing train movements as they happen, is the byproduct of an 18-month-long public-private partnership between the Metropolitan Transportation Authority (MTA), the Transit Innovation Partnership, and Brooklyn-based global design and technology firm Work & Co. Currently in its beta phase, the map which can be accessed at map.mta.info, will ultimately replace The Weekender and will serve as the primary interactive means for moving around the subway system.

The ambitious project marks the subway map's first major redesign in four decades, replacing the iconic design by Unimark International and Michael Hertz Associates seen widely on printed maps today. The Live Subway Map beta merges the best features of the existing printed map with the distinctive "Vignelli" approach

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of The Weekender by overlaying clear and detailed track routes atop a geographically-correct street grid that becomes more detailed as the user zooms in.

Work & Co designed and developed the web-based digital tool on a completely pro bono basis with the goal of making the lives of New Yorkers easier. Highly user-friendly, the map allows users to navigate the system in an intuitive and digital way. Users will no longer have to read through printed station signage to determine how they should travel throughout the system.

In another first, the Live Subway Map beta shows the locations of trains as they move along the system in real time.

A key benefit of the new digital map is a feature to customize for individual rider journeys. With just a few taps, a time filter allows users to decide if they view current train service or future service with “Now,” “Tonight” and “Weekend” options.

By selecting “Tonight,” a user can see what the map will look like after 9 PM to reflect nighttime service changes. An accessibility button highlights accessible stations.

When users tap on a specific station, they will see information that lists the trains that arrive at that station, and the arrival times for any train scheduled to arrive within an hour. This is achieved using existing data already feeding countdown clocks, the MYmta app and various third-party apps.

The Live Subway Map’s first iteration is already robust, and the map will continue to evolve based upon user feedback, which can be submitted through the map site.

Features of the MTA Live Subway Map beta include:

- Automatically updating subway lines: Subway lines will redraw themselves using real-time data to illustrate current and accurate subway service status. Sections of subway lines fade out where a subway line is not running and are denoted with dashes if subways are running in a single direction
- Moving trains: The user will see trains moving that help signal to users that the map is live and also reflect real-time locations of trains throughout the subway system
- Zoom-In features: Greater map detail is exposed as the user zooms in, including the ability to see individual subway lines, subway entrances, station names, and street locations and names
- Subway accessibility: The new map highlights accessible stations and provides updates to accessibility related equipment like elevators and escalators
- Emergency alerts: The map uses the MTA’s data feed to convey official MTA communications for emergencies
- Airports: The map visualizes both of New York City’s major airports and the primary means of accessing them via the MTA system. The map indi-

cates which subway lines connect with buses and the AirTrain to be able to access the airports. Users can tap or click on an airport to learn even more about how to access the airport using public transportation

- Add to homescreen for quick reference: iPhone and Android users can add the map to their homescreen to access the map more quickly. The web-based map then behaves like a standalone app. Future integration with the MYmta app may be developed
- Dynamic and shareable URL: The URL will store the location a user is looking at, the zoom level they are on, the subway line they have filtered by, and whether or not accessibility mode is turned on. This allows users to share exactly what they are looking at with each other, or, to save or bookmark a unique URL based on their preferred train line. (MTA press release, October 20)



View of Type VIII track structure at Sutphin Boulevard/Archer Avenue station before reconstruction on September 30.
 Marc A. Hermann / MTA New York City Transit photograph

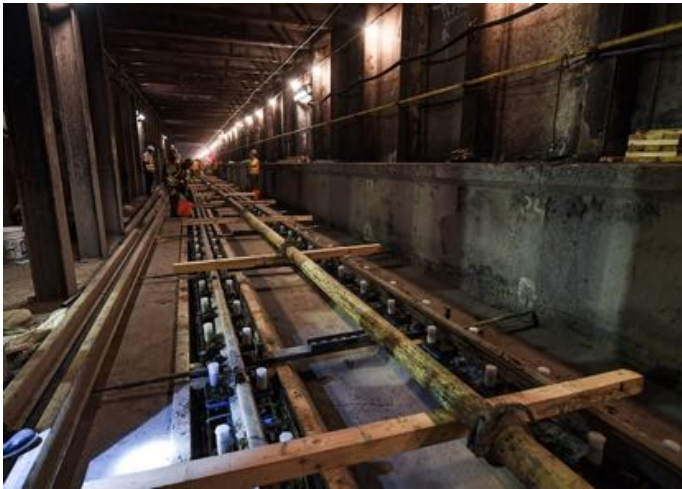


Photo above and the first two on the next page show some views of the track reconstruction work on the upper level of the Archer Avenue Line all taken on September 30.
 Marc A. Hermann / MTA New York City Transit photographs

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Rebuilt track structure prior to the pouring of concrete in the Sutphin Boulevard station.

Marc A. Hermann / MTA New York City Transit photograph

Near-normal **E** service was scheduled to return to the Archer Avenue Line on November 2 following six weeks

of intensive track work. Service has been short-turning at Jamaica-Van Wyck since September 16 when the first phase of this track reconstruction project began.

The Archer Avenue Line, like the Sixth Avenue express tracks from W. 4th Street to 34th Street and the 63rd Street Line, had originally been built to Type VIII track standards. That was a “direct fixation” method without any cross ties at all. After not that many years of service, this style of track construction had deteriorated badly. The Sixth Avenue express tracks and those on the 63rd Street Line were replaced many years ago now. *(Editor’s Note by Jeff Erlitz: The express tracks on the BMT Fourth Avenue Line, after having been rebuilt to Type VIII in, if I recall, the 1970s, were also completely rebuilt to the now-standard Type II-Modified style in, I believe, the 1990s.)*

Phase II of this track reconstruction project starts on November 2, is scheduled to last to mid-December and will replace track at the Jamaica Center-Parsons/Archer station. During this phase, **E** service will operate on a single track at Jamaica Center every eight minutes during rush hours, every 10 minutes middays/early evenings and every 12 minutes late evenings/weekends. Additional **E** service will continue to operate between 179th Street-Jamaica and World Trade Center during rush hours. (MTA press release, October 21)

MTA LONG ISLAND RAIL ROAD



The new three-track bridge carrying the Main Line over School Street, on the Westbury/New Cassel border, as seen on October 9.

Jeff Erlitz photograph

Over the weekend of October 3-4, during another shutdown of the Main Line from Floral Park to Hicksville, a new three-track bridge was rolled into place over School Street on the border of the villages of Westbury and New Cassel, about a quarter of a mile east of the Westbury station.

This was the fifth new bridge placed into service as part of the Main Line Third Track project. The previous four were at:

- Post Avenue, Westbury
- Urban Avenue, New Cassel

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- Covert Avenue, New Hyde Park
- New Hyde Park Road, New Hyde Park



Upgraded Platform B, serving the Long Beach Branch, at Lynbrook on October 7.

Marc A. Hermann / MTA New York City Transit photograph



Rebuilt shelter on Platform A, serving Montauk (Babylon) Branch passengers.

Marc A. Hermann / MTA New York City Transit photograph



Rebuilt ticket office and waiting room.

Marc A. Hermann / MTA New York City Transit photograph

It was announced on October 7 that the rebuilding of the platforms and other upgrades at the Lynbrook station were completed. The four-track elevated station features two rebuilt island platforms, platform canopies and other passenger-friendly amenities. The \$17.9 million enhancement initiative was funded through the 2015-19 MTA Capital Program. Work on the station began in May 2019 and has been completed one month ahead of schedule.

Work on Platform A and Platform B began last September at the west end of each platform. Platforms were resealed and tactile warning strips and platform edges were power-washed and repainted. Platform lighting was upgraded and new translucent canopy roofing was installed atop all six platform canopies, three on each platform. Platform B, serving the Long Beach Branch, was constructed first by JMJ Electric and Platform A, serving the Montauk Branch, was constructed by Zion Construction.

Other advances at the station include:

- Improvements to the existing drainage system
- Two new glass platform waiting rooms
- New signage throughout the platforms
- Installation of LED lighting and security cameras

The station, which is located at Sunrise Highway and Peninsula Boulevard in the Village of Lynbrook, was built in 1938, serves approximately 5,000 weekday riders and is accessible to wheelchair users through elevator access.

A separate project to rebuild the Lynbrook Viaduct is underway and being done in conjunction with the rehabilitation of the neighboring Rockville Centre Viaduct. Work on both projects began in August, 2019 and will prolong the life of the viaducts. Repairs are expected to be completed in summer, 2021. (MTA press release, October 7)



M-7 7746 (Bombardier Transportation, 9/2006) leads Penn Station-to-Hicksville Train #1250 over the South 12th Street crossing in New Hyde Park in this view north on October 23, 2020. This was the last day of use for this grade crossing.

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Another view taken on October 23, this one looking east from the temporary eastbound platform at the New Hyde Park station. Huntington-to-Penn Station Train #1705, with M-7 7621 (Bombardier Transportation, 3/2006) leading, passes over the South 12th Street grade crossing. On the far side of the crossing are the new, still-under-construction, permanent platforms. Note the space provided on the right for the future third track.

Jeff Erlitz photograph



One week later, on October 30, with South 12th Street closed off. Only the crossing gate mechanisms and flashers have been removed. Jeff Erlitz photograph



View looking east on October 23 at the pedestrian underpass which is under construction on the south side of the right-of-way, just east of South 12th Street in New Hyde Park.

Jeff Erlitz photograph

At 12:01 AM on Saturday, October 24, the South 12th Street grade crossing was permanently closed to vehicular and pedestrian traffic. Located in the village of New Hyde Park, this was the last of the three grade crossings in that village to be closed as part of the Main Line Third Track project. The other two were Covert Avenue, to the west, and New Hyde Park Road, to the east.

This crossing, like what will happen to Main Street in Mineola, will not be replaced with a vehicular underpass. This will allow the new platforms to be 12 cars long instead of ten. There will, however, be a pedestrian underpass located here. It is currently under construction.

Not counting the Borden Avenue grade crossing in Long Island City, the westernmost grade crossing on the Main Line is now Main Street in the village of Mineola. That crossing, and the Willis Avenue crossing just to the east of it, are now the last two grade crossings west of Bethpage on the Main Line. They, too, will be eliminated, probably within the next year.

Over the weekend of October 10-11, during one of the railroad's weekend shutdowns of the Main Line between Floral Park and Hicksville (for switch installation work east of Mineola), the platforms at the Merillon Avenue station were relocated a few hundred feet to the east. This puts them back into their original location.

Westbound trains are using the new permanent concrete platform, albeit only six cars worth of the 12-car length. Eastbound trains are using a second temporary platform, again, only six cars long, adjacent to the new permanent concrete platform and built over a section of the new third track. It will be several months before these new platforms are fully complete.

On Tuesday, October 27, the renovation of the single, island platform at the Bellerose station was begun. Bellerose is on the Main Line but can only be served by Hempstead Branch trains. Currently, the east end of the platform is being worked on. A small 40-foot temporary platform extension was constructed at the west end so as to provide the space for four cars to be platformed.

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This platform was originally opened for service on November 8, 1962 as part of the Floral Park grade crossing elimination project.

MTA METRO-NORTH RAILROAD

MTA Metro-North Railroad and MTA Long Island Rail Road are piloting a new technology to filter and purify air inside rail cars using an electrical field to generate a wave of ionized particles that destroy airborne viruses, bacteria and particulate matter, including COVID-19. The MTA is the first transit agency in North America to test the technology.

The pilot follows a successful proof-of-concept conducted by Metro-North over the summer. The air filtration and purification system, which was developed by Westminster, Maryland-based Knorr Brake Company and its Merak North America division, is incorporated into the railroads' existing ventilation systems. It enhances in-car air filtration – which already filters air 30 times an hour or once every two minutes, exceeding CDC standards for certain medical facilities and far surpassing standards for classrooms and restaurants.

In partnership with the MTA, researchers with the U.S. Environmental Protection Agency will test the technology to determine effectiveness in meeting the needs for public transit.

About one-third of the air traveling through the ventilation system is fresh air pulled from above the roof of the cars. The system totally replaces the air inside a car 12 times an hour, or about once every five minutes.

Introduction of the technology has emerged through the MTA's "COVID Response Technology" that was announced in July to engage the private tech industry and rapidly evaluate and deploy innovative technologies that make public transit safer, healthier and more responsive to customer and workforce needs in light of the global pandemic.

The new system passes air through three stages. The first stage applies an electrostatic discharge to actively target viruses, and then uses physical filtration to remove the charged particles. The air is then safely exposed within a self-contained unit, to ultraviolet radiation that has long been proven to kill bacteria, mold and viruses. Third, the air is exposed to a wave of ionized particles that attack pollutants, chemically decomposing them.

The ions further travel deeply through the air distribution ducts of the car and into the vehicle interior to enhance the railroads' existing disinfection of surfaces inside the cars.

The technology was installed in two HVAC units of a Metro-North car on October 7 and was to be installed by the end of the month on a car of the Long Island Rail Road. The railroads will evaluate its effectiveness and its ability to scale up for installation throughout their fleets of more than 1,100 rail cars each.

Underscoring the inherent safety of public transportation, a recent study conducted for the American Public

Transportation Association found no link between public transportation usage anywhere in the world and clusters of COVID-19. (MTA press release, October 15)

AMTRAK

As previously reported, Amtrak reduced the frequency of its long-distance service in October. The schedule of reductions went in service as follows:

Effective week of October 5:

California Zephyr

- Train #5 (Westbound) departs Chicago: Monday/Wednesday/Saturday
- Train #6 (Eastbound) departs Emeryville, CA: Tuesday/Thursday/Saturday

Capitol Limited

- Train #29 (Westbound) departs Washington, DC: Wednesday/Friday/Sunday
- Train #30 (Eastbound) departs Chicago: Monday/Thursday/Saturday
- City of New Orleans
- Train #58 (Northbound) departs New Orleans: Wednesday/Friday/Sunday
- Train #59 (Southbound) departs Chicago: Monday/Thursday/Saturday

Crescent

- Train #19 (Southbound) departs New York: Tuesday/Friday/Sunday
- Train #20 (Northbound) departs New Orleans: Tuesday/Thursday/Sunday

Effective week of October 12:

Coast Starlight

- Train #11 (Southbound) departs Seattle: Monday/Wednesday/Saturday
- Train #14 (Northbound) departs Los Angeles: Monday/Wednesday/Friday

Lake Shore Limited

- Train #48 (Eastbound) departs Chicago Monday/Thursday/Saturday
- Train #49 (Westbound) departs New York: Wednesday/Friday/Sunday
- Train #448 (Eastbound) departs Chicago: Monday/Thursday/Saturday
- Train #449 (Westbound) departs Boston: Wednesday/Friday/Sunday

Southwest Chief

- Train #3 (Westbound) departs Chicago: Monday/Thursday/Saturday
- Train #4 (Eastbound) departs Los Angeles: Tuesday/Thursday/Saturday

Texas Eagle

- Train #21 (Southbound) departs Chicago: Tuesday/Friday/Sunday
- Train #22 (Northbound) departs San Antonio: Tuesday/Friday/Sunday

Effective week of October 19:

Empire Builder

- Train #7 (Westbound) departs Chicago Monday/Thursday/Saturday
- Train #8 (Eastbound): departs Seattle: Tuesday/Thursday/Saturday

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- Train #27 (Westbound) departs Chicago: Monday/Thursday/Saturday
- Train #28 (Eastbound) departs Portland, OR: Tuesday/Thursday/Saturday

Palmetto

- Train #89 (Southbound) departs New York: Monday/Thursday/Saturday
- Train #90 (Northbound) departs Savannah: Wednesday/Friday/Sunday

OTHER SYSTEMS

WASHINGTON, D.C. AREA



Rendering of WMATA's next-generation 8000-series rail car. WMATA rendering

The Washington Metropolitan Area Transit Authority (WMATA) has selected Hitachi Rail to build 256 8000-series rail cars, The *Washington Post* reported on October 6.

Terms of the contract have not been finalized, and the contract has not yet been awarded.

WMATA plans to order 256 rail cars, with an option to purchase up to 800. The contract could be up to \$1 billion, according to *The Post*.

Meanwhile, WMATA updated its 2021 construction schedule to rebuild deteriorating rail station platforms at Arlington Cemetery, Addison Road and four Green Line stations north of Fort Totten.

To facilitate the work, the Arlington Cemetery and Addison Road stations will be closed for about three months between February and May, 2021. Construction at the West Hyattsville, Prince George's Plaza, College Park and Greenbelt stations will take place in summer, 2021.

Construction at the Cheverly, Landover and New Carrollton stations will take place in summer, 2022.

The platform work is part of a larger project to reconstruct platforms at 20 stations systemwide. The project is halfway complete, WMATA officials said in a press release. (*Progressive Railroading*, October 7)

CHICAGO, ILLINOIS

The Chicago Transit Authority's first 7000 Series rapid transit cars have begun testing. The prototype married pair in the photograph, consisting of car numbers 7005 and 7006, began EMI and brake testing on CTA's North

Side Main Line on October 7.

Built by CRRC (China Railway Rolling Stock Corporation) subsidiary CSR Sifang America Joint Venture, the 7000 Series cars represent the largest single purchase of rapid transit cars in Chicago history. The CTA on March 9, 2016 awarded a \$1.31 billion contract to CSR for 846 cars. The agency initially purchased a base \$632 million order of 400 cars, with options to purchase the remainder in coming years. (*Railway Age*, October 8)



Art Peterson, WSP USA photograph

AUSTIN, TEXAS



The new MetroRail Downtown station. The station also features parasol structures mounted on columns, offering a striking visual welcome to downtown and overhead protection for customers as they wait for, enter or exit the train cars.

CapMetro photograph

Capital Metro (CapMetro) celebrated the grand opening of the new MetroRail Downtown station on Monday, October 19.

Together with Austin Mayor Steve Adler and other city officials, CapMetro President/CEO Randy Clarke and his team conducted a countdown as CapMetro Board Chair Wade Cooper rode the first train to the station, breaking the banner for its inaugural ride. The event was streamed live on the agency's Facebook page.

Opening ahead of schedule and under the expected budget, the new Downtown station includes three tracks and accommodates up to four trains at a time, increasing service capacity. The opening of the new Downtown

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Transit, Commuter Rail & Passenger Railroad News

(Continued from page 13)

station also marks the beginning of the next chapter for Austin’s downtown corridor, connecting surrounding businesses and Austin’s growing workforce with expanded capacity to move more people with faster and more reliable transit options.

The station includes a new public plaza for those commuting in and out of downtown for work, heading to school or exploring some of Austin’s popular attractions. The station also features parasol structures mounted on columns, offering a striking visual welcome to downtown and overhead protection for customers as they wait for, enter or exit the train cars. Additional updates include aesthetic and safety enhancements, utility upgrades, new streetscape, a new bridge and bikeway and sidewalk improvements.

The Downtown station was also designed with the environment and economy in mind. The project is registered under Austin Energy’s Green Building Program and includes materials with highly recycled content. Based on industry standards, the economic impact may be approximately \$134 million over the next several decades. During construction of the project, nearly 100 people per week were employed. *(Mass Transit, October 20)*

PHOENIX, ARIZONA



Valley Metro has ordered an additional 14 S700 Siemens light-rail vehicles.

Siemens Mobility photograph

Valley Metro in Phoenix has ordered 14 additional light rail vehicles from Siemens Mobility, which will be manufactured at the company’s Sacramento, California facility and help Valley Metro serve riders on an expanding rail network.

Valley Metro originally ordered 11 light rail vehicles in 2017 and the additional vehicles will bring the total up to 25.

Based on Siemens Mobility’s S700 platform, the light-rail vehicles will offer a larger interior and energy-efficient LED lighting and feature heavy-duty air conditioning systems that will help keep the Phoenix area

riders comfortable in a climate known to reach temperatures of up to 120°F. This fleet will also feature a newly designed front-end bumper designed for collision impact mitigation.

Siemens Mobility says the S700 low-floor light-rail vehicles are known for their low-level boarding at every doorway, spacious seating design and larger windows for better light and views. They feature improved accessibility with wider aisles and storage space for bicycles. In addition, the vehicles have improved performance and optimized availability provided by condition monitoring, remote diagnostics and predictive maintenance.

(Mass Transit, October 2)

LOS ANGELES, CALIFORNIA



As Metro takes delivery of the next 15 overhauled LRVs — at one per month — they will reenter service along the A (Blue), E (Expo) and C (Green) Lines. The contract, awarded in 2017, calls for 52 cars to undergo midlife service.

Railway Age photograph

The Los Angeles County Metropolitan Transportation Authority (Metro) has taken delivery of the first of 16 P2000 light rail vehicles that have been undergoing a midlife overhaul. The Siemens P2000 LRVs were sent to Alstom’s Mare Isle facility in Vallejo, California for the work, which began in 2017 under a \$140 million-plus contract. The contract, which was awarded the same year, covers 52 P2000s.

Their overhaul — covering major systems such as propulsion, HVAC, automatic train control, auxiliary power supply, brake control, communications and doors and trucks — is expected to allow Metro to keep the fleet in service for at least another 15 years. The P2000s originally entered service in 1996 on the city’s A (Blue) and C (Green) Lines.

Metro says it will be receiving one car per month. After performing inspection and testing at its rail maintenance centers, the cars will reenter service along the A (Blue), E (Expo) and C (Green) Lines. As more overhauled P2000s come on line, the agency will decommission the remaining ones and ship them to Alstom until all 52 are complete. *(Railway Age, October 9)*

SOUTHWEST UNITED STATES

by Jack May

(Continued from October, 2020 issue)
(Photographs by the author)

(Editor's Note: We skipped one installment because there was no transit content.)

Today was another day where our friends and we had different itineraries. They were planning to visit relatives in Prescott, about 60 miles west of Sedona, while we were going to ride the Verde Canyon Railroad, which starts in Clarkdale, a little less than halfway (23 miles) along the route to Prescott.

Since our excursion was not scheduled until 1 PM, and because I thought Sig and Cathy would want to get going early in the morning, while I was still at home prior to the trip I went to the internet to see if I could use public transportation to get from our Sedona motel to the railroad station. I suspected it might be difficult, but as it turned out I found it would involve only two regional bus rides, as the town of Cottonwood, about halfway between Sedona and Clarkdale, operates an extensive transit system (extensive in the sense that Cottonwood has a population of less than 12,000 people — which is greater than Sedona's 10,000). A service called Verde Lynx operates 7 days per week between Sedona and Cottonwood with about a dozen weekday round trips (roughly every 45 minutes to an hour during base periods), taking about 43 minutes for a one-way trip from end to end. There are 15 stops, including several in downtown Sedona and one was close by our motel (see <http://cottonwoodaz.gov/DocumentCenter/View/1224>).

The City of Cottonwood also operates a local system, called CAT (Cottonwood Area Transit - <http://cottonwoodaz.gov/DocumentCenter/Home/View/135>) that consists of a network of four color-coded routes that connect with each other and Verde Lynx at a transfer point adjacent to the town's library. Three of the lines operate every 45 minutes with the Red route running to Clarkdale, taking about a half hour for a loop-like round trip. Fares on both bus lines are incredibly cheap, \$1.25 one way and only 50 cents for seniors.

With our train scheduled to depart from Clarkdale at 1 o'clock, we decided to take the 11:20 bus from the stop near our Sedona motel to Cottonwood, which would arrive at 11:53 and connect with the 12:00 bus to Clarkdale, a 24-minute trip. From a map it looked like the railway station was not too far from the bus stop, but I had no idea about how easy or difficult the walk would be (are there steep grades), so I called the Verde Canyon Railroad to ask about the availability of taxis; they very kindly volunteered to send a complimentary car to pick us up at the bus stop if we called upon our arrival.

For our return trip, Sig and Cathy would pick us up at 5 PM after leaving Prescott.

Anyway, that all turned out to be moot, because Sig and Cathy decided they wanted to go shopping in downtown Sedona in the morning and therefore they would be able to drop us off at the Verde Canyon railroad station around lunchtime. Thus my experiment with public transit did not take place, which was a minor disappointment. But on the other hand the chance of anything going wrong would be substantially reduced. So we all spent the morning window- and regular-shopping in Sedona, and drove off at about 11:30, which got us to the depot at about 12:15.

Clare and I had ridden the Verde Canyon on our 2009 trip to Arizona, but since we enjoy absorbing mountain scenery from trains, we wanted to do it again. What became the Verde Canyon Railroad was built in 1912 as a branch line of the Atchison, Topeka & Santa Fe Railway to connect its mainline with copper mines in the area (specifically at Jerome) and a smelter refining the ore in Clarkdale. Thirty-eight miles long, it actually ran from the Santa Fe's Ash Fork-Phoenix line at Drake, which is some 18 miles south of the Los Angeles-Chicago mainline, to Clarkdale. [I rode in a Phoenix-Chicago sleeper over that north-south line in 1961 from Phoenix to New York via the *Chief* and *Twentieth Century Limited* on the return portion of a business trip (my outbound route was the *Broadway Limited* and *Golden State*)]. In 1989 the Santa Fe sold the Drake-Clarkdale branch to a private individual, who began operating it as the Clarkdale Arizona Central Railroad, a short line freight carrier. One year later the AZCR added passenger service to cover the scenic portion of the line, 20 miles, from Clarkdale (milepost 38) to Perkinsville (milepost 18), as the Verde Canyon Railroad. Since then the Santa Fe merged with the Burlington Northern to form the Burlington Northern Santa Fe Railway, and so the AZCR's connection at Drake for freight originating in the canyon is now the BNSF.

Over the years the passenger operation has become quite successful, carrying as many as 100,000 riders per annum. The Clarkdale station, with its ticket office, gift shop, museum and snack bar, is a modern, clean and inviting facility; no doubt large sums have been invested to create a first-rate tourist operation. The personnel, both on and off the train, are friendly and hospi-

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Southwest United States*(Continued from page 15)*

table.

I had no trouble picking up the tickets I had reserved and paid for through the railroad's website (\$59.95 senior rate plus tax each). We were assigned to the coach, "Tucson," which was toward the rear of the train. Two back-to-back EMD FP-7s, 1512 and 1510, which originally operated on the Alaska Railroad, pulled the 18-car consist. The locomotives were followed by a power unit, 16 passenger cars, and a caboose. The 16 cars consisted of 10 heritage-type lightweight air-conditioned coaches and 6 open flat cars, arranged so that one of the open units was placed between a pair of coaches, C-O-C-C-O-C-C-O-C-C-O-C-C-O-C-O. Thus each open unit served passengers from two coaches, except the last, which was for the occupants of the caboose. Of the 10 coaches, 8 were configured for first class passengers and 2 for lowly coach riders like us. Passengers cannot walk through the entire train, being limited to their assigned three-car set.

Our car was configured with standard 2-and-2 commuter-style soft seats, which could be reversed to allow groups of four to sit together, as well as to face forward in whichever direction the train would be moving, as at Perkinsville the locomotives run around the consist before returning to Clarkdale. These cars can seat up to 75, but there were less than that number on our trip, which made it feel quite commodious. The first class cars have very comfortable leather or upholstered seats, arranged 2-and-1, in groups of 4 or 2 with tables in between. An attractive full-service bar is located at one end. Both types of cars are air-conditioned and have spotless toilet facilities. For the extra \$25 it costs to travel in first class (\$30 for seniors as there is no senior first class fare), complimentary cold and warm hors d'oeuvres and soft drinks are provided, and a full range of alcoholic beverages may be purchased from the bar. Snacks (potato chips, etc.) and soft drinks are sold by car attendants in coach. The open air cars have canopies to provide shade and are equipped with back-to-back longitudinal benches facing outward. Each also has an attendant. The caboose may just as easily be called an observation car, as it has an open end platform and contains luxury parlor car-style accommodations inside

for as many as 6 passengers. It is sold for a flat rate of \$700, but it is up against the engines on the return trip.

We found a pair of seats in our car, but spent most of our time in the adjacent open air unit, enjoying the scenery and the fine 75-degree weather. We could clearly hear the narration, which was not the least bit intrusive. After pulling out of the Clarkdale station exactly on the advertised (1 PM), we passed some slag heaps and the remains of the smelter, and, of course, the AZCR's yard, where I saw an EMD switcher, either a GP7 or GP9.

Soon we were in the canyon, and as we continued it got narrower and narrower, with red sandstone walls rising above us — but never to the extent of Glenwood Canyon on the former Denver & Rio Grande Western. In fact that stretch of railroad, now served by Amtrak's *California Zephyr*, plus the Canadian Pacific through the Rockies (Banff/Lake Louise, spiral tunnels), and the Chihuahua Pacifico (Copper Canyon route) through the Sierra Madre Mountains in northern Mexico* are my benchmarks for the best in North American standard gauge rail scenery; the Verde Canyon does not reach those spectacular heights — but it still is very pleasant with a number of dramatically craggy views. And speaking of views, whenever something interesting was in sight, the narrator pointed out exactly where it could be found, which was especially appreciated with respect to spotting bald eagles, and occasionally, bald eagle nests. We were told that there is a good reason the bald eagle is our national emblem — specifically because of the bird's long life, great strength, and especially its majestic looks.

*Even though the Canadian has been moved to CN rails, you can still ride over the CP through the Canadian Rockies on the Rocky Mountaineer, and over the ChP aboard El Chepe, which stops for about 15 minutes to allow passengers to walk to the edge of the Barranca del Cobre (Copper Canyon).

As mentioned earlier, the portion of the line covered by the excursion is 20 miles long. The train tended to run at a speed of about 10 to 15 miles per hour, and after our 1 PM departure from Clarkdale we arrived in Perkinsville at 2:40. We were halted for about 20 minutes while our locomotives ran around the train and coupled up again, with announcements made to the effect that passengers must stay aboard. Our arrival back at Clarkdale was at 4:45 PM, some 15 minutes before the advertised 5 o'clock

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Southwest United States

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Two views of the EMD FP7s used by the Verde Canyon Railroad to pull their passenger trains. A-units 1510 and 1512 were built in 1953 for the Alaska Railroad. Their color is officially called Teal Green, but most striking on their exterior livery is the depiction of a bald eagle, a species which passengers are hopeful of spotting as the train travels through the canyon. The left view was taken prior to departure from Clarkdale, while the right one shows the locomotives running around the train at Perkinsville.



"Yuma" was one of the 10 coaches on our train. Not all of them had corrugated sides, as about half the lightweight cars had silver painted smooth sides. The heritage unit was built as a coach-observation car for the Santa Fe by Budd in 1938. I could not find a roster for the Verde Canyon, but I suspect most, if not all, passenger cars came from the AT&SF.

A view from the rear of one of the open air cars.



There are many sharp curves on the railroad. The left photo was taken from our open car about 15 minutes after our departure from Clarkdale. The right view came about a half hour later, with the train already in the canyon. Note the top of the locomotive peeking through the brush at the left.

ASSORTED TRAVELS FROM THE FIRST HALF OF 2020

by Jack May

(Continued from October, 2020 issue)

(Photographs by the author, except where noted)

There are no roads paralleling the River Line between the southern part of Burlington and the town of Beverly, so if you are driving you have to head inland almost all the way to Route 130 before turning westward on Beverly Road to catch up to the line again. The rail line's route though is straight, and eventually crosses over Beverly Road/Warren Avenue, after which it continues south of those streets through a wooded area with just a few grade crossings. Eventually the rail alignment becomes the boundary between Beverly, an old river community, and Edgewater Park, a newer, more sprawling entity.

Further downstream, the next community is Delanco, a rather unusual name. Because Rancocas Creek empties out into the Delaware River within its borders, apparently its developer decided to call it Del-Ranco, but later the "r" somehow disappeared. In any case, the town is bisected by the line, and because of the wide expanse of green lawn at the station's northern end, it is one of my favorite locations. Since I began photographing at that location over a decade ago there has been a great deal of housing development in walking distance from the station, so even if ridership is not high, at least the creation of the line has spurred investment.

As it turned out I stayed there for more than one headway, as the first units seen in both directions were

wrapped in advertising.

The road (and the railway) move a bit further inland and both bridge Rancocas Creek as Delanco morphs into Riverside. A 1906 Pennsylvania Railroad swing bridge was replaced as part of the project to construct the River Line. The elegant truss span is considered the most significant structure on the line — and many consider its construction the most significant event in the line's creation — that is, if you consider a loud splash significant. On April 5, 2001, while being hoisted into place, the new span ended up tipped at a 30-degree angle into the waters of Rancocas Creek. Riggers finally lifted the bridge into place on July 27. The intermediate 3½ months must have been fun for Conrail Shared Assets.

Starting at Riverside the line runs in a straight line alongside an arterial road (River Road) and occasionally between two roadways through the towns of Riverside, Cinnaminson, Riverton, and Palmyra. There are sections of both single and double track along this 5-mile stretch of the route.

I think it is fair to say that the River Line's right-of-way is in excellent condition. Every piece of ballast looked like it was in place.

And that is my photography from January through June, 2020.



In the left view, a southbound DMU, operating on single track alongside narrow Railroad Avenue, approaches the Beverly-Edgewater Park station, which contains one platform and one track. In the right photo, the operator of the southbound car is not sure whether the lonely occupant of the platform is going to board, but it turned out that she waited for the northbound.

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Assorted Travels From the First Half of 2020

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The large (and empty) Park-and-Ride lot south of the station with a northbound DMU. I am standing in Edgewater Park shooting toward Beverly.



Billboards for Virtua Health and Amerihealth pass during a two-minute period at Delanco. The companies appear to be competitors, and what better media in which to advertise than transit? And fortunately the two liveries do not offend my sense of aesthetics to the degree that many others raise my scorn and disgust.



Pristine version of the two previous photos at Delanco.

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Assorted Travels From the First Half of 2020

(Continued from page 19)

The sun ducked under clouds on each of my attempts to photograph a DMU crossing Rancocas Creek on the single-tracked span.



Looking south at a northbound River Line DMU just below the Riverside station.

NEW YORK CITY SUBWAY CAR UPDATE

The following additional Jamaica-assigned R-160s have operated on the **A** from September 18 through October 12: Alstom R-160Bs 8793-8797, 8823-8827; Siemens R-160Bs 8843-8847, 8918-8922, 8928-8932, 8998-9002; Alstom R-160Bs 9183-9187; Alstom R-160A-2s 9348-9352, 9433-9437, 9493-9497, 9558-9562 (Cuomo), 9698-9702, 9713-9717; and Kawasaki R-160Bs 9888-9892.

Given the widespread media coverage of the **A** train derailment at 14th Street on October 20 which claimed link 6062-6063-6065-6064 its fate was well-known almost immediately. Online images showed the perforation of the side sills of 6062 with the threshold tread protruding through the middle of the car, as well as additional skin and structural damage which (expectedly) seems to preclude its future repair. On October 12 it was discovered that once-JFK A-car 6212 was recruited to be put in its place to create 4-car set 6212-6063-6065-6064, leaving mate 6214 in storage as a result. This reduces the overall surviving R-46 fleet from 750 to a total of 748 cars as opposed to the total loss of all four cars.

As the first few four-car sets of R-179s were re-accepted for full restoration to **J/Z** service by October 9, the pool of sister cars being re-tested had expanded to these 84 of the 96 so assigned, with all having been returned to revenue testing as of October 12: 3066-3073, 3078-3081, 3086-3093, 3098-3109, 3114-3121 and 3134-3141. Later-stage preparations were also underway for the re-introduction of 3074-3077, 3122-3125 and 3130-3133 as well, leaving just three final sets to begin the resumption of their careers after a hiatus of 4½ months.

On October 2, ten-car R-179 consist 3243-3252 became the first of the five-car sets to be restored to revenue testing on the **A**. Through October 11 they had been similarly joined by cars 3015-3019, 3238-3242, 3253-3257, 3263-3277, and 3283-3287, though some

had had initial problems and (as the others were) held back in the line. Through the whole month of restoration for those of the **J/Z** and **A** to date, there was no progress noted at all for the balance of four-car R-179 links previously assigned to the **C**. Plans for their future at the present (October 15) remain incomplete to uncertain, at least in part to the continuing distancing provisions that have compelled the complete assignment of full-length (R-46) equipment on the **C** since the two R-160A-1 borrowed trains were returned to East New York on July 2. It appears the two main options are to hold those 92 R-179s (3146-3237) until such time as strictures associated with the ongoing pandemic can be relaxed or they are to be reassigned elsewhere, whether on an interim or permanent basis.

As for the Phase I R-32s, the fleet was ironically bumped from 134 (as it had been since July 30) to 136 with the last-minute addition of 3924-3925 on September 28, which were shifted to East New York just in time to join what may be their last daily use two days later, given the broad-based restoration of R-179s on the **J/Z**. On September 30, two R-32 trains were operated in the daily equipment cycle made up numerically of these 16 cars: 3471/3658, 3574-3575, 3586-3587, 3706-3707, 3714-3715, 3774-3775, 3888-3889, and 3924-3925 with no others recorded afterward through October 15. Through this time none of the reactivated R-32s were officially removed from the active NYCT equipment fleet in any way, but no further undergoing maintenance activities seem to be occurring either. An October 1 tally found ten cars held for inspection at East New York; 78 OK for service at East New York (of which 16 had operated on September 30); 12 for inspection at 207th Street; and finally 36 OK for service at 207th Street. Quite obviously, at least an unknown quantity of the R-32s will probably remain to be held as a “ready” reserve should there be additional problems with the R-179 fleet.