## The Bulletin



#### Electric Railroaders' Association, Incorporated

Vol. 61, No. 2 February, 2018

#### The Bulletin

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

For general inquiries, or Bulletin submissions, contact us at bu website

**Editorial Staff:** Editor-in-Chief: Jeffrey Erlitz Tri-State News and Commuter Rail Editor: North American and World News Editor: Alexander Ivanoff

Production Manager: **David Ross** 

©2018 Electric Railroaders' Association, Incorporated

In This Issue: The Genesis of Dashing Dan — **Enter the North** Side Division ...Page 2

## **BERNARD LINDER, 1918-2017** by Alexander Ivanoff

Longtime ERA Bulletin Editor-in-Chief Bernard Linder (ERA #2668) passed away on the evening of December 12, 2017 at the age of 99, after a brief illness. Born on March 31, 1918, Bernie grew up in in the Bronx and became interested in electric traction through

his parents. His father was a newsstand vendor in the subway and he would go with his mother to help out. From an early age Bernie collected news stories on transit and traction events, as far as collecting car rosters at the age of 13.

Just before graduating from James Monroe High School, his cousin, who was the Assistant Principal at Erasmus High School, Bernie advised to study electrical engineering in college. After working in the naval shipyard during the Second World War, Bernie was looking for work, and in a chance offer, was hired pretty

much on the spot to become an electrical engineer for the New York City Board of Transportation in 1947. Bernie retired from New York City Transit in 1980 after a good career that spanned over three decades and three agencies (the Board of Transportation, an independent NYCTA and an MTA-run NYCTA).

Despite having worked for New York City Transit and having been a railfan, Bernie did not hear about ERA until a chance encounter with the late Martin Schachne (ERA #1137). He became a member in 1961 and since 1963. Bernie had been involved in some ca-

> pacity with what started out as the New York Division Bulletin (now simply the Bulletin). He was asked by Arthur Lonto to become the Bulletin Editor in 1980, and since then his name had been on well over 400 monthly issues, and until his passing was working on writing new and exciting pieces on early electrification schemes. Originally mimeographed, the Bulletin has grown from three to eight to (most issues) a twenty-page professionally done publication.

Bernie's influence is still widely felt in MTA, and Bernard Linder at his 99th birthday party, March many of his hand-drawn 31, 2017. diagrams can still be Alexander Ivanoff photograph (from a video) found on MTA property. He leaves behind a son,

Lawrence (Larry). To say that Bernie will be missed is an understatement — he was a wealth of knowledge that cannot be replaced and a dear friend to all he knew.



#### **REMEMBRANCES**

#### Randy Glucksman:

I met Bernie not too long after I joined ERA (Continued on page 4)

# THE GENESIS OF DASHING DAN — ENTER THE NORTH SIDE DIVISION by George Chiasson (Continued from January, 2018 issue)

## ENTER THE NORTH SIDE-NUMBER TWO: "THE WHITE LINE" AND FLUSHING'S RAILROAD DEMISE

For his part, Oliver Charlick finally undertook the installation of his very own railroad serving Flushing, one which he felt was badly needed to compete with, if not subsume the continually questionable and growing Flushing & North Side concern, but one which actually arrived too late on the scene, had minimal market penetration, and was seen as a misguided "savior" of sorts. The Newtown & Flushing Railroad was established in 1871 as a holding of Charlick and the Long Island Rail Road, belatedly intended to be a low-cost, dedicated (and reliable and clean) alternative to the Flushing & North Side, which had remained beset by poor public opinion until Conrad Poppenhusen assumed command during April, 1869 and poured his effort into restoring a semblance of customer satisfaction. Nevertheless, this "third" railroad into Flushing took more than a year to build across portions of contemporary Elmhurst and Corona (then Newtown and West Flushing), with LIRR's existing Main Line available to bridge its trackage across the remainder of Queens to Hunters Point terminal and the East River ferries. The entire route, as planned, was placed in service to a wholly new terminal at Flushing with attendant fanfare on November 10, 1873, being coined the "White Line" in local media reports owing to the pristine color and condition of its rolling stock, and also to differentiate it from the existing Flushing & North Side services to Great Neck and Whitestone.

White Line trains used the existing Long Island Rail Road terminal and Main Line from Hunters Point to Maurice Avenue, stopping at Woodside and Winfield en route, then diverged onto their new right-of-way at Maurice (51<sup>st</sup>) Avenue, following a somewhat circuitous, northward-bearing approach to Flushing around newer, lightly-settled residential portions of Newtown (née Elmhurst) and Corona to Flushing Creek. It last took a straight-line approach across its own drawbridge into the center of Flushing, ending one-half block away from the Flushing & North Side's station at Main Street. In a manner similar to their ex-Flushing Railroad neighbor, the White Line's trains stopped on their own branch at the "Newtown" station, sited at the Hell Gate Ferry Road (now Broadway near Justice Avenue, practically on top of the present Grand Avenue-Newtown IND subway station), then at a secluded location called "Corona Park" where the tracks crossed Corona Avenue at its present-day intersection with Saultrell Street. After cutting through the breadth of what would later become the 1939 World's Fair grounds (location of the preserved Unisphere), the White Line passed across Flushing Creek on its drawbridge, then rattled diamonds with the

intersecting Central Railroad of Long Island and its branch to Flushing Bay Dock next to Sanford Avenue and Charles (Delong) Street. It ended at the so-called "Jaggar Avenue" terminal in Flushing, located on that thoroughfare (now a part of Main Street) between Bradford and Prospect Avenues, which are now 41<sup>st</sup> Avenue and 41<sup>st</sup> Road. On July 19, 1875 the Newtown & Flushing opened two more local stops on the pre-existing Long Island Rail Road Main Line at "Schwalenberg's Park" (Skillman Avenue and Van Dam Street) and "Sunnyside," at Jackson Avenue and Bartow (35<sup>th</sup>) Street, which were only served by the White Line's (fairly frequent) trains.

Following through on the line's original intentions, the Newtown & Flushing competed head-on with the Flushing & North Side, undercutting its fares and matching its service train-for-train and then some, with 15 trips scheduled between Hunters Point and Flushing each day. The Poppenhusens' competing concern was forced to match the newer line of course, which proved ruinous to both companies over their first year of competing service (though delightful for patrons). At the same time there were a number of other issues (congestion on the Flushing & North Side, general financial panic, the misplaced Central Railroad venture, and other wild competitions to build new business to places like the Rockaway Peninsula) which forced organizational changes, extended financing outlays, and mental stress to those involved. Before this contentious situation ultimately broke both the Flushing & North Side and Long Island Rail Road companies, it was carried on even through the 1875 death of Oliver Charlick (who was succeeded by Henry Havemeyer), and forced the Poppenhusen family to rotate its standing as company officers (possibly for mental health as well as fiduciary reasons), with son Herman finally taking on the position of President for his harried father in 1874. Matters finally came to a head in early 1876, at which time a furtive peace was at last negotiated between the two companies, which were formally united on February 1, at that under the victorious banner of the Poppenhusen regime.

As previously described, this immediately engendered the wide-reaching, so-called "Poppenhusen consolidations" of 1876, one of which was the complete discontinuance of "White Line" service effective that April 17. This resulted in closure of the two newer local stations on the Main Line at Schwalenberg's Park and Sunnyside, while the Newtown & Flushing's branch remained intact through that summer (complete with new connecting tracks to the Central Railroad's main line toward Babylon) just in case it was needed to relieve summertime crowding to the attractions of Flushing Bay. By the

(Continued on page 3)

#### The Genesis of Dashing Dan

(Continued from page 2)

time the Long Island Rail Road became immersed in its post-Poppenhusen bankruptcy in October of 1877, the "White Line," like its creator Oliver Charlick, had became a historical footnote (albeit an influential one) and vanished. Its empty right-of-way survived across Elmhurst and Corona for a few short years before being overrun by development, though the Corona Park depot building was relocated to the Flushing & North Side station at Louana (National) Avenue after its depot was destroyed by a fire on December 9, 1880. Parts of its alignment could still be traced off Maurice Avenue and into the streetscape of Elmhurst into the early 1920s, at least on some of the (aged) maps that survive in the present day. Until recently, its presence in Flushing was only recalled by a long-gone station at the "Loew's Theatre" on Main Street, which was built to replace the abandoned "Jaggar Avenue" depot about 1924. It became the Century Prospect Theatre by 1953 and was closed in 1987, its site now occupied by a nondescript three-story commercial building that caters to international businesses.

Flushing's time as a railroad hub degenerated quickly through the consolidation and bankruptcy proceedings described above, for not only was the White Line abandoned in April. 1876 but service on the former Central Railroad of Long Island was markedly reduced on October 1, 1877. The relatively new Flushing & Woodside bypass route was deemed unnecessary by the company's receiver (Colonel Thomas R. Sharpe) and it was closed at that time as well but for a freight stub at the Woodside end. This forced Whitestone trains to again use the original Flushing Railroad alignment between Flushing and Winfield, but those serving Main Street and Great Neck continued to shuttle as far as Great Neck Junction. This situation was addressed when the Central Railroad itself was gradually withdrawn from use of the North Side line starting on May 27, 1878, after it was physically joined to the original Long Island Rail Road Main Line through a connecting ramp at "Plainfield" (later Floral Park). At that time service from Flushing and Great Neck was again extended through to Hunters Point, where another consolidation was enacted that utilized recently-added connecting switches between the adjacent F&NS and LIRR Main Lines (dubbed the "Long Island Crossovers" and later known as Tower 30 interlocking) at E. 5<sup>th</sup> Street (49<sup>th</sup> Avenue) and President (23<sup>rd</sup>). These were used to divert all North Side and Central trains to the larger LIRR terminal, which enabled the newer facility west of Front Street to be closed on that same date. As best as can be determined the tracks into the nine-year-old Flushing & North Side terminal were never used again by passenger trains, but the building hosted passenger services for both the Brooklyn, Flatbush & Coney Island and New York, Woodhaven & Rockaway lines as late as 1891. It was finally removed in 1904 to make way for enhanced LIRR freight-handling facilities associated with the

Pennsylvania's New York Terminal project. The Central's operations through Flushing were reduced again in January of 1879 when much of its through service began exiting to the Main Line at the "Stewart Junction" (Floral Park) connection. They were finally discontinued altogether on April 30 of that year as the last through trains from Babylon to Flushing and all Hempstead Locals were rerouted via the Main Line connection and Jamaica, and Flushing's time as a "railroad hub" came to an early end.

## ENTER THE NORTH SIDE-NUMBER THREE: THE NORTH SHORE'S METROPOLITANIZATION

Shorn of all but its most basic elements, the emergent "North Side Division" was nevertheless destined to become a full-fledged Long Island Rail Road operation after the bigger company was reorganized from the Poppenhusen bankruptcy through the "House of (J.P.) Morgan." Developments were on the rough side at first, with the former Flushing & North Side property being foreclosed by its bondholders and showing signs of neglect in 1880. Service from Flushing to Great Neck was then interrupted for five weeks in August and September of 1881 after LIRR invalidated the long-existent operating agreement owing to both the line's deteriorating physical condition and its distressed legal and financial state. In March of 1882 the original drawbridge at Alley Creek (near Little Neck) collapsed when being opened, and service was again suspended beyond Bayside until repairs could be made. The Long Island Rail Road, now under the presidency of Austin Corbin, finally acquired the former and forlorn Flushing & North Side properties one month later, and began to pick up the pieces in this corner of its corporate empire by focusing on incremental improvements which abetted its existing service, yet kept a minimal eye toward expansion.

As urbanization advanced around the three sides of Flushing Bay, its tidal basin as crossed by the Flushing Railroad on wooden trestle work (across the present Willets Point station site) was gradually replaced by solid fills in 1882 and 1888. Also set onto hard earth were the Whitestone Branch right-of-way along the west bank of Flushing Creek between Whitestone Junction and the original Flushing & North Side drawbridge in 1886, along with the swampy land between the Bridge Street station and College Point. By September of 1883 the Flushing side of the Whitestone Branch was evolving into a mildly industrialized area that contained a small freight yard, while the original wooden trestle on the College Point side was transformed into a private rightof-way by 1894, situated on a fill that is occupied by Ulmer Street in 2017. During this same time period, the moribund Whitestone & Westchester extension effort that had fizzled more than a decade earlier was revived, after the Village of Whitestone agreed in March of 1886 to provide for future maintenance of the street overpasses required to complete the railroad's open cut. Heavy construction activities were then quickly resumed and soon completed in the weed-grown depression and on the partially-completed grade of the original W&W

(Continued on page 5)

#### Bernard Linder, 1918-2017

(Continued from page 1)

in 1965, and visited him, Anne, and Larry in their apartment near Gun Hill Road. Whenever I called their home in the Bronx or later after they moved to Brooklyn, until her passing, it was always Anne who answered and spoke to me before handing the phone to Bernie.

Fast forward to 1987 when I was working at 370 Jay Street for NYCT's Department of Capital Program Management. My job was to coordinate the General Orders and work trains for the Capital Program. One of the references used in determining the G.O. limits was the contact rail or "201 drawings." These determine where the third rail power has to be removed during construction work, or for emergencies. All changes to these drawings had to be documented and it was a labor of love for Bernie to go out to the field with paper and pencil to walk the tracks to check if the drawings were correct. When he found a discrepancy, once he was back in his office, he made the changes adding into three boxes: the date, what changed, and his initials, "B.L." After Bernie retired, for many years there was no one who was tasked to do this important work and at one point field surveys had to be performed with a note added that read, "Updated per field conditions." Bernie told me that here were times when his supervisor gave him a hard time when he requested to go to the field, but Bernie always prevailed after explaining the purpose of this work with relation to safety.

After Bernie retired, like clockwork, every Wednesday afternoon he would make the rounds of 130 Livingston St. and 370 Jay Street visiting various ERA members to chat and get the latest subway timetables. It made no difference if it was summer or winter, Bernie always wore a tie, jacket, sweater, and hat. Of course, in the winter, an overcoat was added. He was always cold and told me that he suffered all his life with "a chronic lack of energy." Perhaps he was correct in his getting around, but certainly not in the amazing writing that he did for the *Bulletin* in the 37 years that he was Editor-In-Chief. For the 33 years that I wrote my Commuter and Transit Notes column, I often consulted him if I had questions. We spoke every few weeks till the end.

Bernie will be missed.

Rest in Peace.

#### **Eric Oszustowicz:**

Bernard Linder (Bernie to his many friends) was a truly decent human being. His passing was a great loss to all of us. Most know him through his hundreds of articles over the years in each edition of the ERA's monthly *Bulletin*. Others lucky enough to know him personally also knew him as a true gentleman who was always willing to share his knowledge. He was always kindhearted, generous, and humble. He never raised his voice in anger. Bernie was always looking forward to the future, even at 99 years of age. At the time of his passing, he was planning years of written projects.

Bernie was a living encyclopedia. He recalled information and experiences from the 1930s to the present

in equal, vivid detail. To the very end, Bernie was sharing his knowledge in writing with ERA members and in person to his friends who frequently visited his Brooklyn home.

What Bernie wrote over the years was only a portion of his true knowledge. Much of his writing was based on actual life experiences dating back to the 1930s, so unfortunately, this personal knowledge is lost forever. Through many visits, I and many of his friends listened to his fascinating stories of the past. During the past ten to fifteen years, Bernie was generally confined to his home due to various health issues. He stated that the highlight of his day occurred when people visited him. It was also a highlight in the day of his visitors. Thankfully, Bernie's devoted son Larry was always there to care for him

Through Bernard Linder, many have been educated regarding the history of mass transit in the New York City area. Bernie understood that he was not immortal, so he planned long ago to pass on the priceless documents which were the basis of much of his writings. His legacy will continue for years to come as a result. Production of the ERA's *The Elevated Railways of Manhattan* would have been impossible without Bernie. The upcoming Brooklyn version of this work would also have been impossible. Bernie was truly irreplaceable. We will all miss the company of our dear friend.

#### **David Ross**

I started working with the *Bulletin* staff in 1986 or so, helping to type the issues at the old ERA Headquarters in Grand Central Terminal. By 1992, I had bought my first Windows computer and had moved production into my home. By that time, Bernie had become a welcome presence on Wednesdays in my office at 370 Jay Street (as he had already with Randy Glucksman and some others), regaling my colleagues and me with tales of the "old days." When I changed jobs and moved to 130 Livingston Street in late 1992, Bernie came along. Over the years, I developed a deep respect and admiration for his outstanding memory and his years of experience as a railfan and as a transit employee as well as his gentlemanly ways.

By the time I moved to 2 Broadway in 2004 with my division, Bernie had fallen on subway steps and had stopped visiting. Our Wednesday visits became a Friday phone call (1:44 PM, NOT 1:45 — it was our thing). In our conversations, we would discuss current happenings in local rail (and, yes, bus) transportation, and he would tell me how things were handled when he was on the job. We would also discuss upcoming *Bulletin* issues — he had things planned out for months in advance. He would also tell me about his neighbors, and about how he and his colleagues used to make contact with the third rail...diagrams. Our final conversation took place on the day after Thanksgiving, 2017. The next day Bernie was stricken with his final illness.

I miss those Friday afternoon calls already, and I know I will continue to miss our friendship. Safe travels, Bernie.

#### The Genesis of Dashing Dan

(Continued from page 3)

during that summer; the large terminal and dock at Whitestone Landing were finally finished and a substantial depot along with other facilities built at the shore near Powell's Cove. On August 9, 1886 the Whitestone Branch was opened 0.8 more miles to its ultimate conclusion, the single-track extension originating as a south-to-north loop from the existing Whitestone Village stop (utilizing the space originally created for the turntable and siding) and slipping through an open cut beneath four streets (9<sup>th</sup>, 10<sup>th</sup>, and 11<sup>th</sup> Avenues then 27<sup>th</sup> Street—now Murray Street, 150<sup>th</sup> Place, and Clintonville and 14<sup>th</sup> Roads). It emerged from the cut to cross 19<sup>th</sup> Street (now 12<sup>th</sup> Road) at grade on a northbound heading, then paralleled the west side of 14<sup>th</sup> Avenue (now 154<sup>th</sup> Street) to its two-track terminal (main and siding) just past the (Powell's Cove) Boulevard. Located there were another arrangement of railroad amenities including a turntable, engine house, and freight transfer dock, along with a clubhouse, marina, and (in typical Corbin style) a hotel for added destination value, enabling the railroad's patrons to linger and enjoy the relaxing (summertime) charms of the area's coastline. These facilities were soon to suffer the rayages of economy. nature, and time, however, with the hotel becoming an early casualty and the terminal trimmed back by about 1/4-mile in June of 1892 to 22<sup>nd</sup> Street (9<sup>th</sup> Avenue). This was an attempt to escape the harsh poundings that the maritime perils of the Long Island shoreline could deliver, while the original engine house was claimed by fire and replaced in 1893. At some point in time as well, LIRR established a main servicing facility at Whitestone Landing for its maritime fleet of tug boats, which were

used to move carfloats around New York Harbor and across the Hudson River to New Jersey. Back at Whitestone Village, the original main track was employed as a siding for short-turns and as a freight lead after completion of the line's extension in 1886.

Though the Flushing & North Side main line had been double-tracked from Long Island City to Winfield as early as 1872, access at the latter point remained a handthrown switch until the first "Winfield Junction" interlocking tower was placed in operation on May 15, 1883. To relieve the constant crush of traffic dashing to and from Flushing, double-tracking on the shared portion of the line between Winfield and "Great Neck" (actually Whitestone) Junctions was finally proposed in April, 1886, constructed in small increments, and became operational on May 15, 1889. This improvement eliminated the existing "choke" (meeting) point at Winfield Junction, and the tower building was physically relocated to the new end of double-track at "Whitestone Junction" on May 26, where it was re-designated "Signal Station 53" and watched over the meeting point of trains from Whitestone and Great Neck. Safety on the busy, extended North Side main line between Long Island City and Whitestone Junction was then enhanced through the addition of a manual block signal system by the end of 1892, as overseen by additional Signal Towers 50 (Winfield), 51 (Elmhurst), and 52 (Corona). Newer, larger station facilities were also added during this era at Great Neck (a second depot in 1883 and engine house in 1884), Bayside (1886), Little Neck (1890), Bridge Street in Flushing (1893), Corona (1894), and Douglaston (1898), all of which presaged what would turn out to be the Long Island Rail Road's last largescale expansion project.

(Continued next issue)

## TECH TALK by Jeffrey Erlitz

Over the past year and a half, there has been much progress made in replacing the signal systems at three interlockings on the Queens Boulevard Line. Originally, there was going to be a single contract covering the three interlockings at Roosevelt Avenue, 71<sup>st</sup> Avenue/Forest Hills, and Union Turnpike-Kew Gardens. By the time the contracts were awarded, Roosevelt Avenue was split off into its own contract. That work, under contract S-32749, was awarded to Alstom Signaling, Incorporated and it chose Five Star Electric Corporation to be the install subcontractor. The other two interlockings were awarded to Siemens Rail Automation under contract S-32769 and it also chose Five Star Electric to do the installation work.

Roosevelt Avenue opened on August 1, 1933 and had been signaled by the General Railway Signal Company. The tower, at the north end of the northbound platform, was a 60-lever Model 5 machine. The new interlocking was placed in service over seven weekends from May 14-July 25, 2016. The new relay room is actually on the

platform of the upper level station for the Winfield Branch that was never built. From May 14-July 23 the interlocking was controlled from the new relay room. Control was then transferred to the new master tower at 71<sup>st</sup> Avenue/Forest Hills. The new Maintainer's control panel was built, as is usual these days, by Mauell Corporation. Since Alstom was the prime contractor, the switch machines are Alstom Model 5 and the signals are Alstom Type AT. The Type AT signals are exactly the same kind as those installed by GRS back in 1933! The major difference is that the signal heads are aluminum now instead of iron.

Continental Avenue (as 71<sup>st</sup> Avenue used to be called) and Union Turnpike were originally installed by Union Switch & Signal Company and were placed in service by December 1, 1936, opening day. Continental Avenue had a fairly large 83-lever Model 14 machine while Union Turnpike has a 43-lever Model 14 machine. The new 71<sup>st</sup> Avenue/Forest Hills Interlocking was placed in

(Continued on page 18)

#### **NEW YORK CITY SUBWAY CAR UPDATE**

#### **Subdivision "A" News**

As November, 2017 progressed, the last 10 R-142As that had remained at Westchester, 7596-7605, were also seen on the 4, with any 15 of the 65 stationed there since March, 2016 then returning to the 6 each day among the 35 train sets required for rush hour, including a spare 5-car link to support a single 10-car consist. None was observed at all on December 18, and though this may have signaled a temporary end to the use of New Technology equipment on the 6 for the first time since 2000, that one train then continued to show up on most weekdays into the middle of January, 2018. Its numbers so far have remained within that former "home" group (7591-7655), hinting that these are still technically based at Westchester for maintenance and inspection purposes, but mainly exported to the 4 for their service "tours," usually mixed among that route's own distribution of R-142As and R-142Ss to attain an overall enlarged stable for additional service. In a similar vein, 7116-25 were consequently shifted from the 4 to the 6 on December 18, which raised that route's allocation to a lofty 425 R-142s while its erstwhile companion fleet on the 2 (which is generally shared at will with the **6** and vice-versa) held steady at 395.

44 R-62As, formed in as many as three (3) 11-car trains, continued in 7 rush hour service through mid-January of 2018, and were expected to remain far into the first half of the New Year. Turns out that the 7's CBTC signal and control system has been activated during midnights since June of 2017 (and the route's functions dispatched during such times from the main Control Center), then expanded to weekends and middays last September. The third and final stage of CBTC "takeover" is anticipated for sometime this spring, at which time the last R-62As will presumably (and finally) be moving on. Of the former 1921-5 guintet from the ? (and 6), cabs 1921 and 1925 finally appeared on the 42<sup>nd</sup> Street Shuttle (S) November 27, 2017 along with 1922 as a "middle" car, freed of all but its end seats for added capacity and adorned with Transit's "Cuomo" branding inside. Single car 1928 was soon in a similar state when observed on December 15, as was former Corona unit 1939 when it was seen at Grand Central on December 26. After a lengthy state of decline, the Corona-based fleet of "EPO" R-134 work motors was sidelined for much of 2017 (replaced by various single-unit R-62As for the interim), but has been revived by year's end. Garbage Train "7-Ash" is now (once again) commonly configured with a pair of R-134s at one end and two single R-62As from Corona at the other.

#### Subdivision "B" News

As mentioned on page 15 of the December, 2017 **Bulletin**, on Sunday, November 19, 2017, cars 3058-65, in consecutive order, were dispatched from Jamaica Center as the 6:47 AM ①, the first-ever passenger-carrying

trip for the long-awaited R-179 series, thus starting its eagerly anticipated "30-Day" period of revenue service testing. Despite various and sundry reports of subsequent problems along the way (mainly minor in nature), the cars continued to appear consistently on **①** (**2** as well after December 7), on all days and at all times it was not sequestered for various fixes and tweaks through December 22. Things took a decided turn for the better on December 11, when it was reported that yet another 4-car unit (3066-9, said to be the first true production cars) was in the process of being delivered at 207<sup>th</sup> Street. This was joined at the end of the same week by link 3090-3. Hitched together, they both rapidly entered full testing immediately after Christmas weekend. At long last, more than two years behind their original schedule, all four 4-car sets were the very first R-179s to be accepted for passenger service on **①**/**②** as of Thursday, January 11, 2018. They made regular runs on **1** the following day, January 12, consisted as 1) 3093-2-1-0/3058-59-60-61 and 2) 3065-4-3-2/3066-7-8-9, with no serious problems reported. Concurrently, a seventh 4-car set was delivered that same day (3086-9) while post-production modification and re-testing was continued on the 18 other "pilot" R-179s (5-car units 3010-9 and 4-car sets 3050-7). As things proceed, it appears that the first group in the series will be delivered to East New York for assignment to **1** and **2**. It has now been common knowledge for some months that the nature of the original 300-car R-179 contract was to be changed, in part due to revised service needs and in part to offer NYCT a measure of compensation for the long delays in the builder's contract performance and delivery. Absent an official proclamation to this effect from MTA itself we can offer only the scantest of details at this point, but suffice it to say that more than the expected four new trains are ultimately headed for Pitkin and (A), with a reduced balance of 4-car R-179s to be deployed elsewhere.

Thanks to the tenacity of member Bill Zucker, we have been able to discover the nature of the so-called "Cuomo Fleet" that has been operating on the **(B)** since the start of October. In place as of December 22, these distinctive R-160s feature blue and gold "State of New York" color branding inside and out, along with a floor plan modified inside of each car to accommodate additional standees and wheelchairs due to the removal of end seats. So modified and transferred to Jamaica from Coney Island (all Alstom-equipped R-160s) were 8773-7, 8838-42, 9108-12, 9123-42, 9148-62, 9168-72, 9178-82, 9188-92, 9203-7, and 9218-22 (75 cars). In exchange, these 70 unmodified Alstom-equipped R-160A-2s were swapped from Jamaica (E, F, sometimes R) back to Coney Island (N, Q, W): 9233-7, 9248-72, and 9443-82. Finally, the following 35 Jamaica-assigned Alstom-type R-160s were also modified for this en-

(Continued on page 7)

#### **NYC Subway Car Update**

(Continued from page 6)

hanced assignment: 9238-47, 9558-72, 9688-92, and 9733-7, altogether creating a specialized fleet of 110 cars. Use has seemed to be judiciously maintained on the **(Cont)**, though one "Cuomo" consist was observed on the **(Cont)** January 2. There is also one 8-car train of similarly-altered cars used on the East New York routes made up from R-160A-1s 8325-8 with 8337-40. Carrying the scheme's special markings for its entire length, this consist has "flip-up" seating in the four "B" cars (8326, 8327, 8338, and 8339) and is CBTC-capable, so the train seems to spend most of its time on the **(Cont)**. Its passage has also been documented on the **(Document)**.

When a long-term SMS of the East New Yorkassigned, Phase I R-32 fleet was initiated in early 2017, these 16 of the Budd-built units were brought over from 207<sup>th</sup> Street (**©**, some **A**) to fill potential spot shortages while its own 102 cars were being shopped: 3383/3890, 3574-5, 3614-5, 3621/3644, 3682-3, 3896-7, 3900-1, and 3912-3. From about February 27 through December 15, 2017, the R-32 assignment split was then 118 on the **1**/**2** and 104 on the **6**, with a handful of those on the A. When the additional R-32s were transferred from 207th Street to East New York, for the same reason a like quantity of R-160A-1s (8577-92) were traded from East New York (1/2, M) to 207<sup>th</sup> Street (6, some A). More recently, to institute the eventual full-time extension of G trains to a full 600 feet (10 60-foot or 8 75foot cars), five such runs began using Pitkin-assigned R-46 trains (5846-6149, 6152-6207, 6208-6258 even only) weekdays on December 5, then seven days a week starting on December 16, 2017. Inasmuch as this change reduced the probability that the entire rush hour schedule on the  $\triangle$  could be covered by the  $48\frac{1}{4}$  R-46 trains assigned, additional 10-car trains of Phase I R-32s were employed as required. With their SMS effort concluding by that time, six of the Phase Is were concurrently shifted from East New York to Pitkin, but actually were blended in with those based at 207th Street for use on the **©** and some **A** (3383/3890, 3410/1, and 3444/3777). In exchange, R-160s 8577-84 were returned from 207th Street to East New York and rejoined their sisters on the **1**/**2** and **M**. In mid-January, 2018 there remained 100 Phase I R-32s on the @ and some A, plus 122 on the **1**/**2** to form the series' full complement. At this point the sparing and preliminary use of "full length" (600-foot) trains on the **©** is limited strictly to R-46 equipment; the 207th Street-based Phase Is continued to be maintained as 8-car consists for nominal use on the ②, and extended to 10 only as required for ③ service. This will probably continue to be the case until the fleets based at Pitkin and 207<sup>th</sup> Street can be independently expanded, and more full-length trains made available for the ③, an effect whose timing will be contingent on the arrival of R-179s at NYCT.

In other noteworthy happenings, the mini-fleet of 24 Morrison-Knudsen-overhauled R-42s assigned last spring have continued in service on the M shuttle through early 2018, with a December 11, 2017 "driveby" photo revealing that the connecting viaduct between Broadway and Myrtle Avenue was then completely missing. R-46 link 6038-41, which had been damaged in the June 27 A train derailment near 125th Street, was back in passenger service during October, 2017. As for the other unit, cars 6150 and 6151 (originally numbered 764 and 795, respectively) were not repaired, but rather were retired from revenue service by September of 2017 to officially reduce that massive group's size to 750 cars. The leftover couplet of 6152 and 6153 was remated with "open-end" pair 6206/7 as a "standard" 4-car link, with the two "B" car interiors (6153 and 6207) missing their end seating and color-banded in the so-called "Cuomo" (enhanced) configuration as applied to the R-46 series. R-143 link 8277-80, which was heavily damaged in a yard accident at Rockaway Parkway in 2006 and stored for years at 207th Street, was at long last restored to revenue operation on the (and possibly ①/② or M as well) on December 11, 2017, and the contract's full quantity of 212 fielded thereafter (hopefully to exist for many years to come). On December 9, Bill Zucker observed R-68s 2768-75 together in a consist on the **①**. Sure enough, this signified their formal transfer starting that date from Coney Island (B,  $(\mathbf{G}, \mathbf{N}, \mathbf{W}, \mathbf{Sometimes})$  to Concourse  $(\mathbf{D})$ . Finally, beginning on November 6, 2017 a morning rush hour R trip (using either R-46 or R-160 Jamaica-assigned equipment) is scheduled from Bay Ridge-95<sup>th</sup> Street to 96th Street and Second Avenue. The same train is marked up for return as a **(a)** to lay up at Coney Island Yard, which sometimes has brought an R-46 train onto the Brighton Line, an exceedingly rare and nominally accidental event over the past 42 years. In the "PM" there is also supposed to be a scheduled piece of work, utilizing an R-68/68A, that starts as a **(B)** from 145<sup>th</sup> Street to Brighton Beach and then "morphs" into a late afternoon **a** round trip between Coney Island and 96<sup>th</sup> Street. In reality the SMEE equipment is generally swapped out in favor of an R-160 and so runs as just another (unremarkable) (a) train up to the Second Avenue Subway and back.



## NEW TRANSFER OPENS AT THE WORLD TRADE CENTER by Subutay Musluoglu (Photographs by the author)

As we reported last month, a new in-system transfer passageway between the World Trade Center and Cortlandt Street stations opened on December 29, 2017. This was yet another opening in a series of transit improvements that have been implemented at the World Trade Center (WTC) as part of the ongoing rebuilding of the site since it was attacked and destroyed by Islamic terrorists on September 11, 2001. This particular transfer did not exist prior to 9/11 and its addition to the lower Manhattan transit infrastructure landscape should enhance overall connectivity for commuters.

The passageway links the station's south fare control area to the **MRW** station's southbound platform. The fare control area was reconfigured to enable a continuous paid zone leading from the end of the platform to a new opening in the south bulkhead wall adjacent to the entrance to the WTC retail concourse. Insystem transfer to the Chambers Street AC and Park Place 23 platforms is also enabled via the 15 platform. Previously, the fare array was situated much closer to the end of the platform, with a large unpaid zone for commuters entering from the street stairway on the northeast corner of Church Street and Fulton Street, allowing them access to the WTC as well as the rest of the Chambers Street-WTC subway station complex, via a long corridor parallel to the platform, leading to the AG and 23 platforms. Now, those entering from that stairway are faced with a fare array at the bottom of the landing. The ability to enter the unpaid zone has shifted across the street, to an entrance on the south side of Vesey Street just west of Church Street, located within the pedestal of the future 2 WTC office tower. This entrance had initially opened in August, 2016 as the first northern access to the Santiago Calatrava designed Oculus headhouse to the WTC Transportation Hub, which had opened in March of that year after a decade of construction. Opened on the same day as the new transfer, the new subway entry was built as a branch off the main access down to the Oculus floor, and places commuters across from a new western fare array to the platform, at the head of the aforementioned corridor leading to the rest of the Chambers Street station com-

Returning to the transfer, the passageway leading to the NRW is initially wide at the north end but then narrows down noticeably, until a final dogleg bend brings passengers to the NRW platform. This location is just at the very north end of the southbound platform, and the constricted area has necessitated the installation of a safety railing at the platform edge. From here a walk further down the platform will bring passengers to the stairway that descends to the Dey Street Concourse

level, which provides the transfer to the northbound **NRW** platform. Exiting here into the unpaid Dey Street Concourse allows access to the Fulton Center complex for the **2345AC** and **1**/2.

Also opening on December 29 were two other points of access to the southbound NRW platform. The first is a new fare control area from an intermediate level of the WTC Transportation Hub, which opens directly onto the platform itself, just to the south of the ADA elevator, which itself is located in front of the transfer to the **(B)**. The second is another new fare control area located closer to the south end of the platform, which is accessed from the concourse level underneath the 4 WTC office tower. This configuration provides subway access from the northwest corner of Liberty Street and Church Street. It was observed that signage and wayfinding at this location was insufficient on opening day, which only further exacerbated a confusing arrangement at the fare control area itself, since it is not clear if those wishing to access the northbound NRW platform should enter here and walk north to the same aforementioned stairway to the Dey Street Concourse, or instead descend down a stairway and walk through a pre-existing passageway underneath the tracks, ascend another stairway, and then walk down another corridor to a fare control area adjacent to the entrance at the southeast corner of Cortlandt Street and Church Street within the 1 Liberty Plaza office building. Improved signage should alleviate this condition, which was quite confounding to commuters on opening day.

The last remaining significant transit project at the WTC yet to be finished is the Cortlandt Street 1 station, which continues to trend behind schedule. At this time, its opening is anticipated to be in late 2018, but early 2019 is probably more realistic. This station is on the segment of the Seventh Avenue Line that passes right through the center of the site, and keen observers can make out the station structure suspended above the transition area between the WTC Transportation Hub Oculus floor and the PATH concourse.

Once the ① station is completed, it will probably be the last significant transit improvement to be seen at the WTC for the foreseeable future. The remainder of the rebuilding work is mostly above ground, including the completion and opening later this year of the 3 WTC office tower, additional pedestrian plaza work, and the Performing Arts Center, which is scheduled to open in 2020. The status of 2 WTC, the last office tower yet to be built, is uncertain at this time due to the lack of an anchor tenant.

The utility of the new transfer remains to be seen. As mentioned earlier, it offers yet another convenient op-

(Continued on page 9)

#### **New Transfer Opens at The World Trade Center**

(Continued from page 8)



View on December 20, 2017 looking south across the unpaid zone at the south end of the World Trade Center (3) station. The new transfer to the (1) (2) (3) is behind the blue hoarding to the left of the WTC concourse entrance. A new paid zone was established across this space.



On opening day, December 29, 2017, the new transfer to the  ${\bf Q} {\bf Q} {\bf W}$ .



Transition to the New southbound platform, December 29, 2017.



Another view from the **NR** southbound platform side, December 29, 2017.

(Continued on page 14)

## Commuter and Transit Notes

No. 349

by Ronald Yee, James Giovan, and Alexander Ivanoff

#### MTA METRO-NORTH RAILROAD

The last of seven consecutive-year fare increases on the Connecticut portion of the New Haven Line went into effect on January 1. This series of 1% annual fare increases that started in January, 2012 were imposed to help pay for the fleet of new M-8 commuter rail cars first placed into service in 2011. In November, 2016, CDOT and the MTA announced an order for 60 additional M-8 electric multiple unit (EMU) commuter railcars (with options for 34 more cars made possible through a second amendment to the original contract with Kawasaki), allowing for the retirement of the last of the 36 1973-6vintage M-2 class EMUs and for fleet expansion to enable an increase in the number of trains and cars operated on the line. The M-8 dual voltage, 700 volt d.c. third rail electric and 12.5 or 25 kV overhead a.c. catenary pantograph-equipped EMUs have had a stellar service record, logging in a mean distance between failures of 460,277 miles through September, 2016. The first of the supplemental M-8s are expected to arrive near the end of 2019. The M-8 fleet will increase to 465 cars and if all options are exercised, the M-8 fleet could eventually grow to 499 cars. (MTA website, December 19, 2017; CDOT press release, November 16, 2016)

#### **NJ TRANSIT**

NJ Transit has exercised an option with Bombardier Transportation for 17 additional ALP-45DP dual-mode locomotives for \$160 million. The option is part of the original contract for 26 ALP-45DPs signed back in 2008, which included an option for 37 additional units. Options for nine additional units were exercised in 2011 and now, an additional 17 units have been ordered, with the first unit scheduled to be delivered in October, 2019 from the manufacturing plants in Germany and Poland. (Bombardier Transportation, January 2)

#### **AMTRAK**

On December 18, 2017 at 7:33 AM, Amtrak train #501, the first *Cascades* train to use the Point Defiance Bypass, derailed near DuPont, Washington on a bridge crossing Interstate 5. All 12 of the train's coaches and one of its two engines derailed, with the lead locomotive, P-42-DC 118, staying stationary. The National Transportation Safety Board said that the train had been traveling more than twice the speed limit before it derailed, or at 80 miles per hour instead of the allowable 30 mph. Three passengers died in the wreck.

While WSDOT invested a significant amount of both federal and state funds into improving the route, positive train control (PTC) had not been fully installed or tested, with the state estimating the PTC would be fully in place by 2019. (Editor's Note by Alexander Ivanoff: Of the three fatalities, two of them, Jim Hamre and Zach Willhoite, were both railfans and members of All Aboard Washington, a statewide passenger rail advocacy organization. Both men will be sorely missed. Hamre was a WSDOT retiree and an

alumnus of the Milwaukee Road system, and Willhoite was also a bus fan who worked for Pierce Transit as an IT specialist. Through Facebook, I got a bigger picture of how colossal the loss was: it seems that just about every one of my friends in the transit fanning community knew one of them. I knew Jim fairly well and considered him a friend and colleague from my time at the Rail Passengers' Association. A group of Los Angeles-based transit fans operated a memorial bus ride on January 14, 2018 to celebrate Zach Willhoite's life and among the attendees were ERA First Vice President John Pappas and ERA Treasurer Mike Glikin.) (KIRO-TV, December 19 and 20, 2017; New York Times, December 18, 2017)

Amtrak added a round trip to the Pacific Surfliner Santa Barbara to Los Angeles route starting Friday, January 19. The added service, Train #765 northbound and Train #778 southbound, is aimed at meeting the added passenger volumes traveling by train between the two cities following the recent mudslides that have severed most roadway connections and left few travel alternatives between the two cities. The consist being utilized for this service is a single-level Horizon set of equipment that had been previously reassigned to operate only between San Diego and Los Angeles. It is now extended to Santa Barbara on its runs. A previous service increase due to the mudslides was achieved by "creating" a new double-deck consist by removing one coach from each of several Capital Corridor and San Joaquin trains and assembling enough cars to make up one "new" trainset. Host railroad Union Pacific approved this temporary increase in service to meet a public need and the additional train will provide 1,000 additional seats. (*Trains Magazine*, January 20)

#### INDUSTRY

The *Washington Post* reported on January 3 that the Trump Administration plans to hold the passenger and freight rail industries to a December deadline to install Positive Train Control (PTC), which may have prevented the fatal Amtrak accident in Washington State in December, 2017, the Philadelphia derailment that killed eight passengers in 2015, and scores of other train wrecks.

The implementation of PTC was postponed by Congress, which extended a deadline to have the systems in place from 2015 until December of this year and left open the possibility of an additional extension to 2020. (*Metro* Magazine, January 3)

CRRC Changchun Railway Vehicles Company unveiled a prototype of what it says is the world's first carbon fiber metro car body shell on January 7.

The manufacturer says that the composite materials used allow the car to be 35% lighter than the average metal-bodied metro car, which would help to reduce rail wear.

(Continued on page 11)

#### **Commuter and Transit Notes**

(Continued from page 10)

CRRC says that it has the intellectual property rights to the design, but has not specified when it would begin mass production of carbon fiber body shells. (*Metro Report International*, January 11)

## OTHER TRANSIT SYSTEMS BOSTON, MASSACHUSETTS

The MBTA suffered a significant loss to the PCC fleet assigned to the Mattapan-Ashmont service. On December 29, 2017 shortly after 3 PM, PCC 3262 rear-ended PCC 3260 near the Cedar Grove station, pushing 3260 over 100 yards forward on the tracks, injuring at least 17 passengers and causing significant damage structural damage to both cars. Subsequent evaluation determined that both cars are damaged beyond economic repair and will either be scrapped or set aside for spare parts. With three cars of the ten-car PCC fleet already set aside as inoperable pending rebuilding, there are now only five cars available for passenger service. As a result, the line will now only be serviced by four cars at the peak periods, with headways lengthened from five minutes to six-and-a-half minutes. Apparently, the Operator of car 3260 stopped to assist the Operator of a stalled PCC in the opposite direction. Somehow, the Operator of car 3262 was not informed of 3260 stopped ahead, missed and passed red signals indicating such, and could not stop in time when the stopped car was finally seen ahead. (Boston Globe, December 30, 2017)

#### PHILADELPHIA, PENNSYLVANIA

The Southeastern Pennsylvania Transportation Authority (SEPTA) announced the next step in its efforts to phase out of its token-based fare payment system in favor of its new SEPTA Key Card and QuickTrip fare media. Beginning in January, Station Agents and vending machines at subway and elevated stations ceased selling tokens. While tokens will continue to be sold at other select locations, many retail outlets such as convenience stores have already stopped selling them. In the past 12 months, token sales declined by a million to 2.2 million in November, 2017. SEPTA is the last major transit agency still using tokens as a means of fare payment. (philly.com, December 27, 2017)

#### MIAMI, FLORIDA

Brightline commenced passenger service on the initial portion of its route between West Palm Beach and Fort Lauderdale on Saturday morning, January 13. Test trains utilizing all five trainsets had been operating over this section of the line simulating full service for the month leading up to the inaugural opening, providing valuable training for the crews. Service to downtown Miami is expected to commence sometime mid-summer 2018, the station complex there still under construction. Service will be hourly with the first train departing at 6 AM and the last departure at 11 PM. Fares are \$10 for a one-way trip between West Palm Beach and Fort Lauderdale and a \$15 fare is available for a "Select Service" ride in a business class car with wider seats, com-

plimentary snacks, beverages, and drinks. The Brightline website also announces that construction will begin this summer on Phase II, the extension of the line to Orlando International Airport via the existing Florida East Coast (FEC) tracks northward to Titusville and a new alignment westward to Orlando. Service to downtown Miami is still expected to commence by around mid-2018. As this issue goes to press, the one-week-old service has already had two service disruptions, one due to a fatality involving a bicyclist going around lowered crossing gates and being struck by a train, and the other was a pedestrian who was struck and injured by a train, also while crossing while the grade crossing gates were lowered. Another pedestrian was killed by a test train earlier in the month while trespassing on the tracks. Local politicians are clamoring for either a suspension of service while a top to bottom safety review is performed or launching an intensified safety and awareness campaign and added police enforcement to reeducate local residents regarding safety around the tracks, which now carry 79 mph passenger trains in addition to the somewhat slower FEC freight trains. (**Progressive Railroading**, January 11)

#### CINCINNATI, OHIO

One of the Cincinnati Bell Connector streetcars was in a crash the afternoon of January 19 and derailed, injuring two people. The crash happened at Elm and Liberty Streets around 4 PM and no passengers were injured as service had been suspended Thursday for repairs and testing. The streetcar was still running its route Friday for testing, according to the Southwest Ohio Regional Transit Authority. Streetcar service has been suspended due to continuing failures from the cold weather, an issue that has become a political hot potato in the Queen City. (Cincinnati Enquirer, January 18 and 19)

#### CHICAGO, ILLINOIS

Metra, Chicago's commuter railroad, issued a request for proposal (RFP) for new or remanufactured locomotives to replace its aging fleet of 149 mostly 1970s and 1980s-vintage EMD F-40-PHs. The RFP specifies a base order of 12 new or 15 remanufactured passenger locomotives with options for up to 30 additional new engines or 27 additional remanufactured locomotives, either combination totaling up to 42 units. \$125 million has been set aside by Metra to fund the acquisition of new locomotives. Metra's 2014 modernization plan included 52 locomotives and 367 commuter railcars, but the expected Illinois state funding has since become unavailable, forcing a reduction in these plans. (Metra, January 5)

#### St. Louis, Missouri

Proposals for a north-south light rail line in St. Louis have been unveiled by the city authorities at a series of community consultation meetings which began on January 16. East-West Gateway Council of Governments, has launched a conceptual design study for the 17-mile Northside-Southside LRT in partnership with the City of St. Louis.

Previously proposed in 1999 and 2008, the preferred

(Continued on page 12)

#### **Commuter and Transit Notes**

(Continued from page 11)

route would start from the intersection of I-70 and Good-fellow Boulevard in the Pine Lawn district, and then run east along Natural Bridge Avenue before turning south on parallel single tracks through the city center on 9<sup>th</sup> and 10<sup>th</sup> Streets. It would then follow Jefferson Avenue and I-55 to terminate at Bella Vista in South St. Louis County. Alternative routes for some sections will be investigated as part of the study.

The line is expected to take around a decade to build at an estimated cost of \$1.5 billion; construction of the first phase could start in 2023 for opening around 2027. The capital budget for this section is put at \$700 million, with the Federal Transit Administration expected to contribute up to 50%. As Missouri has traditionally not provided state funding for public transport capital projects, EWCOG is considering the scope for attracting private sector contributions. Unlike the existing MetroLink lines, which fully are segregated and largely follow former railway alignments, the new line would operate on-street at lower speeds. (*Metro Report International*, January 19)

#### KANSAS CITY, MISSOURI

The Kansas City Streetcar Authority posted on Instagram on January 8 that it had a name for its recently purchased snow and brush sweeper. The name chosen was none other than Brushy McBrushface (Editor's Note by Alexander Ivanoff: While a somewhat bizarre choice, it is both humorous and downright cute. Imagine if the streetcar forefathers of yesterday had the social media we have today!) (KC Streetcar via Instagram, January 8)

#### DENVER, COLORADO

A new light rail line, dubbed the L-Line, was to launch in downtown Denver on January 14, with transit officials touting it as a more efficient way to move passengers traveling to and from the Five Points neighborhood while also helping boost on-time performance across the Regional Transportation District's rail system.

The L-Line, which does not use new track, takes over the existing northerly segment of the D-Line, which runs from the Mineral station in Littleton to the 30<sup>th</sup> and Downing station in Five Points.

After the launch, the D-Line will end at the 18<sup>th</sup> and Stout station while the L-Line will cover the 1.7 miles between that station and the 30<sup>th</sup> and Downing station, with trains doing a turnaround loop through the heart of downtown Denver along Stout, Welton, and 14<sup>th</sup> streets. Eventual plans have the new L-Line running to the 38<sup>th</sup> and Blake station to connect with the A-Line to Denver International Airport, pending funding. (*Denver Post* via Jack May, January 13)

#### CALIFORNIA

The estimated cost of building 119 miles of bullet train track in the Central Valley has jumped to \$10.6 billion, an increase of \$2.8 billion from the current budget and up from about \$6 billion originally.

The new calculation takes into account a number of intractable problems encountered by the state rail agen-

cy. It raises profoundly difficult questions about how the state will complete what is considered the nation's largest infrastructure project with the existing funding sources.

The new estimate was presented on January 16 by Roy Hill, who leads the main consulting firm on the project, WSP (formerly Parson Brinckerhoff). Hill said the cost increases were mainly driven by problems including higher costs for land acquisition, issues in relocating utility systems, the need for safety barriers where the bullet trains would operate near freight lines, and demands by stakeholders for the mitigation of myriad issues.

The Board also voted the same day to name Brian Kelly as its new chief executive. As secretary of the California Transportation Agency, he had been deeply involved in the project. Kelly said in an interview that high-speed rail remains crucial to the future transportation and economic needs of the state, but acknowledged that it is facing tough challenges that must be addressed.

As the project's lead proponent, Governor Jerry Brown, serves the final year of his term, it will be crucial, Kelly said, to "dive in, stabilize it and restore its credibility."

The sharp increase in projected costs could require the California High Speed Rail Authority to return to the State Legislature for a supplemental appropriation from the bonds that voters approved in 2008. The remaining bonds probably would cover the cost increases, but partly deplete funds for further construction beyond the Central Valley. (*Los Angeles Times*, January 16)

#### SAN FRANCISCO, CALIFORNIA

Barely a month after returning to service after a complete rebuilding at the Brookville Equipment Company in Pennsylvania, freshly rebuilt PCC 1063 (painted in Baltimore Transit colors) was struck by a box truck that made a sudden and illegal left turn on Third Street at Mission Bay Boulevard in front of the trolley car as it was deadheading south on the T line back to its operations base at Muni Metro East after completing its assignment on the F line. The impact was so severe that the truck was flipped onto its side and derailed the PCC, the impact severely damaging the front right side, which contains all of the door operator mechanisms and underfloor boxes containing Operator controls. Buses replaced LRV service on the T line during the several hours the line was blocked while the wreck scene was cleared out. (Market Street Railway, January 2)

BART placed the first of its new Bombardier rapid transit cars into service on January 19. The ten car train was officially placed into service with a ribbon-cutting ceremony by officials and dignitaries at Oakland's MacArthur station. The train then proceeded north to Richmond, where it turned back south for Warm Springs/South Fremont. Initially, the new train will operate on the Richmond-Warm Springs/South Fremont line from 9 AM to 3 PM and from 8 PM to midnight on weekdays and weekends. Once they have demonstrated full reliability,

(Continued on page 13)

#### **Commuter and Transit Notes**

(Continued from page 12)

they will be allowed to operate over all of the other lines including the Transbay Tube to San Francisco, the airport, and Colma. A second set of ten cars is currently undergoing its final series of extensive testing before entering service and a third batch of cars is expected to be delivered in February. Beyond that, no production schedule has been set or agreed upon, but it is expected that Bombardier will ramp up production rates in the upcoming years to enable the delivery of 16-20 cars per month to BART with an expected completion date by the end of 2022. An interesting situation now confronts riders when a new train pulls into a station. The station platforms have markings indicating where the doors are for the current fleet, which has two doors per side. The new cars have three doors per side, which will result in the new trains not aligning with current markings. BART has decided that when a sufficient number of the new cars are operating, new markings will be added to correspond with their door openings. While the cars have fewer seats, rider reaction to the new cars was very positive. Smoother ride quality, brighter and new color upholstery, more spacious with wider aisles, more passenger amenities, and informational displays showing the name of the upcoming station, a moving dot on a line map to show trip progress, easy-tounderstand automated audio announcements, better standee hand-holds, and more doors per car to reduce station dwell times are among the features. (Editor's Note by Ronald Yee: It is hoped that BART has better luck with Bombardier's production schedule adherence than NYC-T's R-179 and Toronto TTC's Flexity LRVs.) (San Francisco Chronicle, January 19)

#### TORONTO, ONTARIO, CANADA

The Toronto Transit Commission (TTC) reported that Bombardier failed to meet even its revised-for-thesecond time goal of delivering Flexity LRVs (light rail vehicles). The initial contract had called for almost 150 of the 204 LRVs ordered to have been delivered by the end of 2017. Production delays at Bombardier resulted in a May, 2016 renegotiation of the total number of Flexity LRV deliveries to the TTC by the end of 2017 to 70. In October, 2017, when it became obvious that the goal would not be met, the production goal was lowered to 65 total LRVs delivered. Bombardier missed that goal, delivering just 63 LRVs by December 31, 2017. The incessant delays have forced the TTC to perform patchwork maintenance on its aging fleet of ALRVs and CLRVs to maintain a minimal degree of service on its streetcar lines. In some instances, when shortages become acute, service has been supplemented by buses to protect the service levels on some routes. These delays have also prompted Metrolinx, the regional transit agency responsible for mass transit in the greater Toronto and Hamilton area, to reduce its order for Flexity LRVs destined for the Eglinton Crosstown light rail transit (LRT) line and other Toronto area LRT lines from 182 cars to just 76 cars and seek an alternate car builder (possibly Siemens) for the balance of the order. The TTC may also be exploring the possibility of securing LRVs from a different manufacturer, but they would not comment on whether it would follow Metrolinx's lead and reduce the size of the on-going 204-car order with Bombardier. (*Toronto Star*, December 21, 2017)

GO Transit is soon offering more weekday and weekend service on its Barrie Line north of Toronto. On January 2, 2018, the province introduced new midday and evening weekday service between Union Station and the Aurora GO station. Hourly weekend rail service started December 30, 2017.

A total of 230 GO train trips will now operate every week along the Barrie GO line, nearly six times the 40 trips per week that were operated a decade ago. In addition, GO Transit is also increasing its bus service between Aurora and Barrie. Construction to bring all-day, two-way GO train service to Barrie is expected to be done by 2025. (Editor's Note by Sasha Ivanoff: I have a version of the GO Transit system for Microsoft Train Simulator (in fact the route was designed as part of a contract between a Canadian developer and Bombardier Transportation) and since the addon came out over a decade ago I believe that there have been substantial capacity improvements to the line that were not there in 2005.) (Trains Magazine via Al Holtz, December 20, 2017; CTV Toronto, December 12, 2017)

#### LONDON, ENGLAND

The coaches which CAF is building in Spain for use on Caledonian Sleeper trains between Scotland and London are expected to begin entering passenger service during October, the operator said after the first five vehicles arrived in the United Kingdom on January 15. The new stock will initially be used on the *Lowlander* route between London and Glasgow/Edinburgh. The 75 coaches ordered from CAF at a cost of more than £100 million will be the first sleeper vehicles to be introduced to the United Kingdom in more than 35 years.

Caledonian Sleeper plans to offer Comfort Seats starting from £45, Classic Rooms (twin or single) from £85 per person, Club Rooms (en-suite twin or single) from £125 per person, and Suites (double bed with en-suite) from £200 per person. Features will include a hotel-style key card entry system, charging panels, and wi-fi. Classic, Club, and Suite accommodation will also be available as fully accessible rooms for passengers with reduced mobility. Passengers booking a room will be guaranteed solo occupancy unless they choose to share with a partner. (*Railway Gazette*, January 16)

The first phase of the Elizabeth Line, currently Europe's largest construction project, is now less than a year away from opening. Also known as Crossrail, the £14.8 billion project entails the building of a 73-mile east-west regional railway, with 13 miles of twin-tube tunnels under central London. Using the Paris RER as a model, the Elizabeth Line takes suburban commuter rail services presently operating into stub-end terminals and unifies them with a center city tunnel allowing for integrated through-running services. The line will have

(Continued on page 14)

#### **Commuter and Transit Notes**

(Continued from page 13)

40 stations - 30 rebuilt and 10 new, of which 8 are in tunnel. The first phase opening in December will be from Abbey Wood in the southeast through to Paddington, including the full opening of the central London tunnel. The second phase in May, 2019 will extend service to Shenfield in the northeast, and the third phase in December, 2019 will incorporate western services from Reading and Heathrow Airport, at which point the entire Elizabeth Line will be operated with an integrated eastwest service. (Crossrail website, December 19, 2017)

In other London news, tunneling has been completed on the Northern Line extension to Battersea. The two-mile-long extension is being built as a branch from the existing Kennington station, with an intermediate station at Nine Elms, near the newly completed U.S. Embassy. Started in 2014 and set to be completed in 2020, the line's £2.2 billion cost is being covered through an innovative public-private partnership related to the redevelopment of Vauxhall, Nine Elms, and Battersea, site of the famous power station which is being re-purposed as a modern commercial and residential complex. (*Metro Report International*, January 12)

An agreement for Stadler Rail to supply 71 Flirt electric multiple-units to voivodeship-owned regional passenger operator Koleje Mazowieckie was signed in Warsaw on January 17. Stadler said the deal was worth 2.2 billion złoty, making it the highest-valued tender for regional trains ever to be signed in Poland.

The 100 mph EMUs would have "high-performance" air-conditioning, "contemporary" doors, audio and visual passenger information systems, on-board wi-fi, PRM

(Persons with Reduced Mobility)-compliant toilets, and space for prams and bicycles. They will be equipped with ETCS (European Train Control System) Level 2, and will carry a defibrillator and an intercom system so that passengers can contact the Conductor in the event of an emergency.

Stadler's Polish subsidiary was founded in 2007 and operates a plant in Siedlce which employs around 700 people. So far most of Stadler Polska's work has been for export, apart from orders to supply trainsets to PKP Intercity and regional operators Koleje Mazowieckie, Koleje Slaskie, and Łodzka Kolej Aglomeracyjna. (*Railway Gazette*, January 17)

#### XI'AN, ĆHINA

A new 320-mile-long high-speed passenger rail line between Xi'an and Jiangyou in east-central China began service on December 6, 2017. The first phase of the new line opened back in 2014 and the completion of its new extension cuts travel time from 11 hours to just over 4 hours. *Railway Gazette* reported that the time will be further reduced to three-and-a-half hours after a schedule adjustment is made in the near future. Construction on the Xi'an-Jianyou Line started in October, 2012. The line passes through the Qinling Mountains, which required the building of 139 bridges and 62 tunnels. The train will reach maximum speeds of about 150 miles per hour. (trains.com, December 12, 2017)

#### WUHAN, CHINA

A two-line light rail network in Wuhan opened on January 18. The Optics Valley tram network, also known as Guanggu tram, is focused to the Donghu New Technology Development Zone in the southeast of the city.

Construction was approved in March, 2014 and test running started on December 18, 2017. The two lines share a 1.5-mile section. The 10.4-mile north-south line

(Continued on page 19)

#### New Transfer Opens at The World Trade Center

(Continued from page 9)

WARSAW, POLAND



New fare control area between the **Q Q and the WTC Transportation Hub's oculus, December 29, 2017.** 



New fare control area to the **No** from Liberty Street under 4 WTC, in need of better signage, December 29, 2017.

(Continued on page 17)

#### **Around New York's Transit System**

(Continued from page 20)

tainment measures that have been applied during the repainting of other elevated structures beginning around 10 years ago, e.g., the Astoria and Jamaica "L"s.

#### Extension of the 1 Train to Red Hook to be Studied

Governor Andrew Cuomo has expressed support for a study examining the feasibility of extending from South Ferry to Red Hook, Brooklyn via a new tunnel under the East River. The objective is to spur development of business and residential development in the Red Hook area, which is now an industrial waterfront hosting ocean-going shipping terminals. That commercial activity would be shifted south to the existing Brooklyn Maritime Terminal in Sunset Park section of Brooklyn, which is underutilized.

#### **New NYCT President Takes Office**

Andy Byford began his tenure as President of MTA New York City Transit on Tuesday, January 16. Hopes are high that he can lead the effort to turn a troubled and financially strapped agency around and begin to reverse the steady decline in service reliability that has plagued the subway system over the past two years. Prior to arriving at NYC Transit, he was the CEO of the Toronto Transit Commission (TTC) from 2012-7. Upon his arrival there, he formulated a five-year plan to transform the focus and culture of that troubled agency, which had been severely and negatively impacted by a funding and political morass. Under his leadership, the TTC markedly improved to the point where it won the award "Transit System of the Year" in 2017 from APTA. the American Public Transportation Association. Prior to the TTC, he successfully headed the Sydney commuter rail system and London Transport. He faces a daunting challenge, restoring the subway system to a state of good repair, overseeing efforts to bring the system into the 21<sup>st</sup> Century in terms of signal, power, stations, and rolling stock, and lobbying the political scene to provide the necessary funding to achieve these goals.

#### R-211 Contract Awarded to Kawasaki

At its January meeting, the MTA Board awarded Kawasaki a contract to build the next generation of subway cars for NYCT, the R-211. The \$1.4 billion base order of 535 cars includes 440 standard "closed end" cars for NYCT, 75 similar cars for Staten Island Railway, and 20 demonstrator cars for NYCT featuring the "open gangway" design with no doors between cars linked by continuous passageways allowing riders to safely walk from one car to the next and increase passenger capacity to 1,785 passengers, 55 persons more than traditional subway car designs. The contract will also have options for up to 1,077 additional cars for a total value of nearly \$4 billion; many could be of the open gangway design if the two demonstrator sets perform as well as hoped. It is expected that the first R-211 cars will be delivered in July, 2020. One of the terms of the contract is a requirement to deliver the first cars 30 months from the award date. Another term of the contract will be the requirement for the new cars to meet even higher standards of reliability for critical components, especially door operator, propulsion, and braking systems, which are the primary causes of service delays and disruptions currently plaguing the system. The contract will also include penalty assessments if the cars are delivered late. Kawasaki will assemble all of the cars in the United States, at its manufacturing plants in Yonkers, New York and Lincoln, Nebraska. (Editor's Note by Ronald Yee: The actual manufacturer of the car bodies and trucks and sources of the components going into these cars have yet to be determined. Bombardier, the builder of the most recent order of cars, the R-179, was excluded from bidding on the R-211 due to poor performance that resulted in the cars being delivered two years late after many delays and failures during testing, which has forced NYCT to perform an unexpected rehabilitation of 1969-vintage R-42s and retain more of its 1965vintage R-32s in service longer than expected.)

#### New Entrance to Grand Central Subway Station Opened

New street access to the Grand Central station on the Lexington Avenue Line was opened on December 22, 2017. Two new street stairs located on the southeast corner of E. 42<sup>nd</sup> Street and Lexington Avenue, across the street from the Chrysler Building, provide access to a previously existing corridor underneath Lexington Avenue to the lower level arcade under the Chanin Building, which in turn leads to an existing fare control area on the southeast side of the station mezzanine. This is just one element of a major program of station capacity improvements to be built at Grand Central over the next few years, which will be the subject of a more detailed article planned for the March, 2018 *Bulletin*.

#### R-179 Order Modified

The MTA Capital Program Oversight Committee announced on January 22 that an agreement with Bombardier Transportation had been reached concerning the late delivery of the R-179 contract. As part of the agreement, an additional sixteen "B" cars will be manufactured to make additional ten-car trains to expand their usage on the (a) and (b), for an increase in the number of ten-car trains from four to twelve.

## MTA Board Delays Further Work On Enhanced Station Initiative

At its January 24 meeting, the MTA Board delayed a vote to move forward with two procurement actions that would have continued work at an additional 8 NYCT subway stations under the Enhanced Station Initiative (ESI). The delay was forced by NYCDOT Commissioner Polly Trottenberg, one of four mayoral appointees to the Board. The ESI has been criticized for expending funds on cosmetic amenities such as USB recharging ports and Wi-Fi at stations that in many cases are in adequate condition compared to numerous stations all around the city that are in much more dire need of rehabilitation. The ESI has also come under fire for being a distraction from the subway's daily operational issues, especially the rise in service delays. Behind the scenes, the action is yet another chapter in the ongoing feud between Governor Andrew Cuomo and Mayor Bill De Blasio over the priorities and funding of the MTA.

# by Jack May (Photographs by the author) (Continued from January, 2018 issue)

Today was getaway day, and after breakfast we packed up all of our belongings, cleaned the kitchen, put the key in the mailbox, and went on our way. Our apartment in Basel turned out to be an excellent way to avoid expensive room rates and costly breakfasts. We rode the first car to the Bahnhof and then the 9:31 Inter-City to Bern, accompanied by our luggage. Arriving at 10:27, we headed to our pension by riding a Route 9 car from the adjacent tram station to Victoriaplatz. Google Maps disappointed us (again), as we found that a portion of the street along which we were walking to our hotel was a stairway! Such is life and fortunately we were heading downhill, but two trips down the 38 steps with luggage were still demanding. Trolleybus Route 20 would have been a better choice for reaching the Marthahaus, and accordingly we used it for the remainder of our stay.

Because we left Basel later than planned I decided to stay in Bern rather than undertake part 2 of my interurban itinerary. After checking in, Clare and I visited the famous Bear Pit, just beyond the Swiss capital's beautiful medieval-like town center, and then she went off to visit museums while I rode the tramway. It was overcast, but the sky lightened at about 15:00, allowing for a few bright late afternoon photos. As I had mentioned before, Daylight Saving Time results in the sun rising late in the morning and fortunately not setting until after 19:00.

Since my most recent visit, a fleet of new 100 percent low-floor Siemens Combinos in various lengths have been purchased. They are supplemented by 12 modern Vevey-built 70-percent low-floor cars dating from 1989. Bern also adopted a deep red livery (darker than San Diego's), replacing its old khaki green and cream paint scheme (which still can be seen in lasi, Romania, where many of the old cars went). Most importantly, though, Bern extended some routes and converted a couple of trolleybus lines to rail operation (imagine that happening in Philadelphia).

With a population of about 140,000 (325,000 in the metropolitan area), Bern has 5 streetcar lines (see <a href="http://www.urbanrail.net/eu/ch/be/bern.htm">http://www.urbanrail.net/eu/ch/be/bern.htm</a>), which are operated under the name Bernmobil by the Stadische Verkehrsbetriebe Bern (SVB). The rails of this legacy tramway are predominantly laid in street pavement. All but one line is through-routed from one side of town to the other via the Bahnhof, the city's focal point. All except the 3 run right through the heart of the Altstadt, the old city, along a main street full of lovely (albeit expensive) shops. The beautiful pedestrianized Marktgasse is anchored on one end by the medieval Zytglogge, with its 15<sup>th</sup> Century astronomical clock (considered to be the symbol of Bern), and on the other by the 17<sup>th</sup> Century Kafigturm tower, which contains a picturesque arch

that straddles the eastbound tram track.

[I mention this not because I spent time photographing there (I did that on previous trips), but because I find it interesting to note that this busy section of track continues to be equipped with overhead wire — and I wonder now that wireless streetcar operation has come into vogue in many cities, whether Bern would be a good candidate for the new technology — which supposedly is fostered by the desire to eliminate overhead wires from detracting from the view of aesthetic landmark buildings and monuments. But perhaps the Swiss are sufficiently frugal to spend their money wisely — on more tram extensions. Converting trolleybus lines to tram operation would at least cut the overhead wire "pollution" in half; the Marktgasse is served by one trackless route as well as the trams.]

Even the tracks of the two brand new routes, 7 and 8, are laid predominantly in streets. As part of the Tram West Bern project to increase transit capacity, 4.2 miles of new route mileage was opened in 2010, replacing trolleybus operation in the western side of the city. I rode these lines first and then continued on the system's most recent extension (2012), Route 9 to the suburban Wankdorf SBB station, which runs through a busy shopping mall. With so much street track I could have imagined that I was riding a small town trolley network in the 1940s — if it were not for the low-floor cars and countdown clocks, which indeed make this a modern tramway.

I have not mentioned Route 6 yet. It was created by through-routing an interurban tramway line, the G (operated by steam power until 1910), with a branch of the urban streetcar system when the network was revised in connection with the inauguration of tram service on Routes 7 and 8. The high-floor cars used on this line are the system's oldest rolling stock, having been originally built in 1987, and appear to be another offshoot of Zurich's Tram 2000. They were renovated with the addition of low-floor center sections about 5 years ago. The interurban, which runs to the community of Worb, about 7 miles east of Bern, might now be better described as a suburban streetcar line. Before its integration into the network it ran into the city over the SVB from Eggholzi, where it joined the Saali line (now Route 8), running express and terminating on the far side of the Aare River just short of the Kirchenfeld Bridge. This meant passengers bound for the inner city either had to walk over the span or transfer to city trams. The crossing was originally built in 1883 (the same year as the Brooklyn Bridge), but after a century of use underwent rehabilitation. As a result the weight restrictions in place for many years were lifted and now the span is strong enough to

(Continued on page 17)

#### Switzerland in the Late Summer

(Continued from page 16)

carry an increased number of trams at any given time. This led the way to the inclusion of the G line into the urban tramway fabric. Now the 6, it continues to skip three of the four intermediate stops between Eggholzi and Helvetiaplatz.

All of the lines except G originally entered Bern over the tracks of SVB streetcar line 1, but in 1974 were rerouted onto a narrow grade-separated right-of-way (partly single-track) to an underground terminal inside the Bahnhof (I would have liked to have ridden the old line, but it was abandoned at the same time the RBS was rerouted). Although the interurban company turned over the G (6) line to the SVB for operation in 2010, as far as I know it still owns the cars and the right-of-way.

After riding back downtown from the end of Route 9 I

walked south across the Kirchenfeld bridge for some photos and then continued to Worb on Route 6. Since the sun was shining brightly now I stopped to take some additional pictures, and then after reaching Worb, walked across the street to ride the former W line (now the S7) back to Bern, thus completing a circle. I would have liked to have stopped over for photos at Worblaufen, the line's junction with the other RBS routes, but the shadows were now too long. We ate a nice dinner at a local neighborhood establishment.

(Here is a paraphrased excerpt from an August 19, 2015 news item from International Railway Journal. RBS, which operates a 34-mile-long meter-gauge network of suburban lines radiating from Bern, has invited bids for a fleet of 14 E.M.U. trains of 4 low-floor articulated cars each for S-Bahn line 7. The new rolling stock, to be operated on lines electrified at 1,250 volts d.c., must be capable of operating in trains of as many as three cars. They will replace 40-year old Mandarinli units.)



Welcome to the bear pit. Glad to see you. Come a little closer.



A Combino is shown running westbound on Marktgasse just past the Kafigturm. The eastbound track runs through the arch. The trams share this pedestrian street with trolleybuses.

(Continued on page 18)

#### **New Transfer Opens at The World Trade Center**

(Continued from page 14)

tion for commuters. Though this author witnessed limited usage and a lot of befuddled passengers on the

afternoon of its opening, it should be noted that whenever new transfers are added to the New York City subway system, commuters alter their patterns accordingly, so before long, this transfer should also prove its worth.

Subutay Musluoglu is a longtime ERA member and a recurring contributor to the **Bulletin**. He is a Manager with MTA Metro-North Railroad.

#### Switzerland in the Late Summer

(Continued from page 17)





Two views of Tram West Bern, where streetcars replaced trolleybuses in 2010. At left a short (5-section) Route 7 Combino is shown running eastward along Bottingenstrasse in the Bumpliz neighborhood. The view at right illustrates the longer Combino version operating west-bound along Freiburgstrasse at its junction with Bernstrasse, on a section of track near a highway interchange that is shared by both routes.

The remaining photos on this page and the first on the following page are equipment views of the three general types of rolling stock running on the Bern tramway. All were photographed near the Hirschengraben stop.



653 is one of 36 single-ended Siemens Combino units built between 2002 and 2010. They were fabricated in both 5- and 7-section versions, but with some of the shorter ones having been extended, only 7 of the units still have the lesser capacity.



737 is not a Boeing, but rather one of 12 single-ended 70-percent low-floor units built for Bern in 1990 by a consortium of Vevey, Duewag, and Brown-Boveri.

(Continued on page 19)

#### **Tech Talk**

(Continued from page 16)

service over 11 weekends from June 10-September 18, 2017. The new master control panel, as well as the Maintainer's indication panels in the relay rooms, were built by Mauell. Since Siemens was the prime contractor here, though, the signals are Safetran Type RT and the switch machines are US&S Style M-3. Part of the work here included converting the single crossover between Tracks D1 and D3 at the south end of the 75<sup>th</sup> Avenue station to a double, or diamond, crossover for increased

#### flexibility.

As I write this, the work at Union Turnpike is ongoing. The work is scheduled for nine weekends, from November 4, 2017-February 19, 2018. As of December 14, 2017, only the new signals on southbound Tracks D1 and D3 in the Union Turnpike station are in service. During this transition time, two Tower Operators are needed, one in the old tower at the north end of the northbound platform and one up in the new relay room on the mezzanine.

Jeff may be contacted via e-mail at jefferlitz@gmail.com.

#### Switzerland in the Late Summer

(Continued from page 18)



87 is one of 9 Tram 2000 cars built by Schindler in 1987 for the RBS interurban to Worb. A low-floor section (painted red) was added to these double-ended units by Stadler in 2010. Note that there are no doors in the older center section.





Two views of Route 6 with its unique double-ended equipment. An outbound Bern city car is about to pass the former interurban unit on the Kirchenfeld bridge in the left photo. At right, the back end of 86 is shown near the Gumlingen Hofgut stop east of Bern. Most of the 6-mile line from Bern to Worb has become suburban.

(Continued next issue)

#### **Commuter and Transit Notes**

(Continued from page 16)

runs from Huazhong University of Science & Technology to Fozuling, with 17 stops. A southern five-stop extension is planned. The 12.2-mile east-west line runs from Tangxunhu City Railway Station to Optics Valley Botanical Garden, serving 25 stops.

Service runs between 6:30 AM and 10:30 PM and utilizes a fleet of 26 steel-bodied low-floor light rail vehicles. The five-section LRVs are 114 feet long with capacity for 360 passengers and a maximum speed of 43 miles per hour. The vehicles are equipped with wi-fi and LED lighting. The fleet uses supercapacitors, which are recharged at stops, for catenary-free operation.

The first six LRVs were built by CRRC Changchun, with the remaining 20 assembled in Wuhan by Wuhan

Zhongchang Ruian Industrial Company.

Ridership on the two-line network is forecast at 10,000 passengers a day. (*Metro Report International*, January 19)

#### INCHEON, SOUTH KOREA

The AREX airport rail link was extended by 3.6 miles on January 13 to serve Incheon International Airport Terminal 2. Terminal 2 opened on January 18 ahead of the 2018 Winter Olympic Games, which will take place in PyeongChang in February.

AREX is now almost 40 miles long and connects Incheon International Airport with the main railway station in Seoul via Gimpo International Airport.

Service is operated with a fleet of six six-car Class 1000 electric multiple units for non-stop service and 22 six-car Class 2000 EMUs for stopping service. (*Metro Report International*, January 18)

## **Around New York's Transit System**

#### Second Free Transfer Vetoed

New York Governor Andrew Cuomo vetoed a bill that would have permitted a second free subway transfer to MetroCard users. The bill, submitted by State Assemblyman Jeffrey Dinowitz (D-Bronx) was intended to assist riders who are forced to utilize alternate means or routings and pay an additional fare to travel around unplanned service disruptions that have plagued the subway system during the past year. While rejecting this measure out of concern for an overall fare revenue loss due to an abuse of a subway-to-subway transfer, Governor Cuomo has ordered MTA to provide staff and the ability to issue manual transfer tickets ("block transfers") to such affected riders whenever there is a significant service disruption. He also signed legislation requiring MTA to maintain its current two-year time window during which commuters can transfer unused value from expired MetroCards to new MetroCards through 2022.

Here is a brief overview of current MetroCard transfer

- All transfers are good for two hours. •EXCEPTION: A three-hour transfer window applies from transfers from any subway station to the Q22, Q113, and Q114 routes of MTA Bus, and the N31, N32, and N33 routes of the Nassau Inter-County Express
- MetroCard transfers are good for one connecting trip on any other local or express bus service, New York City subway, or Westchester Bee-Line buses (restrictions apply). •EXCEPTIONS: Two transfers are available with MetroCard for the following transfers. The transfers must be made in order or in reverse order, and the 2-hour rule applies
- 1. Between bus routes crossing the Staten Island Railway south of the Staten Island Expressway, the Staten Island Railway through St. George Ferry Terminal, and

then any MTA local bus or subway service below Chambers Street in lower Manhattan

- 2. Between bus routes B61 and B62 and any bus route connecting with either B61 or B62
- 3. Between bus routes B70 and S53 and any bus route connecting with S53
- 4. Between bus routes Q22 and Q35, and **26** trains at the Flatbush Avenue-Brooklyn College station.
- 5. Between bus routes Q22, Q52 Limited, or Q53 Select Bus Service, and (A) at the Rockaway Boulevard station
- Transfers with coins are good for use on one connecting local bus route
- Peak travel periods for express buses are 6-10 AM and 3-7 PM Monday through Friday when buses are on a weekday schedule

#### **Countdown Clock Activation Completed**

Next train arrival "countdown clocks" were activated at all 22 a stations on December 31, 2017, completing NYCT's plans for equipping all if its 472 stations with real-time train status displays by the end of 2017.

#### **Lead Paint Survey**

Governor Andrew Cuomo directed MTA to survey all above-ground facilities for lead paint and to determine what degree of abatement measures would be required. (Editor's Note by Ronald Yee: This is in response to community concerns raised by City Councilmembers regarding lead paint chips and dust falling out of the elevated structures around the city, notably under the Flushing Line elevated structure, which has an extreme case of peeling paint and is currently slated for repainting in the 2019-20 timeframe. This elevated structure was among the last to be simply repainted over 10 years ago without the benefit of a full scrape-down and stripping to bare metal with full lead abatement and con-

(Continued on page 15)

#### SUBDIVISION "B" CAR ASSIGNMENTS

**CARS REQUIRED DECEMBER 16, 2017** 

LINE	AM RUSH	PM RUSH	LINE	AM RUSH	PM RUSH
A	60 R-32, 256 R-46	60 R-32, 264 R-46, 8 R-68A	0	168 R-143, 24 R-160	168 R-143, 24 R-160
<b>B</b>	40 R-68, 160 R-68A	32 R-68, 152 R-68A	<b>M</b> **	168 R-160	160 R-160
<b>©</b> *	16 R-32, 40 R-46, 88 R-160	16 R-32, 32 R-46, 88 R-160	M Shuttle***	12 R-42	12 R-42
0	232 R-68	216 R-68	<b>0</b> / <b>0</b>	24 R-68, 300 R-160	24 R-68, 300 R-160
<b>3</b>	260 R-160	260 R-160	0	210 R-160	8 R-68, 210 R-160
G	56 R-46, 370 R-160	56 R-46, 370 R-160	B	240 R-46	240 R-46
0	52 R-68	52 R-68	(Rockaway)	12 R-46	12 R-46
0/2#	88 R-32, 16 R-42, 56 R-160	88 R-32, 16 R-42, 56 R-160	(Franklin)	4 R-68	4 R-68

<sup>\*</sup>R-46 trains are 600 feet long; R-32 and R-160 trains are 480 feet long \*\*Service operates between Forest Hills/71<sup>st</sup> Avenue and Broadway Junction during Phase II of the Myrtle Viaduct reconstruction project

<sup>\*\*\*</sup>Service operates between Metropolitan Avenue and Wyckoff Avenue during Phase II of the Myrtle Viaduct reconstruction project

<sup>\*</sup>As of January 12, 2018: AM and PM-72 R-32, 16 R-42, 56 R-160, 16 R-179