

NEW YORK
DIVISION

BULLETIN

ELECTRIC
RAILROADERS'
ASSOCIATION

VOLUME 5, NUMBER 6

25¢

DECEMBER 1962

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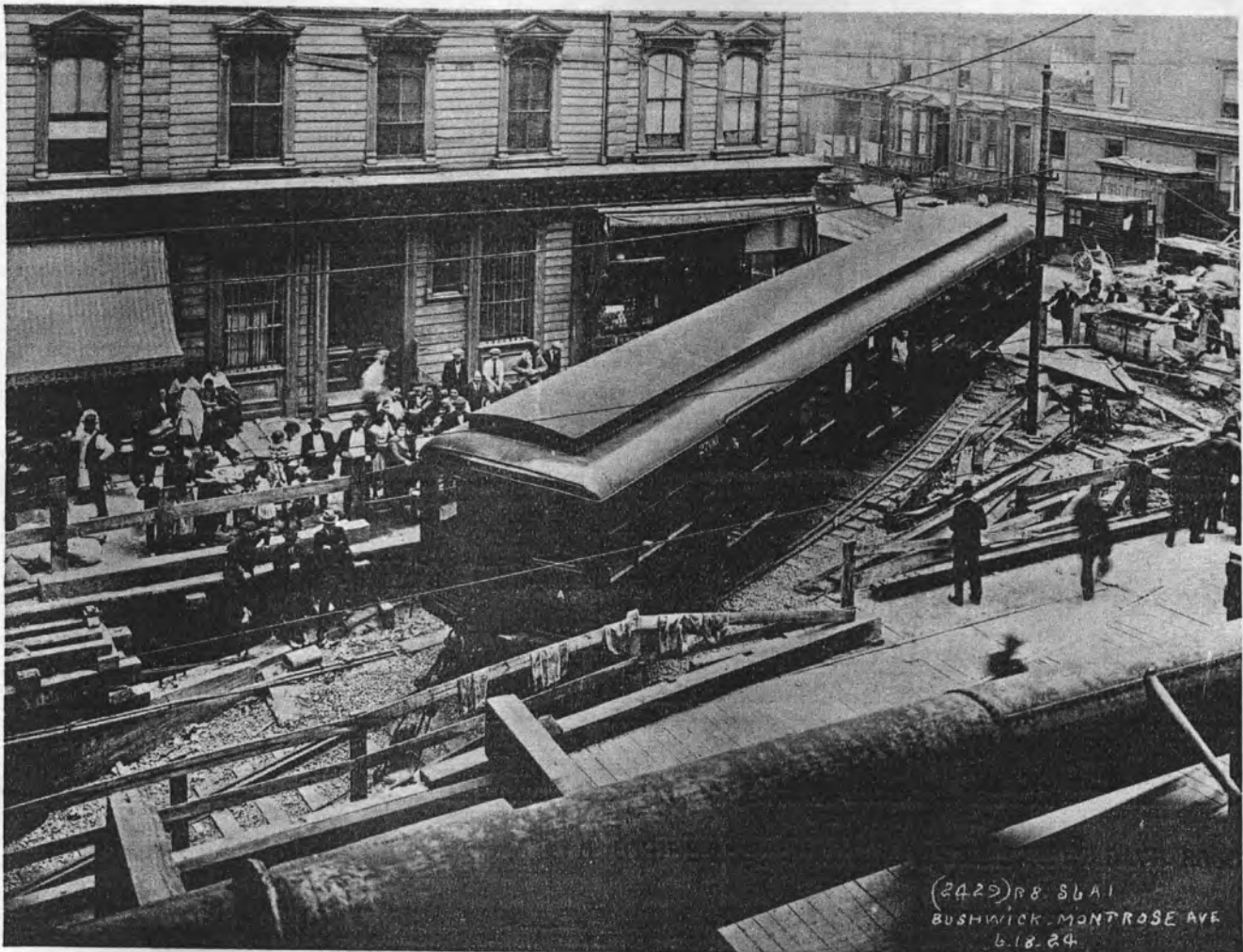


Photo showing BMT A-Type car #2700 being lowered into the 14th St.-
Eastern Line subway at Montrose Ave. & Bushwick Ave. on June 18,
1924. See story in feature article.

14TH ST. - SUBWAY

By DAVID ROGOFF

(Dual Contract Section)

The 14th St.- Canarsie Line, officially the "14th St.-Eastern District Line" first appears in the records on May 12, 1905, as Construction Route #8 in Manhattan and as part of Construction Route #10 in Brooklyn. However, as then proposed, Construction Route #8 was only a crosstown route running from Marginal St. (then at the Hudson River) to the East River. The route was 2 track from Marginal St. to University Place (Secs. A & O) and 4 track from there to the East River (Sec. B). The route had 2 two track spurs. Sec. D. went south on Greenwich St., Washington St., and Liberty St., and thence east to Maiden Lane and William St. (one track each of the latter 2 streets connecting to the Construction Route 9E-1 to Brooklyn). Sec. E went south on University Pl. and Canal St. to and south on Centre St. (connecting to Construction Route #9). The latter route connected to outer ("local") tracks of the 4 tracks on East & West 14th St. The writer has been unable to trace Sec. C.

Construction Route #10, Sec. O, adopted May 25, 1905, was 4 track and ran on North 7th St., Metropolitan Ave., to Union Ave. Sec. A. continued under Metropolitan Ave. to Bushwick Ave., then south on Bushwick Ave. to Lafayette Ave. (continuing west into Construction Route #9G).

Construction Route #8 as above, was voided and was remodified on May 15, 1908. Construction Route #10 was voided and revalidated in 1911.

After many delays, the route was divided into several construction sections and built under the Dual Contracts (Contract IV) as follows:

Sec. 1- 250 feet west of the west side of the Ave. of the Americas (then 6th Ave. to Irving Pl. A 2 track subway under East & West 14th Sts. in Manhattan. Construction was as Sec. 2 (see below) except for rock tunneling (2 parallel rock tunnels) from a point 140 feet west of 5th Ave. to the west side of University Pl. This section passed under the Hudson & Manhattan Railroad at 6th Ave., under the BMT Broadway Subway at Broadway, and under the IRT Lexington Ave. Subway at 4th Ave. It also underpinned the IRT 6th Ave. El. This section was 2,889 feet long.

The sub-contractor was Booth & Flinn, Ltd. Work began in the fall of 1916. Operation began on July 14, 1928. Construction was delayed by World War I.

A proposed change was to construct the section to the east building line of 6th Ave. for a connection to a proposed "6th Av. Line." This proposal was killed and the section was built to west of the west side of 6th Ave. as originally intended.

Stations built were 6th Ave. and Union Square (Broadway), both single platform island stations. A

Sec. 2- Irving Pl. to Ave. B. A 2 track subway under E. 14th St. in Manhattan. Construction was by cut and fill using steel bents and concrete jack arches. Stations built were 3rd Ave. and 1st Ave., both outside platform stations. This section was 3,289 feet long.

The sub-contractor was the Degnon Contracting Co. who went bankrupt. The contract was then reawarded to Patrick McGovern in Sept. 1922. Work began on Sept. 21, 1920 and was at an unknown date. Operation began with Sec. 1. This section was delayed by the bankruptcy of the original sub-contractor. There is an unused diamond crossover space at Ave. A. and an operating diamond crossover at 1st Ave. Both stations have outside platforms only. The entrances to both stations are at the west end. Both stations, however, have structural provisions for entrances at the east end of each platform. This provision consists solely of 2 omitted wall girders at the east end of each platform to allow space for an opening into small mezzanine alongside, but not over the platform. The missing wall girders are concealed by station tile. The east end of each station is too shallow to permit a mezzanine to be built above the tracks. An entrance to the east end of 1st Ave. station (at Ave. A.) is much needed, has been often proposed and has been just as often turned down. This section at its construction underpinned both the 2nd and 3rd Ave. Els. (IRT).

Sec. 3- Avenue B to Bedford Ave. Two single track tunnels under E. 14th St. in Manhattan, the East River, the Brooklyn Eastern District Terminal (railroad) yard, from Manhattan to Brooklyn. Construction was by compressed air shield tunneling using cast iron tunnel segments lined with concrete under the river and heavy concrete along on other sections. No stations were built on this section. This section was 1.34 miles long.

The sub-contractor was Booth & Flinn. Work began in 1916 but was delayed by the war. The tunnels were finished on July 12, 1922. Operation began with Sec. 1. The ventilation and emergency shaft on the Manhattan end is concealed under E. 14th St. at the east side of Ave. D. The ventilation and emergency shaft on the Brooklyn end is at the waters edge in the B.E.D.T. railroad yard. The maximum tunnel grade is 3.2%. The tunnels are approximately 30 feet between centers (about 13 feet of rock between outside walls of tunnels). The inside of the tunnels are 15 feet wide, the outside is 17'2" to 18'0".

Sec. 4- Bedford Ave. to beyond Manhattan Ave. A 2 track subway under N. 7th St. and Metropolitan Ave. in Brooklyn's Williamsburg section. Construction was as in Sec. 2. Stations built were Bedford Ave. (single island) and Lorimer St. (outside platforms). This section was 3,591 feet long.

The sub-contractor was Mason & Hanger- MacArthur Bros, Inc. Work began in the fall of 1916 and was finished on Aug. 25, 1921. Operation began with Sec. 1.

This section has an operating diamond crossover at Roebling St. The section was built with structural provisions for future subway crossings above the section by the proposed Crosstown Line (Route #55) at Bedford Ave. and at Roebling St. The provisions for the crosstown line crossings at both these streets consisted of reinforced roofs and adequate clearance space, but no actual structure. There was also structural provisions of the same sort between Bedford Ave. station and a station to be built on the proposed crosstown line. The radius of the curve from N.7th St. into Metropolitan Ave. is 312 feet. ^B

Sec 5- Manhattan Ave. to Meserole St. A 2 track subway under Metropolitan Ave., private property and Bushwick Ave. in the Williamsburg district of Brooklyn. Construction was as in Sec. 2. Stations built were Graham Ave. and Grand St. (Both outside platform stations). This section was 0.69 miles long.

The sub-contractor was Mason & Hanger- MacArthur Bros., Inc. Work began in the fall of 1916 and was finished on March 25, 1921. Operation began with section 1. This section was delayed by World War I. Space was provided in the original construction for a diamond crossover east of Manhattan Ave., but this space was never used. Instead a crossover space between Stagg and Ten Eyck Sts. was built after construction ~~was~~ by David Levy (see below). This added work began in 1923 and was finished on March 16, 1924. A crossover was installed and used at this point. It was probably removed after the line was extended beyond Montrose Ave. station in 1928. The radius of the curve from Metropolitan Ave. into Bushwick Ave. was 253 feet.

As shown in the published contract drawings, the outbound end of this section was to be centered under Bushwick Ave. This was to allow for Sec. 6 to be built centered also under Bushwick Ave. at its inbound end, as specified in Contract IV of the Dual Contracts and Construction Route #41. However in 1916, Route #41 was replaced by Construction Route #59, with an entirely different location of Sec. 6 (see below). As Route #59 included a turn off from Bushwick Ave. at Meserole St., instead of Between Montrose and Johnson Aves., it was therefore necessary to provide the beginning of a curve at the outbound (south) end of Sec. 5, where straight centered construction had been originally called for, in the Contract Drawings. As Sec. 5 was already in construction when Route #59 was adopted, the changes were easily made but were never published. The changes actually consisted of about 77 feet at the south (outbound) end of Sec. 5, where the subway left the center line of Bushwick Ave. and began to swing to the east.

However, when Sec. 6-A-1 was actually built, Route #59 was dropped in favor of a route similar to that of Route #41 (see below) and the changes wrought to Sec. 5 had to be undone. A piece of extra work was written into the plans of Sec. 6-A-1, which included the rebuilding of 77 1/2 feet of ~~the outbound~~ (south) end of Sec. 5 to more or less its original planned location centered under Bushwick Ave. The trackway and duct benches were straightened, but an offset east wall is still visible just north of Montrose Ave. station. This is probably the shortest length of abandoned subway tunnel in the subway system.

Sec. 6-A-1- Meserole Ave. to just south of Boerum St. A 2 track subway under Bushwick Ave. in the Williamsburg district of Brooklyn. Construction was as in Sec. 2. Stations built were Montrose Ave. (outside platforms). This section was 0.13 miles long.

The sub-contractor was Frederick L. Cranford, Inc. Work began in 1923 and was finished on Sept. 27, 1924. Operation began with Sec. 1.

Montrose Ave. station was built with a temporary ramp to the street surface from the present Manhattan bound track (see "Montrose Ave.- LIRR Connection" below). From 1924 to 1928, the trains operated to and from the present Brooklyn bound platform. A small inspection pit was constructed beyond the end of the station on the present Brooklyn bound track.

THE MONTROSE AVE. STA. - LIRR CONNECTION

The line as then constructed was ready for operation, but was isolated from the rest of the BMT. Seven years had passed since construction began and questions were being asked. It seems that the delay in deciding the route of the extension from Montrose Ave. station to East New York had prevented a track linkage from being made to the rest of the BMT. However some sort of operation became a political necessity and a makeshift was devised. It consisted of bringing cars into the line via a temporary single track connection on Montrose Ave. between the LIRR's Bushwick Terminal Yard and the Montrose Ave. station. The track was not electrified.

Montrose Ave. station was therefore built with a section of its roof (at the north end of the station) omitted above the north (Manhattan) bound track. A temporary ramp was built in the station from this track southward to street level just north of Montrose Ave. The ramp consisted of wooden planking over 12 horizontal steel "I" beams riveted to webs of the steel columns of the station bents. The ramp grade was 16.9%. After the single track reached the surface just north of Montrose Ave, it swung east onto Montrose Ave. on a very wide curve and proceeded across Bushwick Place into the LIRR yard over a small wooden trestle from street to yard level. In the yard the temporary track connected to a switch track from the LIRR (see diagram).

It was decided to put 20 new \$30,000 BMT steel "A" type subway cars into service on the line. The first car, #2700, was brought into the line on June 18, 1924, along with an unidentified second car. The cars had been delivered to the 39th St. Shops of the BMT in South Brooklyn some time earlier. To get the cars from the 39th St. Yard to the new subway, the following route was used.

Over the electrified lines of the BMT (present South Brooklyn Railroad) to Parkville Junction (just south of Foster Ave. on McDonald Ave.) into the LIRR (present Bay Ridge Division), thence via an unidentified route over the LIRR to the Bushwick Terminal Yard, hauled by a steam switching engine. Each car was then hauled separately by a "hugh motor truck" to the top of the incline. Here each of the 2 cars were hooked to cable and lowered separately by block and tackle into the tunnel. The temporary ramp grade was 16.9% which was too high for anything but a mountain railway.

On the following Sunday (to avoid interference with LIRR freight traffic), the other 18 cars were brought into the line. However, by this time, the special move was mastered and the cars were brought into the line as 2 groups of 9 cars each.

In order to build the temporary ramp, it was necessary to relocate the then existing 2 trolley tracks on Bushwick Ave., between Montrose Ave. and Meserole St., from the center to the west side of the street. The ramp track was not connected to any trolley track. In order to get onto Montrose Ave. at a curve which the long subway cars could negotiate, it was necessary to build the track over what had been the sidewalk at the northeast corner of Bushwick and Montrose Aves. The temporary track and ramp probably lasted until 1928, when the line was extended to East New York (see below).

Traces of the ramp and temporary track are still visible. The rivet holes on the center roof columns (used for the horizontal "I" beams) are still visible on the column webs. The part of the sidewalk used by the curve into Montrose Ave. has, of course, been since restored, but the track location can be traced by division of the concrete in the sidewalk.

The ramp and the temporary track was built by the T. H. Reynolds Co. and was completed on April 1, 1924. It was built under the supervision of the N. Y. State Transit Commission at a cost of \$1,500,000.

The delay in choosing the route beyond Sec. 6-A-1 was due at least in part to the then mayor of New York, John F. Hylan (1868-1936), who was mayor from 1918 to 1925. Hylan, in his youth had been discharged from a job as a locomotive engineer by a predecessor of the BMT (the Kings County Elevated Railroad). (see ERA Member Vincent Seyfried's "B.R.T. Trolley Lines in Queens County" - Chapter XV - on sale through the ERA).

NOTES:

(TO BE CONTINUED)

10/31/62 DR

A- Sec. 1 was later underpinned by the IND 6th Ave. Subway (then 2 "local" tracks). At the time of construction of the IND line, structural provision was provided for 2 future free underground passageways between the 2 stations (6th Ave.-BMT and 14th St. IND), but for some reason the passageways were never completed (see "N. Y. Division Bulletin"- Jan. 1961- "6th Ave. Subway History"). However, as of this date, the passageways are scheduled to be completed and opened at the same time as the 2 express tracks of the 6th Ave. Subway now under construction. The 2 express tracks of the IND line will pass under the 14th St.-Canarsie Line. At present there is no free transfer, indoors or outdoors, between the IND and BMT at this point.

There is an unused diamond crossover space just east of the 6th Ave. station. This space was originally used for the crossovers at the Manhattan end of the line, before the line was extended to 8th Ave. (see below). The crossover is now gone and the space is sealed and used for utilities.

There is a group of free underground transfer passageways between the Union Sq. station and both the 14th St. station of the BMT Broadway Subway and the 14th St. station of the IRT Lexington Ave. Subway.

B- The 14th St.-Canarsie Line is underpinned at Union Ave. by the IND Crosstown Subway (2 track). A free underground transfer passageway is provided between the Lorimer St. station of the 14th St.-Canarsie Line and the Metropolitan Ave. station of the IND Crosstown Line.

(Track Diagrams Will be in Next Installment)

CRANE FALLS OFF EL

On Nov. 28th, Crane #20158 (ex-EMT 3055) fell from the IND el at West 6th St. and Sheepshead Bay Rd. (between W. 8th St. and Van Sicklen stations of the "D" Culver Line) killing 3 men and halting normal service for 20 hours between Ave. X and Coney Island. The 1914 crane was replacing ties and rails ("panels") when it fell to the ground between the two tracks (separated at this point) and the boom fell over the northbound track breaking a wood utility pole. Two men in the cab were trapped and died despite efforts of Army and Navy derricks to rescue them. A man on a flat car coupled to the crane was thrown to the ground when the flat was turned on its side but remained on the el. He died at the hospital. The crane was on the southbound track where the el leaves the street and operates over prw and a section of track had been removed and had to be replaced before service was restored about 7 AM the next day. During the first few hours of the tie-up, "D" trains operated thru Coney Island Yards with passengers. Using the ramp south of Avenue X, they looped around the main lay-up area, then took the ramp to West End Line and to Stillwell Ave. The operation required no reversing moves, but a pilot was assigned to each train. Later, trains terminated at Ave. X (switching back at the foot of the ramp and transfers issued to the Sea Beach (about $\frac{1}{4}$ mile west).

THIRD RAIL ON THE MYRTLE "L" will eventually be shifted to subway position. Before this can be done, the shoes on the Q-Type cars will be changed to the type used on the subway cars. The spans at Cumberland St., Vanderbilt Ave., Washington Ave. and Sumner Ave. don't allow enough clearance for the subway type third rail or for the subway type shoe. A wooden dummy rail, covered with a thin piece of metal will be placed at these locations and will be higher and closer to the running rail than the contact rail in "L" position so as to raise the contact shoe. If it still doesn't clear the girder ribs, a small piece will be cut out of the rib.

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PUBLICATIONS COMMITTEE & JULY BULLETIN

The members of the Publications Committee, after examining the question in technical detail, find that the "New York Div. Bulletin #4, July 1962," published by Paul Matus cannot be considered official for the following reasons:

1. Only the Publications Committee is authorized to publish material purporting to be Bulletins of the New York Division.

2. The above rule cannot be circumvented or superseded by any statement made by any member of the committee without formal authorization from the committee to make such a statement.

3. Regardless of the impression received by anyone that he was authorized to publish for the Publications Committee--which was evidently the unfortunate misunderstanding that led to this confused situation--there was no such authorization. Such authorization may be made only by an official statement of a committee as a whole when a non-member of said committee is involved in any activity normally reserved to that committee.

The members of the Publications Committee realize the confusion that led to the publication of the Bulletin by Paul Matus labeled July Edition of N. Y. Div. Bulletin. We fully appreciate the efforts of Mr. Matus, and would like to make use of his efforts in official capacity in the future. We are grateful for his intentions, which we fully believe were both honorable and selfless; but in view...(of 1,2 & 3 above), it regretfully, cannot be considered an official edition of the BULLETIN, however meritorious its content may be.

WATER MAIN BREAK DISRUPTS IND SUBWAY SERVICE & PATH

A water main break at 18th St. & 6th Ave. on the morning of Dec. 7th, sent water into the tunnels being dug for express tracks on the IND 6th Ave. Subway undermining both the local tracks and the PATH (Hudson Tubes) tracks. PATH halted tube service between New Jersey and 33rd St. and increased the service to Hudson Terminal. All IND 6th Ave. service between W. 4th St. and 34th St. was suspended causing an emergency revamping of IND service. For the duration of the emergency, the following was the lineup of the IND:

- A, E, GG and HH services were unaffected and operated normally.
- AA 8th Ave. Local: 168th St.-Wash. Hts. to Hudson Terminal. Route was not changed but operated in RUSH-HOURS ONLY instead of NON-RUSH-HOURS only.
- BB 6th Ave. Local: 168th St.-Wash Hts. to 6th Ave.-34th St. Route was not changed but operated NON-RUSH-HOURS ONLY instead of only in RUSH-HOURS.
- C Exp.: Concourse-Bedford Park to 34th St.-6th Ave. in RUSH-HOURS. Operated express Tremont Ave. to 59th St. southbound in AM and northbound in PM. Exp. 145th St. to 59th St. in opposite direction. White-White Markers.
- CC Discontinued for the emergency.
- D "6th Ave. Exp." operated during NON-RUSH-HOURS from 205th St. via Concourse, usual route to 59th St., then switching to local tracks north of 59th St., and via 8th Ave. local tracks to West 4th St. then via Houston St. and usual route to Church Ave. (Yellow-White Markers) or Coney Island (Green-Yellow).
- DD "6th Ave. Local" operated during RUSH-HOURS from 205th St. same route as "D" but making local stops. (Operated express tracks north of Fordham Rd.) Used same marker lights as "D"-Green-Yellow and Yellow-White.
- F 6th Ave. Exp.: 179th St.-Jamaica to 34th St.-6th Ave. at all hours. Red-Red.

Several pages would be needed for a complete story, however, certain comments must be included. --- It is the first time the "C" has operated as a regular line since the "E" was extended via Fulton St., Brooklyn. It is the first time there has been a "DD" Local.

Because of the layout of the 34th St.-6th Ave. trackage, it is possible to terminate "C" and "F" trains on all four tracks. In fact, your reporter was aboard a "C" train that pulled out on track B-1 (Southbound Lcl) and crossed to track B-4 (Northbound Exp) at 42nd St. at the same time an "F" train left from track B-3 (Southbound Exp) and crossed to track B-2 (Northbound Lcl) at 42nd St.

Because of poor layout at West 4th Street, the "D" trains had to operate on local tracks north of West 4th Street (to 59th Street). Passengers going southbound from 59th Street were confused by the train route signs: the "C 8th Ave. Exp." operated on 6th Ave., while the "D 6th Ave. Exp." operated via 8th Ave. on the local tracks. It was expected that the Emergency service would last about one week but latest word expects it to last over two weeks.

EXPRESS PLATFORM OPENS - 59TH STREET-LEXINGTON AVE. IRT

On Nov. 15th, about 11:40 AM, the new low level express platform of the IRT East Side Subway at 59th St. was formally opened. A train of new red cars left the station and operated to Bowling Green. An elderly rider commented: "I see they brought back the old Red Mikes." This was a nickname for the red Staten Island trolleys. Red Mike was also a nickname for transit-hating Mayor Hylan. Conversion of the station to an express station was decided because it is the fourth busiest station on the Lexington Ave. Subway, and a transfer point to the BMT. The three busier stations are: Grand Central, 14th St. and Fulton St. There are four new escalators (all up): one from the south end of each express platform to the local platform above and another to each local platform from the mezzanine which is above the north end of the new express platforms (but below the BMT tracks).

SNOW SCHEDULES AT NIGHT ON THE BMT call for a 10-minute headway on the entire Myrtle Ave. and Broadway-Jamaica lines. Sea Beach trains will leave Coney Isl. on a 10-minute headway with alternate trains to 36th St. only. On the West End, there will be a 10-min. Hdy. with trains alternating between 36th Street and Chambers Street.

FIRST R-33's (8806-9345) IN SERVICE; IRT CAR NOTES

The first of the IRT R-33's went into service about Nov. 15th and are now running on the IRT Broadway Local. Except for a minor change in the couplers, they are identical with the red R-29's. The four R-29's with experimental trucks have not yet been delivered but all others are in service. The R-33 order (St. Louis Car) of 540 IRT cars is the largest number of cars ever ordered for the New York Subways. The R-36 order of 424 IRT cars will be the first cars purchased by NYCTA's own funds (proceeds from a special bond issue) and will be numbered 9346-9769.

Forty IRT cars (R-17 thru R-28) are operating as trailers, identified with an "X" like the IND trailers. At least 3 R-26/28's have been seen without a mate (7751, 7827 and 7957), the #2 (Blind) end coupled to an R-17. These are odd-numbered, therefore compressor cars. Even-numbered cars in the single-end or "married-pair" group (7750 and up) have motor-generator and battery sets. The red cars (R-29 & R-33's) have drawbars at the #2 end, and not easy to separate and operate with other "mates."

TEN CAR TRAINS ON FLUSHING LINE

On Nov. 1st, the IRT started use of 10-car trains on the Flushing Line from 5:15 to 9:54 AM and 2:15 to 7:50 PM, Monday thru Friday. At this writing, forty of the 6500-6549 R-17's are assigned to Flushing and are generally operated by themselves but sometimes are mixed with R-15's and have also been seen in trains with R-14's. Train indicator brackets have been installed as well as roll signs originally made for the R-17's with only Flushing Line destinations. The loud speakers are not used. Since the track extensions in Corona Yard are not yet finished, trains are laid-up, in off-hours, almost as far west as Junction Blvd. (on the center track). Car 6549 was washed and wrapped in cellophane with a big red ribbon to signal the start of 10-car service. Only one conductor per 10-car train is used, the first time on the IRT.

BMT CARS REBUILT, RENUMBERINGS, OTHER CAR NOTES

The rebuilding of almost 400 BMT 2000-series cars was completed about a year ago but the BULLETIN never listed the rebuilt cars. All the cars that are now numbered between 2400 and 2799 were rebuilt. This includes two cars of other series that were renumbered into this group but, of course, excludes certain cars that were renumbered in other series and cars that were in accidents and scrapped. The rebuilding consisted of new wiring and electrical parts, removal of unused cabs, reduction in the number of seats and interior speckled green paint. In the case of the low BX's, the 4000-series trailer car was removed, scrapped and replaced with a 2600-series motor car. These number as follows: 2400-2615-2401 etc. thru 2430-2630-2431 then 2432-2632-2433 etc. thru 2456-2649-2467. These are now "B-Types."

The higher 2490's were coupled into two-car units designated "BT" and have no door control buttons for the conductor's position: They are numbered 2468-2469 etc. thru 2498-2499.

We repeat renumbering of certain BMT cars:

| | | | |
|--------------|---------------|--------------|--------------|
| 2472 ex 2771 | 20178 ex 2500 | ex 2006 | 2753 ex 2472 |
| 2473 ex 2753 | | 2576 ex 2351 | 2755 ex 2473 |
| | 20179 ex 2714 | | 2771 ex 2755 |
| | 20180 ex 2741 | | 2791 ex 2189 |

The following cars were wrecked Nov. 21, 1959 at the portal of the Sea Beach Line and later scrapped: 2631, 2768-9-70, 2866-7-8.

A number of BMT R-27/30's have been seen running around with other than their lawful mates. Scandal on the BMT!

Incidentally, recently scrapped BMT cars (and some IRT) are piled two and three cars high between the Sea Beach and West End lines where the West End leaves the el before Coney Island.

IND R-10 #3099 has been painted bright red. Many R-10's have headlights.
 This month's offset cover contributed by Dave Rogoff, Henry Raudenbush and Doug Grotjahn. Last month's offset was contributed by Hugh A. Dunne and Art Lonto.

MERRY CHRISTMAS

HAPPY NEW YEAR