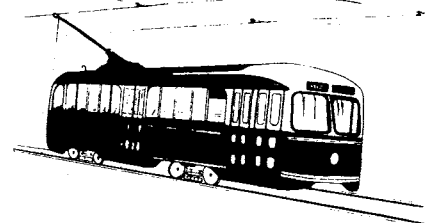


New York Division BULLETIN



New York Div., E.R.A.

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APRIL 1969

IN THIS ISSUE:- HISTORY OF NASSAU ST. BMT SUBWAY by David Rogoff - P.3

FIRST MODIFIED (STRAIGHT END) R-40-M's IN SERVICE

The first R-40-M's were officially put in service on the "F" on March 6, although they were reportedly seen around Feb. 20. At first run in solid trains, they are usually mixed with slant end R-40's. Contrary to earlier reports, the side ribbing below the windows of the R-40M's (4250-4349) is exactly as on the slant end R-40's although the wide blue stripe makes it appear different. The blue seems to be the same as the R-32 doors, lighter than the R-40 indented area blue stripe. There is also a lighter blue vertical stripe near the end of each unit. This contains the "M" seal with the word "TRANSIT" below the "M". The "EXP" and "LOCAL" signs and pantograph gates have been eliminated and the route letter is somewhat smaller. The front letter and motorman's window will be enlarged slightly on the last 14 cars (4336-4349) as well as on the R-42's, the first of which were delivered in April. Unfortunately, the seating capacity is only 44 and very uncomfortable. On April 7, one R-40-M train started service on the "N"-Sea Beach Exp.

Certain R-40's have been assigned to 8-car groups, to be kept together, used only in rush-hours, with any 2 other R-40's added:
#1 4258-9, 4268-9, 4276-7, 4278-9 #2 4506-7, 4274-5, 4282-3, 4284-5
#3 4254-5, 4272-3, 4286-7, 4288-9

(See page 8 for ROLL SIGN lists for E-F and EE-GG-N series R-40's)

SERVICE DISRUPTED BY SNOWSTORM

A heavy snowstorm on Sun. Feb. 9, the worst since 1961, knocked out service on several open lines including the Brighton, West End, Sea Beach, Franklin, Canarsie, Rockaway, White Plains-Dyre and Flushing. The "D" from the Concourse cut back at Prospect Park until Monday night when local service to C.I. resumed. The "QJ" ran only to Broad St. until Tues. PM rush when it was extended to Prospect Park although some operated from Coney Island. On Wed. AM regular "QJ" and "QB" service resumed, and the "D" ran express. West End "B" and Sea Beach "N" trains terminated at 36 St- 4 Ave. or 95 St until Monday night when the West End Line was reopened. "N" trains ran via West End until northbound Sea Beach resumed Tues. AM and southbound about 3 PM Tues. Culver Shuttle resumed 2:40 AM Tues. and Franklin was the last line restored late Tues afternoon. "LL" (Canarsie) trains from 8 Ave. cut back at Myrtle Ave. until Monday afternoon when they were extended to Atlantic Ave. and to Rockaway Pky. before the Tues. AM rush. Late Tuesday morning "HH" trains ran between Far Rockaway and Rockaway Park only with thru service to Euclid Ave. restored 3 PM Tues. Myrtle El. (MJ) service was affected by a derailment at Metropolitan. About 3 PM Monday single track service operated between Bridge-Jay and E'way and later another train between Bway-Myrtle and Fresh Pond. "M" and "MJ" resumed normal service Wednesday. "KK" trains ran Tuesday but not Monday and "RJ" (RR to Chambers St.) were restored Wed. AM.

All IRT #2 and #5 White Plains service was out north of Freeman St. until Monday mid-morning when extended to E. 180 St., to E. 241 St. on Monday afternoon. Dyre Ave. service resumed about 2:30 PM Tuesday.

HUGH DUNN'S NYCTS QUIZ:- Answers for Feb. '69: 35. Blue Birds; 36 Clark Equipment Co.; 37. Franklin Ave. (Fulton St.) and Jay St.-Boro Hall and Bridge-Jay (Myrtle Ave.); 38. 5 (Harlem-Concourse Line, Cranberry-Ful Rutgers-Houston Line, 53 St-Queens Line, Greenpoint-Crosstown Line).

QUESTIONS: 39. What was the name of the only private car ever operated on the IRT? 40. Who was the owner of this car? 41. Name 2 points where you could transfer (as of June 1967) between trains of all three rapid transit divisions without payment of additional fare. 42. Name the one station on the IND that has been abandoned and removed.

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FEB 9 SNOWSTORM (CONT'D)

The Flushing Line had single track service from Main St. to 74 St. and Queens Plaza to Times Sq. from about 7:30 PM Sun to 12:30 PM Monday when local service was restored. Express trains resumed Wed. The Third Ave. El. (#8) was restored about 12 noon Monday.

Long Island RR suspended all service Sunday evening and did not try to run any trains on Monday. Partial service resumed Tuesday. The former New York Central and New Haven lines had very irregular service. The former Pennsylvania RR and Erie-Lackawanna maintained near normal service throughout. PATH (Hudson Tubes) service was out between Newark and Journal Square Sunday evening and most of Monday.

Incidentally, it shall be the policy of the BULLETIN to refer to the former Pennsylvania RR lines as "Penn" and the former New York Central lines as "Central" when necessary to distinguish them. The former New Haven RR is officially the "New Haven Region" of Penn Central.

OTHER SERVICE DISRUPTIONS

On Feb. 25, the AM rush, a watermain break caused a fire in the transformer at 110 St. & Central Park West suspending service between 59 St. and 125 St. Trains were turned back at these points and some "B" and "D" were terminated at 57 St-6 Ave. or diverted to Queens. Consequent delays on the BMT were further aggravated when a train stalled on the Manhattan Bridge. The same morning, a freight train derailed on the Erie-Lackawanna disrupting that railroad's service.

On Feb. 11, a northbound "A" stalled at 200 St. at 8:30 AM causing "A" trains to be turned at 168 St. and one R-40 was used on the "A".

On March 3, a derailed freight train caused suspension of Central Harlem and New Haven trains to and from Grand Central 7:30 to 10 AM. Harlem Div. trains cut back at Woodlawn and New Haven trains were sent over the Hell Gate Bridge to Penn Station making all stops to New Haven R-9's REPLACING B-TYPES ON EASTERN DIVISION.

Following complaints about the 14 St-Canarsie "LL" Line, The Mayor visited the line on Feb. 28. With advance notice, TA borrowed R-16's and R-27's from other lines and pulled off most B-Types. R-9's started to replace the B-Types permanently in mid-March. All the lettered cars were sent to the Eastern Div. (A-00 - E-99) by April 20 and are used in various mixtures, with old or new numbers, with or without signs. R-9's are used in 7 car trains on the "LL", 6 on the "KK" and "M". On April 30, there was 1 B-Type on the "M" and 10 B-Type trains on the "LL" SERVICE NOTES, Q-TRIP, "F" TO BE CHANGED, "GG" CUT

On Sat., Washington's Birthday, because of department store sales, PATH operated all 4 lines with 10 min. midday and 6 min. "rush-hour" headways. Usually only two lines run on weekends.

On March 22, Trolley Museum of NY operated a "Q-Type" trip over all open lines of the BMT Eastern Div. and into Essex St. Station.

Rush-hour "F" service will soon be revised to have Kings Highway trains make all stops in Brooklyn and "GG" trains, now on a strict 4 min. rush headway, will be cut to primarily 8 min. with a brief 6 min.

NASSAU ST. SUBWAY HISTORY

(CONSTRUCTION) ROUTE #45 ---
BROAD-NASSAU ST. ROUTE
(Manhattan)

by
 DAVID
 ROGOFF

Sec. 1- North end of Chambers St. station to the south building line of Liberty St. A 2 track subway (plus 1 return track going as far south as Beekman St.) under Park Row south to south of Frankfort St. and under Nassau St. south to Liberty St. in lower Manhattan's "Financial District." Excavation was by cut and cover under wood plank decking through fine sand and clay in alternating layers ("Manhattan Qicksand"). Construction was by typical steel bent and concrete jack arches. The only station built was "Fulton St." (centered on Fulton St.)(2 platforms, 1 on each of 2 levels- see below). This section was 2,192 feet long.

The sub-contractor was the Marcus Contracting Co., for which Spencer, White & Prentis were managing engineers. Mr. H. M. Hale was resident directing engineer. Work probably began in 1928.

This section passed above the 2 track IRT "Seventh Av. Subway" (Construction Route #48, Sec. 1) opened on July 1, 1918 at Beekman St., and above the 2 track IND "8th Av. Subway" (Construction Route #101, Sec. 1) opened on Feb. 1, 1933, at Fulton St. The portion at Fulton St., of this line, was, however built under a slightly later contract as part of the "8th Av. Subway". Construction of Route #101 at Fulton St., was, however, completed prior to the rest of the "8th Av. Subway" in 1933 to permit the opening of this line in 1931 (see below). Also underpinned by this section were elevated columns of the IRT 2nd & 3rd Av. Lines' terminal at "City Hall" (6 tracks, 2 levels) and elevated columns of the BMT "Park Row" terminal (2 tracks at 1 level at this point). Altogether 26 elevated and bridge columns were underpinned as were about 250 feet of the east wall of the adjoining IRT "First Subway" between the Brooklyn Bridge and Frankfort St. Also 52 buildings were underpinned for a length of 2,423 feet (including part of Sec. 2). Old masonry had to be uncovered including the old "New York World Building" and various vaults of abandoned warehouses under sidewalks which had first been used for wine cellars and later for paper storage, and various other bridge structures. In addition, the old 18 floor "Times Building" (lower Manhattan) had to be underpinned.

Owing to the traffic and business conditions on Nassau St., no street surface could be replaced during business hours, then 8 AM to 7PM, this work being done on nights and on Sundays & holidays. Also, no storage was permitted along Nassau St.

At Fulton St. station, the narrowness of the street (34 feet) precluded a single level station with adequate platform width. In addition, the necessity of passing above the IRT & IND Subways at BEEKMAN & FULTON sts., prevented enough flexing of the tracks to place platforms on 2 levels, both on the same side. Accordingly, Fulton St. station was designed as a 2 level station with a platform on each level to the left of the running direction. In effect, the station might be described as a "split-level-single island" station.

South of Chambers St. station, the 2 through tracks curve west, then curve east at Frankfort St. The minimum radius at any point is 200 feet at the southbound track south of Chambers St. At no point does one through track run directly over the other.

The southbound track rises at a -2.3% grade from Chambers St. to north of Frankfort St., then levels and remains so to near the south end of the Fulton St. platform between John & Fulton Sts. It then descends a +4.0% grade to Liberty St.

The northbound track rises at a -3.3% grade from Chambers St. station to north of Frankfort St., then levels to between Spruce and Beekman Sts., then descends at a +4.0% grade to between Ann and Beekman Sts., and the beginning (north end) of the station platform, then levels to near the south end of the station platform and then descends at a +4.0% grade to between Maiden Lane and Liberty St., where it joins the descending grade of the southbound track (+1.4%).

The return track is practically level.

Retained of the original construction (Construction Route #9-0, Sec. 1) was a pedestrian underpass passing over the roof of this line at the Brooklyn Bridge approach, and part of the never used "Brooklyn Bridge Connection" which connected to the current north bound through track and northbound lead to the return track at the south end of Chambers St. station (See "Bulletin" Vol.2, #3- July-August 1959).

The 2 center tracks at Chambers St. merge into 1 track south of the station under the IRT pedestrian underpass (chaining 45+35). It goes then to directly under the south bound through track to about 5 feet north of the IRT subway wall at the Beekman St. north building line (chaining 39+15). This gives a length of 620 feet from switch point to bumper. The return track is about 5 feet above the IRT track level, at the bumper.

Several tracks at Chambers St. station were slightly relocated along with this section. The southbound through track was moved slightly west for 80 feet (including platform edges), the southbound return track lead was relocated slightly east for 110 feet, including platform edges.

This section was opened at the same time as Sec. 2 (which see).

Sec. 2- South building line of Liberty St. south to the north curb line of South St.- A 2 track subway under Nassau St. south to Wall St. and under Broad St. to South St. of lower Manhattan's "Financial District") ("Wall St.") (plus 2 stub tracks from approximately Beaver St. to halfway between Water & Front Sts. under Broad St.). Excavation was by "cut & cover" under wood plank decking through fine sand and clay (as in Sec. 1). Construction was by typical steel bent & concrete jack arches, except the 2 through tracks running from halfway between Water & Front Sts. to South St, where construction was in 2 unlined cast iron tunnels. The only station built was Broad St. (centered on Exchange Pl.) (2 outside platforms). This section was 2,630 feet long.

The sub-contractor was Moranti & Raymond, Inc. Work began on Feb. 1, 1928. Tracks were by the T. H. Reynolds Contracting Co. Station Finish was by Chas. Meads & Co.

A trailing point crossover was located between the two tracks north of the Broad St. station, just south of Pine St. A diamond crossover was located between the 2 stub tracks just south of Marketfield St. Both switches are controlled by an interlocking tower "Broad St." at the south end of the southbound platform.

The 2 tracks run side by side from Liberty St. south to south of Beaver St., where the 2 through tracks spread into 4 tracks. The 2 center tracks ("stub tracks") continue side by side south to a point half way between Water & Front Sts. There is approximately 575 feet of clear track between the end of the diamond crossover and the "stub tracks" bumpers. After the stub tracks branch off the through tracks, the through tracks continue south and move somewhat together, although not side by side, passing under part of the "stub track" structure, at which point they go into 2 separate 1 track tunnels to the south end of the section. At the south end of this section, the 2 tunnels are about 30 feet apart, center line to center line.

From Liberty St., both tracks descend via a -1.4% grade to south of Cedar St., then level off (approximately) to the south end of the station, where they then descend by a -2.4% grade to Beaver St. Here the southbound through track begins a -4.05% grade as far as the tunnel sub-section, and then descends by a -4.00% grade to the south end of the section. At Beaver, the northbound through track continues at a level to Marketfield St., then descends by a -3.62% grade through the tunnel sub-section, but flattens out to a descent of a -1.9% grade, 49 feet north of the south end. Here both tracks connect with (Construction) Route # 33, Sec. 2 (see "Bulletin"- Vol. 8, #2 & #3- April & June 1965). The lower northbound grades enable the easier ascent of trains from the East River, the higher southbound grades being with and not against traffic. Also the higher southbound grades provide clearance for the southbound track to pass under the northbound track into Whitehall St. station (see Sec. 2 of Construction Route #33), avoiding grade crossings ("on the flat") between the 2 routes.

The 2 "stub tracks" after leaving the through tracks, level off (approximately) to Stone St., then descend via a -2.4% grade to Pearl St., where they then rise via a +2.0% grade to end at the bumpers.

Curves are slight on this section, the maximum being 300 feet radius at Wall St.

Nassau St. varies from 35 to 40 feet in width. Broad St. is much more irregular, being 60 feet wide at Marketfield St., 90 feet wide at a point south of Exchange Place, and 70 feet wide at South St. Widths are measured building line to Building line.

This section and Sec. 1 were opened on May 30, 1931. Sec. 1 & Sec. 2 are signalled "R" ("Nassau St. Loop").

Fulton St. station has a maroon horizontal stripe bordered by dark brown. Broad St. station has a gold horizontal stripe bordered with brown. Both have small square IND type tiles.

ROUTE HISTORY
(Construction) Route #45

Because of the narrowness of Nassau St., and the nearness of a far better north-south route (Broadway), there was not any serious proposal to use either Broad or Nassau St. until 1905, when (Construction) Route #3, the "3rd Ave. Route" was proposed by the NYC Bd. of Rapid Transit RR Commissioners. Sec. IV of the route consisted of a 2 track subway under Park Row south from Chatham Sq. to a point between Spruce & Franklin Sts., thence south under Nassau & Broad Sts. to the intersection of Broad & Pearl Sts.. At its north end it joined to a 4 track subway under Bowery & 3rd Ave., and to a 2 track subway going south under St. James Pl. (then New Bowery), Pearl St., and private property to Broad St., where it re-joined Sec. IV.

The entire (Construction) Route #3 was adopted by the Bd. on May 12, 1905, by the NYC Bd. of Estimate & Apportionment on July 14, 1905 and by the mayor on July 28, 1905. Construction was, of course, delayed. By law, the authorization of the would have expired in 3 years if construction was not begun so the route had its life extended by special legislative acts in 1908, in 1911 and in 1913, each time for 3 more years. By 1913, the "Dual Contracts" were in effect, and part of Sec. IV (ONLY) of the route was assigned to BRT operation under Contract IV. Under the "Dual Contracts" enabling law, extensions of time were no longer required.

(Construction) Route #45, the "Broad St.- Whitehall Connection" (officially) was a route created especially for the then anticipated "Dual Contract" operation in 1912. It was a 2 track subway under Broad St., connecting at its north end at Pearl St. with Sec. IV of (Construction) Route #3, and at its south end with (Construction) Route #33 at South St. It was adopted by the NY (State) Public Service Comm. (1st Dist.) on May 17, 1912, by the NY City Bd. Of Estimate & Apportionment on May 31, 1912 and by the Mayor on June 6, 1912. For convenience in construction, both Const. Route #45 and Sec. IV of Const. Route #3 were grouped together and called (Construction) Route #45. The part above Liberty St. was called Sec. 1, the part south of Liberty St. was called Sec. 2. Except for Sec. IV, (Construction) Route #3 was never built, although provisions for the rest of the line were built at the Manhattan end of the Manhattan Bridge ("Canal St." Line)* and at a subway crossing above Bowery station (DeLancey St.- Kenmare St. section of "Center St." Line)**

(Construction) Route #33 (& Sec. IV of Const. Route #3) were the the last & final parts of the "Dual Contract" construction to be completed. They had a low priority and suffered the displeasure of Mayor Hylan and the shortages of World War I. Plans were drawn up as early as 1923 for Sec. 2. A contract was even awarded to Patrick McGovern, Inc. for the section at \$5, 976,085.50 as low bidder, but the Bd. of Estimate refused approval of the contract, perhaps because they thought the price was too high. Sec. 1, then about to be opened for bids was stopped. Contract Drawings were then completely redrawn & completed by early 1927 by the then NYC Bd. of Transportation, who also designed the IND lines. Hence the station trim is typical of IND not BRT or BMT.

Broad St. was originally the site of a small stream (or common ditch) known as Bloemmart's Vly, which emptied into the East River at the then shore line of The Strand (later Pearl St.). The vly began in a marsh south of Wall St. An even smaller branch fed into the vly from the west on what is now Beaver St. This branch, name unknown, began just west of New St. (present street name).

The vly & its branch were converted into a canal between 1654 & 1659, mainly by shoring up the stream banks by walls of sheet piling. Roadways were on either side of the main canal & its branch. The canal was irregular in width. Its north end was at that time fixed at a point south of Exchange Pl. The main canal was called Heere (or Heer or Heeren) Gracht (or Graft) which means "high ditch" in Dutch. It may have been named after a similar street in Holland. The branch was then known as Begun Gracht. The meaning of "begun" is unknown. Locks were built at the East River in 1662-3 to retain water in case of fire, etc. The canal & its branch were filled in 1676, when the town was under British occupation.

The canal was bridged at Bridge St. (hence the name), Stone St. (so named as it was the first paved street in 1658) and at Prince St. The branch was bridged at Broad St. Pearl St. was so renamed from the Strand because of the seashells lining its side. Then the shoreline, Pearl St. is now 600 feet in shore. The filled in canal and its side roadways were renamed Broad st., because of the unusual width for the local area. The branch canal & its roadways (much smaller) were renamed Beaver St. (perhaps from the animal).

In 1670, the northernmost city limits was at the present site of Wall St. An actual wood planking wall or "palisades" was built from the East River at Pearl St. west to the Hudson (or North) River at a point east of Greenwich St. The wall had been built in 1653 and was one of the first projects of the municipal government. It had a water gate at Pearl St. and a land gate at Broadway. It was rebuilt at least once and had at one time 6 "bastions" (tiny forts). It was demolished in 1699.

At the northeast corner of Nassau & Wall Sts. is the present Federal Hall National Memorial. It has been the site of the 2nd NYC City Hall built 1699-1704. (The 1st was at 71-3 Pearl St.) It was remodelled as Federal Hall between 1788-9. Washington was inaugurated here on April 30, 1789. The Hall was demolished in 1812 and a new Customs House was built on the site in 1834-42. The Customs House was remodelled into a Sub-Treasury Building in 1863 and was used as such to 1925.

At the southeast corner of Broad & Pearl Sts. is Fraunces Tavern, the oldest existing structure on Manhattan Island. It was originally built as a residence for Etienne DeLancey (also anglicized to "Stephen Delancey"), in 1719. It became the tavern of Samuel Fraunces et. seq. in 1762. It was the scene of Washington's farewell to his officers on Dec. 4, 1783. It was bought by the Sons of the Revolution in 1904 and reconstructed to its original design & reopened in 1907. Little exists of the original building however, as it was rebuilt many times. It is now a historical museum and a restaurant.

Also on this route the present Morgan Guaranty Trust Co. Building at the southeast corner of Broad & Wall Sts. This was originally J. P. Morgan & Co. ("The House of Morgan"). It was built in 1913. On Sept. 16, 1920, anarchists planted a bomb in a wagon in front of the building. It exploded and killed 33 and injured 400. Bomb scars still are visible in the stonework.

Across the street at the southwest corner of Broad & Wall Sts., is the New York Stock Exchange (the "Wall St." of financial fame). It was built in 1903, an addition in 1923. It has free guided tours.

At the east side of Nassau St., between Maiden Lane & Liberty St., is the massive Federal Reserve Bank of New York. It was built in 1924 and has 5 levels below the street. It is much deeper than the adjoining subway.

At the west side of Nassau St., between Liberty & Pine Sts., is the new Chase Manhattan Bank & Plaza built in 1960. It is one of the few examples of good modern architecture in the city.

The original pupose of the 2 stub tracks south of Broad St. station is in doubt. In 1921, the Annual Report of the Public Service Commission said.... "...in connection with the 4 track, 2 story subway in Nassau St, the lower level is to be used for the Fulton St. Connection from Brooklyn and the upper level for Route #45..." (underlining is mine). Later references before construction refer to the upper tracks as stub tracks only, which was the way it was finally built. The "Fulton St. Connection" was a plan to connect the BMT Fulton St. El. into both the BMT subway ("Ashland Place Connection") and a new tunnel under the East River to the Broad St-Nassau St. Subway.

NOTES

A- This is in error, the tunnels are concrete lined.

*- See "Bulletin"- Feb. 1966- Vol. 9, No. 1 & Apr. 1960, Vol. 3, No. 1

** - See "Bulletin"- Nov. 1960- Vol. 3, No. 4

D. Rogoff Oct. 20, 1968

| REVISED R-40 ROLL SIGNS | | LISTS - SIDE OUTSIDE (Strip maps appear inside) | | EE | GG |
|-------------------------|-------|---|---|-----------------------|---------------------|
| | -top- | | -top- | | N |
| 179 Street Jamaica | E | Hudson Terminal | NOTE: All the Queens destinations for "F" are identical. "F" South destinations continued.. Second Avenue Kings Highway (All have "Special S Special" at the bottom.) | 179 Street Jamaica | Whitehall Street |
| 179 Street Jamaica | E | Euclid Avenue | | Continental Avenue | Whitehall Street |
| 179 Street Jamaica | E | Lefferts Boulevard | | Continental Avenue | Canal Street |
| Continental Avenue | E | Aqueduct | | Continental Avenue | Coney Island |
| 179 Street Jamaica | E | Rockaway Park | | 57 Street 7 Avenue | Coney Island |
| 179 Street Jamaica | E | Far Rockaway | | 57 Street 7 Avenue | Kings Highway |
| 179 Street Jamaica | F | Church Avenue | | Continental Avenue | Church Avenue |
| 179 Street Jamaica | F | Coney Island | | Continental Avenue | Smith 9 Street |