newsletter

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newsletter

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James A. Brown, Editor

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Please address NEWSLETTER contributions to the Editor at 3 Bromley Crescent, Bramalea, Ontario. No responsibility is assumed for loss or nonreturn of material.

All other Society business, including membership inquiries, should be addressed to UCRS, Box 122, Terminal A, Toronto, Ontario.

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The Cover

Rapid transit comes to the suburbs! A westbound TTC Bloor-Danforth train is shown here on the newly-opened eastern extension of the subway, between Warden and Victoria Park Stations. It is skirting Bell's Bush Park and the Massey Creek Ravine -- scenery which no doubt comes as a pleasant surprise to many commuters formerly used to traffic jams on their way to work. See page 55.

- Ted Wickson

Coming Events



Regular meetings of the Society are held on the third Friday of each month (except July and August) at 589 Mt. Pleasant Road, Toronto, Ontario. 8.00 p.m.

- Steam excursion to Stratford, leaves Toronto at 0815 EDT. FARES: Adult \$9.75; Child \$5.00; June 1: (Sat) Infant \$1.00.
- being arranged. Write the Entertainment Committee for details. A visit to the OERHA property at Rockwood is June 9: (Sun)
- June 13: NOTE CHANGE OF DATE! Outdoor meeting: A visit to CN's new Express (Thurs) 7. 7.30 p.m. Regular TTC KEELE bus leaves Lansdowne Subway Station at 6.25 p.m. Terminal entrance by road is about one half mile north of the main yard entrance, on Keele St.
- Regular meeting. Omer Lavallee recalls steam days on the Newfoundland Railway. June 21: (Fri)
- Hamilton Chapter regular meeting. June 28: observation session at Bayview, 8.00 p.m. (Fri)
- Steam excursion, Toronto to Montreal, return July 6: by diesel. Leave Toronto at 0900 EDT. (Sat)
- Steam excursion, Montreal to Toronto, going trip by diesel. Leave Montreal at 0900 EDT. July 13: (Sat) FARES for steam portions only of July 6 & 13 trips: Adult \$15.00; Child \$7.50
- Movie night at 589 Mt. Pleasant Road. July 19: (Fri) your best 8mm movies to this informal session.
- Ontario Northland steam excursion, North Bay to Englehart, leaving North Bay (CN Station) at 0830 EDT. One fare only: \$13.00. Optional Aug 3rd: (Sat) special cars Toronto to North Bay and return.
- Summer meeting and social night at 589 Mt. Aug 16: Pleasant Road, featuring refreshments and pro-(Fri) fessional films of rail interest.

It was just thirty-five years ago this month, depths of the Depression, that the Royal Scot of London Midland & Scottish Railway visited Toronto. worthy citizens, anxiously seeking tangible evidence that the world was returning to normalcy, turned out in droves to inspect this example of the ultimate in luxurious travel. Here are a few of them at the Exhibition Grounds on May $4 \, \mathrm{th}$, 1933. -- TTC

50 MAY, 1968

RAILWAY NEWS AND COMMENT

GO TRANSIT MAKES FOUR MILLION BY ITS FIRST BIRTHDAY

GO Transit's four-millionth passenger dropped his ticket into the farebox just two days before the government-sponsored commuter system observed its first birthday. Like opening day itself, the event passed without fanfare.

Highways Minister George Gomme did have something of a birthday announcement, however. He suggested that the government could be in a position by early next year to begin laying plans for expansions of GO Transit. Until now, the government has insisted that the existing operations must be studied for two to three years before any decision could be made to expand it.

One form of expansion will occur before then. Fourteen new cars will be added to the GO fleet this fall, and will be used to lengthen existing trains. GO Transit is now carrying about 16,000 passengers daily, just over the forecast figure; on peak winter days, the total approached 20,000.

PASSENGER, FREIGHT TRAINS INVOLVED IN DERAILMENTS

Injuries were slight when Canadian Pacific's <u>Canadian</u> was derailed at Girdwood, Ont., 30 miles east of White River, April 29th. Spread rails derailed the trailing unit and five cars as the westbound train passed Girdwood at about 7.30 a.m. The early hour was credited with minimizing injuries, since most passengers were still asleep. The line was cleared by early the following morning.

Later the same day, a caboose and about ten cars of a southbound CN freight left the rails in a 'reverse sideswipe' at Barrie, Ont. Newmarket Subdivision traffic detoured via the Bala Sub, reversing the situation of March 16th (March NL, page 27). The mishap provided exercise for 120-ton auxiliary No. 50073, formerly of Fort Frances and filling in at Toronto for the 250-ton big hook, No. 50397, which is currently being overhauled in Montreal.

LAST TRAINS CALL AT LORNE PARK AND DON

The end of April saw the last train service at two Toronto area stations, Lorne Park and Don.

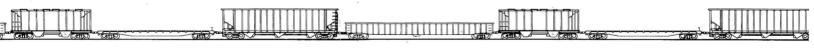
GO train 969 made its last stop at Lorne Park on April 26th, with little ceremony. About 90 persons disembarked, the tickets were collected and the agent locked up the shelter and drove back to Clarkson, the stop for all future GO trains (April NL, page 40).

The last train to Don was even less eventful. Although the station was unstaffed in the final months, one train a day in each direction continued to stop there. The final stop was made by train 388 on April 28th, and just two persons alighted -- UCRS president Ross Hoover and your recorder.

-- Charles McLeod



-- Tom Henry



WORTH NOTING...

- * A practical course in Canadian geography and railroading was given to 28 Toronto public school students, who travelled to Vancouver and back in a chartered sleeper on CN's <u>Super Continental</u>. Their four teachers conducted seminars on the car, and the students wrote reports of their experiences for pupils in other classes. CN supplied rule books, operating timetables and other material for the discussions.
- * Three children, all under 10, stowed away on CN's Montreal-bound <u>Rapido</u> on May 6th, and were not discovered until the train had passed Kingston. They had been hiding in a washroom. CN officials returned the stowaways to Toronto on the overnight <u>Cavalier</u>.
- * CN will spend \$2 million this year to extend sidings and install CTC signalling between Jasper, Alta. and Red Pass Junction, B.C., and to upgrade the existing CTC between Jasper and Brule with power switches at both ends of all sidings.
- Prime Minister Trudeau officiated at the unveiling of a memorial to Sir Casimir Gzowski -- noted bridge and railway (Grand Trunk) builder -- in Toronto on May 25th.
- * CN has adapted a Hy-rail station wagon to serve as an on- and off-track ambulance for isolated railway construction workers.

EQUIPMENT NOTES...

CANADIAN NATIONAL MOTIVE POWER NOTES

* Deliveries:

From General Motors Diesel Ltd., 3,000 h.p. SD-40's, class GR-30d:

5042 - Ap	or 20/68	5046 -	May	8/68
5043 - Ar	or 20/68	5047 -	May	8/68
5044 - Ap	or 27/68	5048 -	May	17/68
5045 - Ar	or 27/68	5049 -	May	17/68

From Montreal Locomotive Works, 3,000 h.p. Century 630's, class MR-30b:

2032	_	Apr	26/68	2034 -	May	2/68
2033	_	Apr	30/68	2035		

- * MR-10 switcher 8211 has been assigned to Port aux Basques, Nfld., to switch the standard gauge marine terminal there. Foreign equipment is now appearing on the island, heretofore exclusively narrow gauge, as carferries bring mainland cars into the Port aux Basques terminal for trans-shipment of goods into narrow gauge
- * MR-18 No. 3883 replaced unit 3853 in the rebuilding program for the southwestern Ontario $\underline{\text{Tempo}}$ service, and has been renumbered 3151, the number originally intended for 3853. The Tempo units have been regeared for 92 m.p.h. speeds, and have been fitted with dual control stands and engine/alternator sets for supplying train electrical requirements. Before and after numbers are tabulated below:

New number & class
3150 MRE-18g
3151 "
3152 "
3153 "
3154 "
3155 "

MORE DELETIONS FROM CN PASSENGER CAR ROSTER

* Sixteen passenger cars have recently been approved by Canadian National for retirement or conversion to other service:

Cafeteria Car;

Cafe-Club Car;

Tignish (724)

Dining Cars;

Sleeping Cars;

Coaches:

11gh1sh (124) 1241, 1249, 1292, 1300 Whitebear (1000), Ludlow (1513), St. Hyacinthe (1683) 5067, 5109, 5110, 5111, 5117, 5242, 5247

CN TRIES MAINLAND CARS ON NEWFOUNDLAND LINES

Nine standard gauge mainland freight cars rolled out of Port aux Basques, Nfld. late in March, culminating a series of experiments which could profoundly affect shipments of goods to and from the island. The cars, loaded and sealed on the mainland, reached their Newfoundland destinations with the seals still intact -- on narrow-gauge trucks. They made the 100-mile voyage across Cabot Strait aboard CN's new car ferry MV Frederick Carter.

Conventional carload shipments to Newfoundland have had to be trans-shipped twice, in the past -- from mainland cars to the Cabot Strait ferry, and from the ferry to Newfoundland equipment. Now, with the opening of the Port aux Basques marine terminal, mainland cars can be handled directly to the Newfoundland port, and the trans-shipping done directly from standard-gauge cars to their slim gauge counterparts. The new experiments suggest that even this cargo handling may be reduced in future, although the exchange of tracks is possible. future, although the exchange of trucks is possible only with certain types of mainland equipment.

Supplementing its new carload handling techniques, CN is looking toward extensive use of containers as well, to speed up Newfoundland's freight.

CANADIAN PACIFIC MOTIVE POWER NOTES

* End of the line for CP's Trainmasters! The Striegel Supply & Equipment Corp., of Baltimore, Md., has purchased six 2,400 h.p. CLC Trainmasters from Canadian Pacific as operational locomotives. The units concerned are 8906, 8911, 8913, 8914, 8915 and 8919.

The diesel engines and main generators from eight other CLC's -- 8902, 8907, 8908, 8910, 8912, 8916, 8918 and 8920 -- have also been purchased by Striegel. It is understood that this firm may negotiate in part or in total for the remaining seven units, although at last report Nos. 8900, 8904 and 8905 were still working regularly out of Tadanac, B.C.

* Remanufactured traction motors will be used in CP's Century 630's, now under construction at MLW. However, these motors will not necessarily come from withdrawn 8900's, as has been rumoured.

REGARDING THAT SPERRY CAR....

* Our query in last month's issue about the origins of Sperry Rail Car No. 402 (page 41) prompted a veritable flood of information, including notes from Ed Jordan, Brian West, Bill Linley, Kenneth Mozersky, M. Drube, Don Gordon, Norman Tutt, Ray Corley, David Osborne and Joe Howard. A thorough account of SRS 402 came from John Maclean, and follows herewith:

This is one of the ten rail buses built for the New Haven Railroad in 1951 and 1954 by Mack Trucks Inc. at their Allentown, Pa. plant. They were intended for light suburban and branch line passenger service, and were known as FCD cars, after F.C. Dumaine, the New Haven president at the time they were ordered.

... FCD Type II, Nos. 11-19, built in 1954, were of the type illustrated (in the April NL), with centre doors on each side, a train door at the 'blunt' end, and were equipped with multiple-unit controls permitting operation in two-car units.

The cars saw little revenue service on the New Haven due to a change of management while they were under construction. After lying around for several years, Nos. 18 and 19 were sold in 1958 to Sperry Products Inc. for conversion to detector cars, becoming their Nos. 403 and 402 respectively.

A couple of interesting sidelights on No. 402: When received by Sperry, it was shipped all the way to Cologne, Germany for installation of its ultrasonic detection equipment, and then returned to the U.S.A. Its first assignment as a detector car was to the New York City Transit Authority subway system; apparently it is now being used on more conventional railways.

Full information on these cars, including pictures of both types (FCD I and FCD II) and plans of Type II, may be found in the booklet 'History of Mack Rail Motor Cars and Locomotives', published in 1959 by the Lehigh Valley Chapter of the National Railway Historical Soc.

NEW ACQUISITIONS FOR CANADIAN RAILWAY MUSEUM

* A locomotive and two cabooses have recently come under the wing of the Canadian Railway Museum, at Delson, Quebec.

The locomotive is CN's venerable 77, built in 1930 by CLC-Westinghouse. Unfortunately, problems with No. 77's 380 h.p. Caterpillar engine will likely prevent operation of the unit.

The two cabooses, Nos. 34 and 35, represented the entire fleet of the Napierville Junction Railway, the Canadian arm of the Delaware & Hudson, and will require considerable restoration before going on display. D&H has supplied the NJR with 'new' vans to replace the museum-bound units.

The Field Hill Mystery





Anyone who has explored the Field Hill area on foot will undoubtably have come across, or had pointed out to him, the remains of a steam locomotive and tender near the base of Mount Cathedral. They can be found just above the Trans-Canada Highway as it approaches the base of Mount Stephen, as the highway is situated on the pre-1909 Big Hill main line. The wreck is on the roadbed of a spur which took off from the main line at this point, and was also used as a safety switch for runaway trains.

The common impression is that the locomotive was a pusher which ran away on the Big Hill and was derailed.

However, the facts are otherwise. An excavation made around the wreck several years ago unearthed a locomotive builder's plate — Baldwin, 1885 — which, when traced back to the source records for that works, indicated that this locomotive had been built for the North West Coal & Navigation Company, whose line had opened in 1885 between Dunmore and Lethbridge. This section was later acquired by Canadian Pacific and is now the Taber Subdivision.

The catch is that, when it was owned by the North West Company, it was a narrow-gauge line, and the builder's records showed that the locomotive was built for a three-foot gauge. Measurements of the wreck confirm this.

Running as the first section of Number 8, Canadian Pacific 2-8-2 5433 charges up the Big Hill east of Field, B.C. with a diminutive train. The locomotive is about to enter the lower of the two famed Spiral Tunnels at Yoho.

-- Collection of R.S. George

Unfortunately, no complete record exists of the North West Company's disposal of its locomotives. The Company itself became a part of the Alberta Railway & Coal Company which operated a number of other three-foot-gauge railways in the Lethbridge area. And, the AR&C was eventually assimilated into Canadian Pacific through other corporate steps.

Its narrow-gauge lines were widened to standard over a period of about 15 years, beginning in 1893. And so its narrow gauge locomotives would have been disposed of during that time. Certain features of the Field wreck indicate that it took place in the latter part of this period, almost certainly after 1901.

Information that would solve the mystery of the wreckage of a narrow-gauge locomotive over 100 miles from the nearest known narrow-gauge railways has never come to light.

Behind the mystery locomotive of Field Hill undoubtably lies a plausible answer; behind other stories the explanation is less obvious.

Like this one:

Many years ago, a wayfreight was making its way slowly down a canyon on a CP line in the Rockies. In addition to the locomotive, five or six cars and a van, there was the division superintendent's official car coupled to the rear.

In due course, the train came to a siding set on a mountain-side ledge and, expecting a meet with another train, pulled into the clear.

All was quiet and peaceful. The men in the head end sat in the cab and swapped stories; the conductor and flagman were in the van talking with the superintendent's Oriental cook, who had come forward to visit with them.

The "super" was sitting at the back of his car reading reports (superintendents ALWAYS read reports!) when, as he later related it, he had an uncomfortable desire to get

up and walk up the track away from the train. He passed it off as ridiculous, but the more he tried to ignore the urge, the stronger it became. Finally, he reached for his hat, went out the back door, stepped down to the roadbed and started to walk back along the track.

He had only gone a couple of hundred feet when a 10-ton boulder dropped from the mountain side and bounced the official car off the track and into the canyon, neatly uncoupling it from the van which remained unscathed.

When the superintendent recovered, it is said that he asked for his pension — even though he was scarcely 50. As for his Oriental attendant, the story goes that he forgot, in that one instant, all the English he had so carefully mastered over the years, and returned to his homeland where such occurrences at least had some basis in legendary lore.

-- Canadian Pacific SPANNER

Just how far is it between Toronto and Montreal?

Occasionally, the question arises as to the mileage on the Canadian National main line between Toronto and Montreal, which generally follows the route established by the Grand Trunk Railway in 1856. The subject has been of particular interest in recent years due to the speedup of CN schedules, commencing with the inauguration of the Rapido and the forthcoming introduction of the Turbo Train.

The original single track GTR main line was relocated in some sections — principally in the area east of Oshawa to Port Hope — when it was double-tracked before the turn of the century, to obtain more favorable grades. The mileage boards — actually triangular concrete markers established along the north side of the double track route — reflected the "true" mileage as of that time between Montreal (Bonaventure) Station and Toronto (Union), mileages being shown west from Bonaventure.

The first changes in mileage were in and around Montreal. In 1888, the main line had been rerouted from Dorval through Lachine to Bonaventure. However, on July 14, 1943, service commenced by a new route from St. Henri (Junction) via Pt. St. Charles into the new Central Station, increasing the mileage by 1.5. On June 4, 1961 the Lachine route was abandoned and a route not dissimilar to the original one was established from the west end of Turcot Yard via Ballantyne (Junction), paralleling the CPR to join the "old" line at Dorval. The mileage over the new route was essentially the same as the old.

The cost to relocate the concrete mileage markers between Montreal and Toronto would have been prohibitive, and hence today the mileage at Dorval is still recorded as 10.3 miles from Bonaventure — as it originally stood in 1888, while the actual mileage is 11.8, as follows:

Mileage at St. Henri:	1.8 3.3	(from Bonaventure) (from Central)
St. Henri to Dorval:	8.53 8.5	(via Lachine) (via Ballantyne)

While passenger timetables were adjusted in 1962 to show essentially true mileage between the two cities, the operating timetables (for what is now the Kingston Subdivision) shows mileages from Bonaventure.

On July 21, 1957, the CNR opened the Cornwall - Cardinal diversion when it was forced to abandon the old line due to the flooding program of the St. Lawrence Seaway Project. As advertised at the time, the new route (to the north) was a half mile longer than the old. Yet, as before, neither the concrete markers north of the track nor the mile boards on the south side east and west of the diversion were relocated. The new diversion had only mile boards on the south side, and these were set up to integrate with the old. Then where did the extra half mile go to?

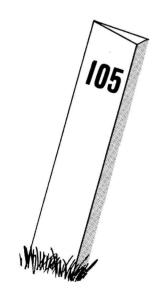
The additional mileage was "absorbed" at the western end of the diversion between mile board 104 (on the new line) and mile board 105 (on the original line). Coming west from Montreal, this can be easily spotted as follows:

Last mile board on new diversion: 104
Last ½-mile marker on pole on new diversion: 104.5

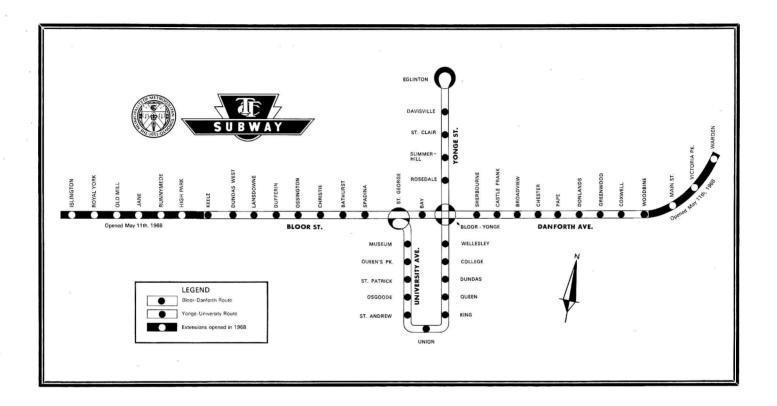
Junction with old line (104.77): 104.27 (old mileage)
Cardinal Station (105.3): 104.8 (old mileage)
Next mile board (105.5) on original line: 105.0

Because this additional mileage had been absorbed, and did not appear on any adjustment to operating timetables, it was similarly not reflected in the passenger schedules. Hence today, mile boards on the Kingston Subdivision show Toronto Union as 333.8, the passenger timetables show the Montreal - Toronto mileage as 335.3 (making up the extra mileage at Montreal), and the true mileage is 335.8.

To someone clocking the fast trains, the true mileage must be taken into consideration in start to stop schedules, and the existence of the "missing" half mile is very apparent when one tries to calculate the average speed between mile posts 104 and 105.



Subways to the Suburbs



Metropolitan Toronto again moved to the forefront in rapid transit progress, as 6.16 miles of extensions to the BLOOR-DANFORTH subway system were opened to the public at 6.00 a.m. on Saturday, May $11^{\rm th}$. Travel time for many subway users was reduced by as much as 30 minutes for a one way journey.

The new extensions were officially opened on Friday, May 10th, at 2.00 p.m., in special ceremonies, by the Hon. John Robarts, Prime Minister of Ontario, and William R. Allen, Q.C., Chairman of the Metropolitan Toronto Council. Special ceremonies were held at Islington Station where Mayor Edward A. Horton of the Borough of Etobicoke officially opened the terminal, and at Warden Station where Mayor Albert M. Campbell of the Borough of Scarborough performed a similar function.

The eastern extension of the BLOOR-DANFORTH subway into Scarborough measures 2.72 miles, and with the western extension of 3.44 miles into Etobicoke makes the line over There are now more than 21 route miles of 14 miles long. subway in service in Metropolitan Toronto.

Coincident with the opening of the BLOOR-DANFORTH extensions, street car service was discontinued on the BLOOR and DANFORTH Shuttles that commenced with the opening of the original section of BLOOR-DANFORTH in February, Extensive changes to other surface routes, including the removal of DUNDAS street car service north of Dundas West Station, were inaugurated to provide more direct-to-subway service, giving the maximum benefit to transit riders. The subway extensions and the new and extended surface routes will add more than 7 million miles to the 62 million miles of service provided by TTC vehicles in 1967.

BACKGROUND

The BLOOR-DANFORTH subway extensions were not included in the official Bloor-Danforth-University Subway Project. Construction on the UNIVERSITY portion began in the autumn of 1959 and the line was opened on February 28th, 1963. Work on the BLOOR-DANFORTH section began early in 1962 and the line was opened on February 26th, 1966.

While the original BLOOR-DANFORTH line was still under construction, plans were prepared for the extensions of the line easterly into Scarborough to Warden Avenue (at St. Clair) and westerly into Etobicoke paralleling Bloor St. Clair) and westerly into Etobicoke paralleling bloor Street to Montgomery Road (the western terminal was later changed to Islington Avenue). Approval for the \$77 million project was given by Metropolitan Council and the Ontario Municipal Board early in 1964, and work on the first contract began in March, 1965. Metropolitan Toronto's share of \$60.091 million covered "right-of-way" costs (acquisition and preparation), construction and finishing of the line, while the TTC share of \$17.632 million covered "operating equipment" charges, such as track and signals, rolling stock and power supply, based on the "Woods-Gordon" formula of cost-sharing; 70% by Met-ro and 30% by the TTC. The Province of Ontario provided a subsidy of \$10.8 million, covering certain right-of-way construction costs.

by R. D. McMann



In an unusually sylvan setting, Old Mill Station forms a part of the B-D Subway's Humber River bridge.

-- Ted Wickson

RIGHT-OF-WAY & ROUTE ALIGNMENT

Over 500 properties were expropriated by the Metropolitan Toronto Subway Property Committee, to provide the cleared right-of-way for the extensions. Ownership is retained by Metro, and it is expected that land costs will be recoverable through the sale of surplus land and the leasing of air rights.

The easterly extension runs east from Woodbine Station through 300 feet of cut-and-cover section east of Cedarvale Avenue, then through 1900 feet of twin 16-foot circular tunnels to the western end of Main Station. The line then swings slightly northeast through cut-and-cover to Dentonia Park, emerging at Thyra Avenue in the Borough of East York and passing immediately into Scarborough via a bridge over Victoria Park Avenue into Victoria Park Station. The line continues northeasterly on the former right-of-way of the Canadian Northern Railway, paralleling the Ontario Hydro transmission line, crossing over Pharmacy Avenue, underpassing Fir Valley Court and Warden Avenue to the terminal at Warden Station at St. Clair Avenue. There is 550 feet of tail track north of the station on a concrete bridge over St. Clair Avenue, and a 350-foot maintenance track just southwest of the station on the south side of the scissors crossover.

The westerly extension alignment from Keele Station is parallel to and just north of Bloor Street for its entire length. Leaving the elevated Keele Station, the line runs through a cut-and-cover section to High Park Station, emerging into the open for 900 feet while bridging Clendenan Avenue and crossing Kennedy Ravine on embankment. The line then continues underground through Runnymede and Jane Stations to Riverside Drive, emerging to cross the Humber River on an 800-foot prestressed concrete bridge to Old Mill Station. The line again becomes underground at this point and continues through Royal York Station to Montgomery Road, again emerging to cross Mimico Creek on a 310-foot reinforced concrete bridge into the underground Islington Station. There is a third (center) track immediately before the scissors crossover at Islington, providing storage space for a full-length train, and two short tail tracks beyond the station for storage of work equipment.

TRACK CONSTRUCTION

Twenty-five hundred tons of running rail, exclusive of specialwork, was required for the 6.54 miles of double track installed in the extensions. The use of continuous welded rail is employed on the extensions, as on the UNI-VERSITY and BLOOR-DANFORTH lines, to provide a quieter and smoother ride. Rubber pads have been installed between the base of the rail and the concrete invert to dampen vibration. In addition, 1,750 tons of contact rail carry the traction power.

TRACTION POWER

Power for the extensions is provided at 570 volts DC by six new substations, located at Warden, Victoria Park, Indian Grove (on the original line), Jane, Prince Edward Drive and Islington. All stations use silicon rectifiers of the outdoor type, eliminating the need for expensive buildings.

NOISE CONTROL

The use of accoustic material to reduce noise has been continued on the extensions. At Victoria Park and Warden Stations, the track has been equipped with lead isolated track beds to reduce vibration. A test section has been installed west of Warden Station utilizing concrete ties as another method of reducing vibration and maintenance.

SIGNAL SYSTEM

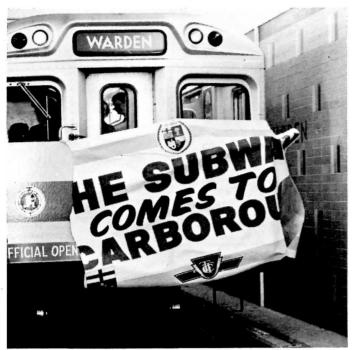
The BLOOR-DANFORTH extensions use a wayside three-aspect colour light signal system similar to those in use on the earlier subway lines. Control is provided at each signal location by an automatic train-stop device.

The system is divided into 'Interlocking' and 'Automatic' sections. The former type sections are located at Islington, Jane, Victoria Park and Warden Stations, with all other areas being of the latter type. In 'Interlocking' areas, two or more train routes are possible, and track switches and signals are interconnected so as not to allow conflicting train movements. Signals in the 'Automatic' sections are controlled by the trains in each section.

The signal system is tied into the central control panel at St. George Station. Because of the increased distances from St. George to the extension wayside signals, solid state coding devices were introduced to reduce the cable requirements for the transmission of information.

ROLLING STOCK & SCHEDULE REQUIREMENTS

Both Hawker-Siddeley (Class H-1) and Montreal Locomotive (Class M-1) subway cars are operated in 4-car trains over the entire BLOOR-DANFORTH system. The current schedule calls for 20 trains in weekday base service, 35 trains during the AM rush and 36 in the PM rush. Saturday service requires 22 trains, while just 15 operate on Sundays. Running times eastbound and westbound are 36.5 and 36.4 minutes respectively.



-- John Skillen

STATIONS

Nine new stations, three in the east and six in the west, have been provided along the extensions. With the exceptions of Warden, Victoria Park and Old Mill, all stations are underground. Victoria Park and Warden are at grade, although dips in both Victoria Park and St. Clair Avenues respectively give both a partially elevated appearance.

Old Mill Station is noteworthy as a portion of its platforms occupy the westend of the strikingly modern bridge over the Humber River.

Train platforms are uniformly 500 feet in length on either side of the tracks, except at Warden and Islington (Terminals) where island platforms provide greater flexibility. Platform and mezzanine areas are similar to existing stations on the BLOOR - DANFORTH line, using glazed ceramic structural tile with contrasting trim for interiors. Some walls in Warden and Islington Stations have patterns formed by the use of glazed facing tiles.

There are a total of 32 escalators installed in the extension stations, with 6 at Royal York alone. High Park and Royal York are equipped with secondary automatic entrances, having closed-circuit television and communications systems to enable station collectors to observe the entrances. Collectors booths are also located at the secondary entrances for manual operation if required.

Lighting intensities in the extensions carry on the same high standards previously established by the TTC. Fixtures have been selected on the basis of appearance, ease of maintenance and dust-tightness. Platforms are illuminated by a continuous row of fluorescent fixtures. A newly-developed mercury vapour lamp is used over bus loading platforms, giving low-cost lighting of high intensity and in the same colour as produced by fluorescents. An emergency power lighting system is provided from a DC source in each station. At Main, a new AC emergency system using fluorescent lamps has been provided, and is now undergoing evaluation.

Of special note is the inclusion of large commuter parkride facilities at Islington, Victoria Park and Warden, accommodating more than 3,000 cars. The lots at the terminal points are not expected to be completed until midsummer. Kiss 'n' Ride entrances are provided at Islington and Warden; the former will not be completed until midsummer, while the facility at Warden is now in use.

Station	Walls	Trio
Warden	BEIGE	BLUE
Victoria Park	GRAY	BLAC
Main	YELLOW	RED
High Park	WHITE	BLAC
Runnymede	GREEN	BLUE
Jane [®]	YELLOW	GREE
Old M111	GRAY	RED
Royal York	BEIGE	BLAC
Islington	WHITE	BLUE



Shortly before opening day, a test train poses in Warden Station.



-- TTC



→ PCC 4126 and Mack bus 920 at Jane Loop, November 1943.

-- TTC

A PRE-SUBWAY PORTFOLIO



⚠ Last day at Woodbine Station Loop

-- Ted Wickson



Runnymede and Dundas, May 5th, 1968 -- Ted Wickson

♥ PCC 4575, at Keele Station, was a rare last-day BLOOR car.

-- Ted Wickson







To mark the opening to the public of the new Bloor-Danforth Subway extensions, the TTC issued two commemorative tokens to first-day riders.

Special brass tokens stamped with the official crest of Etobicoke were available at the six new westerly stations, while on sale at the three new easterly stations were tokens with a view of the Scarborough bluffs.

Unlike the original opening of the B-D line, special tokens were doled out to all comers, riders on May 11th had to purchase the latest commemoratives. receiving one plus four regular tokens a dolĺar.

Mint pairs are still available -- at a cost of 50 cents -- from the Toronto Transit Commission, Treasury Department, 1900 Yonge Street, Toronto 7, Ont.

STATISTICS OF THE EXTENSIONS

Total Length Number of Stations	6.16 Miles
Types Of Construction - Cut & Cover Open Cut & Embankment Tunnel Bridges	3.88 Miles 1.63 Miles .36 Miles .29 Miles
Number Of Men Employed (Const	ruction 1637
Construction Materials Used - Structural Steel Reinforcing Steel Rail (All types) Cast Iron Tunnel Liners Cement Sand Gravel	2720 Tons 20810 Tons 4797 Tons 5919 Tons 1,823,970 Bags 196,187 Tons 298,180 Tons
Excavation	1,254,089 cubic yds.

PREVIOUSLY PUBLISHED DATA

For additional information on the original portion of the BLOOR-DANFORTH subway and its rolling stock, please refer to the Society's NEWSLETTERS for March, 1966, June, 1965 and May, 1962.

DATA SUPPLIED BY: TORONTO TRANSIT COMMISSION



TRACTION TOPICS

Edited by John F. Bromley



* Possibly the biggest news to appear on the North American trolley scene in many years is the fact that the San can trolley scene in many years is the fact that the San Francisco Municipal Railway have apparently ordered no less than sixty, eight-axle (4 truck) three-section articulated cars from the St. Louis Car Division of General Steel Industries. GSI, who are licensed to produce the DuWag-type articulateds in the United States, has reportedly quoted a price of \$175,000 per car. The units are to be 98 feet long, 9 feet wide, with a maximum speed of 50 miles per hour. The cars will be capable of operating in trains of four units, and are to have doors designed in trains of four units, and are to have doors designed with folding steps which will allow either high or low level loading. The articulateds are apparently going to be double-ended, and while the accompanying photograph is of a single-end, low-level loading car with only six axles, one can easily imagine that these will be very impressive on the streets and in the tunnels of San Francisco. We can only hope that a more pleasing paint than the present dark green will be chosen for the cars. The existing PCC car fleet, of which 25 cars (1016-1040) were built in 1952 (the last ever produced in North America) will be retired.

Vienna DuWag-type articulated No. 4407

-- John Bromley Collection

* The number of air-electric PCCs retained for service as of May 11th was 17, and the list published in the April NEWSLETTER, page 48, is correct. The four cars that were to be retained for stand-by service were instead retired, and all air cars are now operated out of Russell, and one or two are usually found in base service. The of the cars are operated on KINGSTON ROAD-McCaul, The bulk one or two generally finding their way onto CARLTON, KING or the KINGSTON ROAD TRIPPER. Basic assignments on KINGSTON ROAD throughout the day are generally handled by Class A6 (4300s), while a few 4625s and 4675s can be found occasionally in base and more often in rush hour.

Following are the assignments of PCCs as of May 11th:

RUSSELL DIVI	ISION	172	CARS
Class A2 Class A3	4199 4220 4226 4228 4245 4247 4253		1 6
Class A4 Class A5 Class A6	4261 4275 4290 4300 – 4369		$\begin{array}{c} 6 \\ 1 \\ 2 \\ 70 \end{array}$
Class All	4578 4586 4589 4593 4597 4599 4600 4625 - 4674		10 7 50
Class A12 RONCESVALLES	4675 - 4699 S DIVISION	174	25 CARS
Class A6 Class A7 Class A9 Class A13	4400 - 4489		30 90 8 46
ST. CLAIR DI	VISION	97	CARS
Class A8 Class A9 Class A14			50 17 30

A complete summary of all air-electric PCC cars ever operated by the TTC follows, indicating present status of each car:

STORE	DATD	ANFORT	H DIVI	SION	(For r	emoval	to Hi	llcres	t Shop	g)			- 3
4000	4009	4020		4045	4053		4072		4077	4083		4096	410
4104	4107	4110	4117	4119	4124	4130	4136	4152	4153	4154	4158	4173	417
4197	4219												
STORE	DATH	ILLCRE	ST SHO	PS (E	xcludi	ng car	s for	scrap)					- 7
4003	4007	4012	4013	4016	4017	4019	4024	4030	4033	4037	4038	4039	404
4044	4046	4047	4048		4054	4055	4057	4058	4064	4065	4066	4074	407
4080	4081	4084	4102	4106	4108	4112	4129	4132	4139	4165	4166	4168	416
4171	4175	4176	4178	4182	4187	4189	4191		4207	4208	4214	4215	423
4233	4234	4237	4241	4243	4246	4252	4259	4269	4271	4272	4281	4282	428
4285	4289	4291	4294	4296	4594	4601	*						
STORE	DATR	USSELL	DIVIS	ION									- 4
4202	4205	4210	4211	4212	4213	4218	4222	4223	4224	4225	4229	4231	423
4235	4236	4238	4239	4242	4249	4250	4254	4255	4258	4267	4268	4270	427
4280	4293	4577	4581	4582	4583	4584	4585	4590	4591	4592	4598		
STORE	DATR	ONCESV	ALLES	DIVISI	ON								- 1
4200	4201	4221	4251	4274	4278	4279	4299	4575	4576	4579	4580	4587	458
STORE	D AT S	T. CLA	IR DIV	ISION									- 6
4001	4004	4006	4008	4010	4011	4015	4018	4021	4022	4023	4025	4028	402
4031	4035	4040	4041	4043	4051	4059	4060	4061	4062	4067	4073	4076	407
4085	4089	4091	4097	4098	4105	4109	4111	4113	4118	4122	4125	4128	413
4135	4137	4138	4150	4156	4160	4161	4163	4170	4180	4188	4190	4198	420
4206	4217	4286	4295			,		55,000		1000			
PREVI	OUSLY	SHIPPE	D TO A	LEXAND	RIA, E	GYPT					15		- 6
4002	4005	4026	4027	4034	4036	4049	4056	4068	4069	4071	4082	4087	409
4093	4094	4095	4099	4101	4103	4114	4115	4116	4121	4126	4127	4131	413
4151	4155	4157	4162	4164	4167	4172	4174	4181	4183	4184	4185	4192	419
4195	4196	4209	4240	4244	4248	4256	4260	4262	4263	4264	4265	4266	427
4276	4283	4287	4288	4297	4298								
SCRAP	PED &	REMOVE	D FROM	TTC P	ROPERT	Y							- 1
4014	4052	4063	4086	4120	4179	4186	4227	4257	4292	4595	4596		
SCRAP	PED OR	PARTI	ALLY S	CRAPPE	D, AT	HILLCH	EST SH	OPS					-
4088		4159											
REMAT	NTNG F	OR SER	VICE.	AT PUS	SELL D	ivisio	N						- 1
	4220	4226		4245			4261	4275	4290	4578	4586	4589	459
4199													

Several of the 14 air cars retired at Roncesvalles were used in service on May 13^{\pm} and 14^{\pm} , and 4200, 4575 and 4580 were on DUNDAS on the 14^{\pm} . None ran after the PM rush hour on that day.

Compiled/JFB - MAY 20, 1968

Interiors of all cars except those at Roncesvalles have had their interior advertising cards removed, and in addition, several cars at St. Clair and Russell have been stripped of trolley poles, retreivers and large exterior advertising brackets, as follows:

At Russell: 4210, 4583, 4585, 4592 and 4598. At St. Clair: 4006, 4011, 4022, 4023, 4043, 4111, 4113, 4118, 4156, 4160, 4170, 4188, 4190, 4217,

It is expected that all cars stored at Russell will be so treated, as these will probably be the first cars to be shipped to Egypt when such activity again begins this summer. The Egyptian Government has recently stated a desire to purchase all stored cars that are fit for further service (approximately 200). Work is continuing at St. Clair as well, and for some reason 4018 is in the shop area on track 1. Further developments in this area will refer to the above listings.

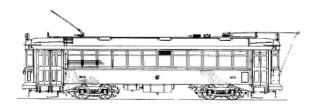
Reports of Israeli bomb-damage to several ex-TTC PCCs in Alexandria have been confirmed, but it is not known how many or which cars have been destroyed.

* The last cars on the routes abandoned in conjunction with the opening of the BLOOR-DANFORTH subway extensions were spread over May 10^{\pm} and 11^{\pm} . The last CARLTON NIGHT a.m. on May 10th (Friday morning). The last DUNDAS-City Hall car left Runnymede at 10.45 p.m. on May 10th, followed by the last DUNDAS-Broadview Station car, with a large number of railfans aboard, at 10.52 p.m. The early closing of the DUNDAS route north of Dundas West Station allowed TTC crews to ready the overhead for the JUNCTION trolley bus, and diesels took over until the next morning. The early closure resulted in the UCRS last night fantrip being detoured to other parts of the system.

The last BLOOR SHUTTLE car was 4712, while the last DANFORTH SHUTTLE from Luttrell was 4666. The UCRS special cars, 4199 and 4226, were the last cars over both routes.

On the last day, cars 4536 and 4575 were both assigned to BLOOR in the evening rush, with 4575 remaining out in service until 11.00 p.m., to the delight of the many service until 11.00 p.m., railfans in the area.

* The TTC is currently renewing rail on Queen Street between Shaw and Dovercourt, and minor repair is being carried out on College between Grace and Brock. The diamonds at Dundas and Bloor were removed within a few days of the passing of the last BLOOR car, although the N to W and E to S curves are still in place. It is very probable that E to S curves are still in place. It is very probable that C-2 will visit both the DANFORTH and BLOOR routes to remove several sections of specialwork and other rail. The rails on Danforth between Main and Coxwell must be maintained until the stored cars at Danforth are removed to Hillcrest. Several cars were towed out (including the Hillcrest. Several cars were towed out (includin 8 dead "Rotation" cars) during the week of May 6th.



Japanese - built Subway Maintenance cars RT-12 (Locomotive) and RT-13 (Crane) arrived in Toronto on May

motive) and KI-IS (Grane) arrived in Interior on May, aboard the Texas Maru, of Japanese registry.... Grinder W-28 was working on Broadview Avenue in early May, and is currently operating on College, out of Hillcrest Shops.....PCC cars out of service due to collisions include 4302, 4336, 4340 and 4723.....the PARKSIDE experimental bus service (NL 2/68, p.244) has been dropped.

PARKSIDE experimental bus service (NL 2/68, p.24) has R been dropped, thus assuring CARLTON service along N Howard Park Avenue for several more years.....both RT-10 and RT-7 (formerly W-27) entered service recently, and RT-5 has been placed in dead storage.....C-1, now owned by the OERHA, has been overhauled and repainted and is currently stored at St. Clair Division while some work is done on the front axle and wheels.....for those interested. the equipment assigned to the 40-JUNCTION trolley bus route appears to be confined to the T-4 (9085-9124) and T-6 (9140-9144) series.....weekend assignments on QUEEN, previously operated by a hodge-podge of MU and non-MU equipment, is now serviced only by MU cars, the exception being trippers to Greenwood Raceway, where almost any type of car can be found (except during rush