# newsletter

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Upper Canada Railway Society

# newsletter

Number 244 May, 1966

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**Editor** ——— **James A. Brown**

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Please address NEWSLETTER contributions to the Editor at 3 Bromley Cres., Bramalea, Ontario. No responsibility is assumed for loss or non-return of material.

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

## The Cover

The sun emerges from behind storm clouds for a brief interval to illuminate GTW F-units, strikebound at Port Huron, Mich., April 2nd, 1966: on left, 9024/11/22; on right 9014/09/19. See page 81. /C.W.R. Bowman

## Contributors to this Issue

Roger Boisvert, Percy Booth, John Bromley, Ray Corley, Harlan Creighton, Tom Henry, Bob McMann, Peter Meldrum, Tom Parkinson, Bob Sandusky, Dave Stalford.

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Distribution: Tony Kerr, George Meek, Bill Miller, George Pearce, John Thompson, Brian West.

# Readers' Exchange

FOR SALE: Traction items, employees' timetables, vintage RAILROAD, TRAINS magazines; send self-addressed envelope for list. Want negatives of TTC Witts and TRC's on Lansdowne hill, just above Davenport, also Birneys on Davenport. The Rev.Fr.C.S. Black, Box 924, Listowel, Ont.


# Coming Events

Regular meetings of the Society are held on the third Friday of each month (except July and August) at 587 Mt. Pleasant Road, Toronto, Ontario. 8.00 p.m.

| | |
|---|---|
| May 20th; (Fri) | The final UCRS meeting at Room 64, Royal Ontario Museum, Queens Park at Bloor St., Toronto; 8.00 p.m. Entertainment will feature an illustrated lecture on Australian railways by Graham Cropley assisted by John Ward. |
| May 27th; (Fri) | UCRS Hamilton Chapter regular meeting. Board Room, CNR James Street Station, Hamilton, Ont. 8.00 p.m. |
| June 1st; (Wed) | If demand warrants, a tour of CN's Toronto Yard will be arranged. Free tickets will be available at the May 20th meeting. |
| June 4th; (Sat) | IMPORTANT! The Spring Steam Excursion originally scheduled for this date has been CANCELLED. Confirmation of trip details with the railway was not completed in time to allow sufficient advertising time. Next trip is planned for Sept 24th. |
| June 17th; (Fri) | Regular meeting, to be held at the Society's new "head office", 587 Mt. Pleasant Road. (From St. Clair Subway station, take the eastbound ST. CLAIR car to Manor Road and walk south a few doors.) Doug Sheldrick will discuss Mexican railways with slide and movie accompaniment. |
| June 24th; (Fri) | UCRS Hamilton Chapter regular meeting. Board Room, CNR James Street Station, Hamilton, Ont. 8.00 p.m. |
| July 15th; (Fri) | A summer evening PCC excursion, complimentary to UCRS members. Non members will be charged the regular $2.00 fare. Full details next issue. |

### CHARLES MATTHEWS

Society members will be saddened to hear of the recent sudden death of Charles Matthews, a member and friend of UCRS for many years. His extensive collection of railroadiana and historical artifacts which was recently donated to the Ontario Centennial Centre of Science and Technology will be a lasting memorial to the man who made such a worthwhile and lasting contribution to his day and generation.


A new fast Montreal-Toronto train, a bilingual CPR timetable, an answer to the rail passenger's biggest complaint and a new CPR train service -- These are some of the highlights of the major railways' summer schedules, introduced April 24th.

Canadian National timetables are now showing schedules in Daylight Saving Time (where effective) in an effort to eliminate the annual summer confusion that inevitably occurred when travellers attempted to translate their fast time to railway standard. For some time, CN commuter schedules and Newfoundland and P.E.I. timetables have been printed in Daylight time. However, Canadian Pacific has retained standard time in its summer schedules so that, at least at points served by both lines, the situation now appears more confused than before. In Toronto Union Station, for example, the traveller now finds two clocks where one used to be, one reading "Canadian National -- Daylight Time", the other "Canadian Pacific -- Standard Time"! (As a footnote, the Pacific Great Eastern and the Ontario Northland have published their summer timetables in Daylight Saving Time for a number of years.)

For the first time, CP's timetable is fully bilingual, following the practice adopted by Canadian National four years ago.

CN

Once inside CN's striking "Rapido" timetable cover, the passenger student will encounter a host of unfamiliar train numbers, created to facilitate improved accounting procedures and a proposed computerized reservation system. (See April NEWSLETTER, page 61)

The transcontinental service is basically unchanged from last summer, with separate sections of the "Super Continental" from Montreal and Toronto to the west during the mid-June to mid-September period. The westbound "Panorama" continues its unique daylight mountains-to-tidewater journey from Jasper to Vancouver, appropriately complimented by a full-length dome. Transcontinental mail and express is handled on trains 201 and 202 which carry passengers between Winnipeg-Saskatoon and Saskatoon-Montreal respectively; Toronto connection is provided by non-passenger trains 203 and 204, having Toronto departure and arrival times of 12.15 and 7.50 a.m., EDT, respectively. To compensate for the withdrawal of local westbound service formerly provided by No.103, the Capreol-Foleyet mixed now runs daily, and a new tri-weekly mixed operates between Foleyet and Hornepayne. The weekly South Parry-Capreol mixed appears again in the employees' timecard but is not shown in public schedules.

In the Maritimes, several service cuts have appeared. Gone is the Edmunston-Levis twice-weekly train as well as one of the Moncton-St. John Railiners. One of the two Railiner runs which formerly operated from Sydney to Halifax now runs to Truro only, connecting with the eastbound "Ocean" (the "Limited" portion of the name has disappeared). In Newfoundland, the westbound "Caribou" has a new schedule for the period from June 5th to September 24th.

The luxurious Montreal-Quebec "Champlain" now covers the distance in 2 hr. 59 mins. -- some 16 minutes faster than its inception schedule of two years ago. Also noteworthy is the increase in running time of the morning Richmond-Quebec Railiner service, between Richmond and Danville. Last winter's schedules allowed not 16 minutes as carded now, but six minutes for the 12.2 mile run; apparently the timing was a mite demanding!

The weekly Montreal-Portland train is back for another season, to handle holiday traffic into Vermont, New Hampshire and Maine.

In the Montreal-Toronto service, trains 18-19 and 31-32 no longer appear since they are now given over to express-mail traffic only. The usual accelerated summer daytime train, now called the "Premier", enters Montreal-Toronto service on a 5¾-hour schedule on June 17th; a single passenger stop, at Dorval eastbound, will be made. (Considerable track and signal work will be under way this summer on this route, and engineering forces have agreed to the high-speed passage of the "Rapido" only past the work areas, hence the slower timing of the "Premier".) It is worth noting that the Ottawa-Toronto overnight service now bears the same name as a crack afternoon flyer which linked the two cities in 1931; the original "Capital" covered the distance (via Forfar) in 5¾ hours -- faster than all but one of today's trains!

A number of new names have appeared in the Toronto-Windsor-Sarnia service, retiring the familiar names "La Salle" and "Inter-City Limited". The Toronto-Windsor trains are now named "Tecumseh", "Erie" and "St. Clair"; the latter two trains now depart Toronto at 5.00 p.m. and 7.05 p.m. respectively, both considerably later then their predecessors, Nos. 75 and 37. The Toronto-Sarnia trains are called "Mohawk", "Huron", "Maple Leaf" and "International", the latter two operating through to Chicago. The "Huron", formerly train 81, has reverted to last summer's schedule, leaving Toronto at 4.10 p.m., and operating via Stratford. The "Mohawk", formerly train 5, now departs Toronto at 6.40 p.m., with the Bruce Peninsula RDC's in tow (to Guelph). Despite rumblings to the contrary, the Stratford-Goderich and Palmerston-Owen Sound RDC's still operate; southbound RDC departures from Owen Sound, Kincardine and Southampton are bright and early -- around 5.00 a.m.

Elsewhere, CN has made a number of adjustments in arrival and departure times. A conventional train has appeared on the Prince-Rupert-Prince George run, operating daily from mid-June to mid-September, tri-weekly otherwise.

## Canadian Pacific

For the first time in living memory, CP's summer transcontinental service consists of a single daily train. However, with the demise of the "Dominion", a number of adjustments have been made to compensate. The evening Montreal-Ottawa train 235 is back to its 5.00 p.m. departure with No. 232 making the eastbound run in the morning; both trains carry a dome car. Additional stops have lenghtened the schedule of the "Canadian" to the extent that Toronto-Detroit and Toronto-Owen Sound trains are now scheduled more than an hour later to permit connections. The Sudbury-Soo service was rescheduled to connect with the "Canadian" and, by BTC order, the Sudbury-White River RDC now operates daily instead of tri-weekly.

Montreal-Megantic day trains 202-203 have disappeared, with Sherbrooke-Megantic local service provided by an extension of trains 206-201. Also gone is the summer sleeping car service between St. Paul and Vancouver.

An unexpected addition to CP's passenger mileage may be found in the railway's Ontario mixed train circular. The new mixed runs six days a week between Mattawa,Ont., and Angliers, Que.; since 1960, the Mattawa-Temiscaming leg has been freight-only, while the recent Temiscaming-Angliers mixed service was tri-weekly.

/Harlan Creighton

# UCRS News

April Fools Day 1966 was a wet, cold and blustery day in Toronto as 14 UCRS members (including the president and one director) braved the elements and appeared at Castle Frank Station to try their luck as contestants in a Transit Rally.

The contestants were dispatched in teams of two and given instructions for four tasks that they were to perform. The tasks took them over the new subway system, a carline (DUNDAS) and three different bus routes, and also included a collection of transfers from all "wye" stations. The finishers gathered afterward for refreshment and tallying of results which showed winners as follows: 1st, Don Watson and Dick Organ; 2nd, Brian West and George Meek; 3rd, Dave Thompson and Steve Munroe.

Our thanks to the following who acted as marshals for the various tasks: Charlie Bridges, Dave Stalford,Terry Thompson and Bill Weighill. Thanks too to George Oliver for his help in planning the rally and reproducing the instruction sheets.

/Bob McMann

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## On the Shelf...

THE INTERCITY ELECTRIC RAILWAY INDUSTRY IN CANADA by John F. Due. Published by the University of Toronto Press, Toronto 5, Ont., 118 pages, $3.95.

In the past, the student of electric traction has encountered a dearth of publications relating to the field of Canadian electric railways. In the United States there have been a large number of publications relating to the histories of individual companies and to the industry as a whole, the most notable being The Electric Interurban Railways in America by George W. Hilton and John F. Due (Stanford, 1960). Now, Professor Due has written a book on Canadian intercity electric railways which may be regarded as a companion piece to his earlier work.

Perhaps because the industry in Canada was small in size compared to its American counterpart, so is the book on the small side. However, what it may lack in size is made up for in the material presented -- where else can one find between two covers a general history of the industry as it existed, plus short histories of the individual companies for Canada? The book is divided into two parts, the first dealing with the development characteristics, financial situation and decline of the industry, and the second presenting short histories (including maps from various sources) of each individual company, some 25 in all. There are four pages of photographs, the credits belonging to some very well known UCRS members. Also worthy of note is a chapter on the projected Hydro Radial system.

For the moderate price, this book is certainly a worthy addition to any collection of electric railway literature. I would recommend it to all enthusiasts who have an interest in Canadian railways, be it steam, diesel or electric.

/Robert D. McMann

# Railway News and Comment

## CANADIAN NATIONAL DOES WELL IN 1965

CN's net operating profit in 1965 on railway operations alone was $9.9-million, as compared with $7.4-million in 1964, according to CN's annual report for 1965, tabled recently in the Commons. The Crown-owned company had a deficit last year of $33.4-million and is budgeting for a 1966 deficit of $25-million; however, without its heavy debt burden, stemming in part from amalgamation of financially troubled lines in the 1920's, CN would have shown a modest overall profit. (Gross 1965 revenues from all sources were $914.7-million, and there was a net profit of $28.5-million before debt interest.) CN president Donald Gordon again urged parliamentary action to bring the company's debt burden into reasonable proportions; however, because of agressive sales, modern facilities and equipment and a booming economy, CN's 1965 deficit was 13.7% smaller than in 1964 and less than half that of 1960. Mr. Gordon warned that CN is facing higher wage demands and increased costs for its pension plan and other expenses.

In 1965, CN moved the greatest volume of freight in its history, 101.1-billion gross ton miles, at an average of 2,582 gross tons per freight train. Passenger revenues rose 12.5% to $58.3-million; no indication was given of actual operating expenses of passenger services.

## FOUR-DAY STRIKE SNARLS EIGHT U.S. LINES

An illegal strike by the Brotherhood of Locomotive Firemen and Enginemen at 12.01 a.m. March 31st crippled operations of eight U.S. railroads for four days, throwing 200,000 rail and industrial workers off their jobs in 38 states. The eight lines, IC, UP, MP (and its subsidiary T&P), CofG, SAL, B&M, PRR and GTW, estimated their losses at more than $30-million.

The strike capped a seven-year dispute over the elimination of some 18,000 firemen's jobs under a two-year federal arbitration ruling which expired at midnight, March 30th. The union maintained that in the absence of a new agreement, the jobs eliminated under the terms of the arbitration should be reinstated once the ruling expired, although its specific complaint was the alleged failure of the railroads to set up apprenticeship programs which would teach new jobs to the displaced firemen.

CN's New England freight was diverted from the B&M and operated via New London, Conn. Traffic for the GTW accumulated in CN's Sarnia yard awaiting settlement of the strike, while Toronto-Chicago passenger service terminated at Sarnia; GTW locomotives stranded in Canada remained idle during the strike period.

## TRACKWORK, SIGNALLING FOR CN'S KINGSTON SUB.

This summer, CN's Kingston Subdivision (created at the latest timetable change from the old Oshawa, Gananoque and Cornwall Subdivisions, and covering the entire Toronto-Montreal double-track line) will be the scene of extensive engineering work. The work involves the installation of CTC signalling from Dorval to Coteau, Que., and from Pickering to Bowmanville, Ont., together with reballasting, the construction of passing tracks and crossovers and the lengthening and superelevating of numerous curves. The trackwork is expected to be completed in the fall and the signalling in the spring of 1967.

Increasing frequency and length of both passenger and freight trains in recent years is given as the reason for the work. Summer passenger schedules have been lengthened slightly while the work is being carried out.

Although no official statement has been made, this work could also be considered as paving the way for the gas turbine "super trains" reported as being under consideration by the Cabinet in March. (March NL, page 42)

## TORONTO HOSTS TRANSPORT SHOW

The latest in railway equipment formed a sizeable part of Canada's largest industrial show, held at Toronto's Canadian National Exhibition on May 2-5. Over 400 exhibitors participated in the combined Transportation, Materials Handling and Mining & Metallurgy show which occupied over 11 acres of exhibit space.

Some of the railway highlights of the show were the world's largest (50,000 U.S. gallons) tank car, concrete ties, elastic fastening systems for use on timber ties, flash butt rail welding plant, a new truck-mounted, air-operated disc brake for freight cars, demonstration of a new cushioning device and a display of transportation seating.

CN-CP Telecommunications demonstrated the value of fast communication to shippers, while CN's exhibit stressed "physical distribution", demonstrating every aspect of material handling, packaging, plant location, transportation, storage, warehousing, order processing, inventory and cost control. New York Central demonstrated its Flexi-Flo system for transferring dry bulk commodities to and from rail cars.

## PILOT COMMUTER STATION FOR PORT UNION

The first station for the new 52-mile Toronto Lakeshore Commuter line will be completed early in the summer half a mile east of the existing CN station at Port Union, Ont. The new station will act as a pilot model for the remaining stations along the line to be built by the provincial government.

Access to the ticket control centre will be from an adjacent parking lot, with separate entrances to the passenger platforms on the north and south sides. Shelters will be incorporated on the platforms as protection from inclement weather.

WORTH NOTING:

-Ontario Northland has called for tenders for the modernization of stations along its main line in line with its recently-announced image revamp program.

-Ex-CN 2-6-0 No. 89 (now at Steamtown, U.S.A.) was recently used on a special between Hartford and Springfield, Mass., to mark the Centennial of the Hartford Steam Boiler Inspection and Insurance Company.

-Thousand Islands Railway No. 500 will be officially presented to the town of Gananoque on June 4th.

-CN needs telegraphers and is establishing "brass pounders" training programs to recruit the necessary men.

-CN London Area officials recently toured the Area in a special train, meeting business and civic dignitaries en route; CN's "Year In Review" film was shown in coach 3224, specially fitted out for the purpose.

-One of the world's largest and most modern express freight terminals, a $7-million complex, is now under construction at CN's Toronto Yard.

-Early in April, after just five months of operation, CN's Montreal-Toronto "Rapido" carried its 100,000th passenger.

-CP orders for new equipment in 1966 will "match those of 1965", when $102.6-million was spent on more than 2,700 freight cars and 48 rebuilt diesel locomotives.

-To eliminate potential confusion at Brockville, CN is experimenting with through coaches from (and to) Ottawa which will be marshalled with the "Lakeshore" at Brockville, eliminating the change of train formerly required by Toronto-bound passengers.

-The Commons Transportation Committee is being taken to task for "giving itself a holiday" by riding the CPR's "Canadian"; the worth of the junket to the already overburdened taxpayer is being seriously questioned.

-Rail grain movement will continue at a high rate in 1966 with new wheat sales contracts being announced by the government.

-CN's elderly (48 years) carferry "Canora" will be withdrawan from service this month; the ship has been operating between Port Mann (later Tilbury Island) on the Fraser River and Victoria. Service will be maintained by railway barges.

-In spite of the shaky future of its B&M and NH connections, Central Vermont has been taken to task for its plans to drop passenger service south of the U.S. border.

-CPR, CNR and the City of Toronto are each contributing $3000 for a study of air rights development possibilities south of Front Street in Toronto; the survey may be complete by the end of July.

-CN has not yet decided whether to prosecute University of Guelph students who perpetrated a flying saucer hoax by attaching lighted CN fusees to gas-filled plastic bags and releasing them over the city of Guelph.

-It has been suggested that the Quebec government approach CN regarding the possibility of doubling the Quebec-Montreal service provided by "Le Champlain", during Expo 67.

-PGE has allowed a Vancouver publicist to paint a PGE boxcar with advertising for B.C.'s Centennial year. Now CN is being approached to surrender a car or two. (Note: advertising is prohibited on the rolling stock of federally chartered railways)

-Following the washout of a bridge at Smithers, B.C., CN provided a two-car RDC train to convey school children to and from school.

-Quebec Premier Lesage has been asked by the Rapid Transit Action Committee to intercede to resolve the impasse which has developed over the use of CN's suburban Montreal Mount Royal tunnel line as a rapid transit facility. CN has agreed to cooperate but difficulties between Montreal and the northern municipalities are blocking progress on the plan.

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COMMUTER SERVICE WILL NOW SERVE HAMILTON

In an unexpected about-face (April NL, page 61) Ontario Highways Minister Charles MacNaughton announced in early May that the new Lakeshore Commuter service would be extended to serve Hamilton, with possibly only a single daily train, operating to CN's James St. station. In announcing the "experiment", Mr. MacNaughton bowed to demands of Hamilton's mayor Copps that the city be included in the commuter scheme. CN has petitioned the BTC to discontinue the two commuter trains that it presently operates between Hamilton and Toronto.

MORE CTC FOR CANADIAN PACIFIC

Canadian Pacific has ordered CTC signal equipment from Union Switch and Signal division of WABCO for a 500-mile installation from Cartier to Current River (Port Arthur), Ont. The entire distance will be controlled from a 21-foot CTC machine located at Schreiber, Ont.

## PRR-NYC MERGER APPROVED BY ICC

The Interstate Commerce Commission has unanimously approved the proposed merger of the New York Central and Pennsylvania railroads, giving the green light to the creation of a $4.2-billion, 41,000 mile railroad, the Pennsylvania New York Central Transportation Company. Probable effective date of the consolidation is June 1, 1966.

Under the conditions of the merger, Penn-Central must take over the passenger and freight operations of the bankrupt New Haven, and must indemnify the Erie-Lackawanna, Delaware and Hudson and Boston and Maine against adverse effect of the merger on their revenues. If the Lehigh Valley is not ultimately included in mergers with either N&W or C&O, it must be included in Penn-Central. The Pittsburgh and Lake Erie and New York, Susquehanna and Western will be included in the merged company. All employment reductions brought about by the merger will be by attrition.

Eight years after the consummation of the merger, savings are expected to be on an $80-million annual level.

The new system will take over the present Canadian operations of the NYC from Windsor to Fort Erie and Niagara Falls, and by trackage rights, into Montreal.

In other merger news, the ICC denied the application of the New Haven to discontinue its remaining passenger service, and by a narrow margin turned down a merger creating a 25,000 mile system from the GN, NP, CB&Q and SP&S on the grounds that the drastic lessening of competition and the adverse effects on employees would outweigh the benefits that might be derived.

## SINCLAIR ELECTED CPR PRESIDENT

Ian D. Sinclair, formerly vice president of the Canadian Pacific Railway, has been elected president, succeeding the late R.A. Emerson. Mr. Sinclair is succeeded as vice president of the railway, a post primarily concerned with the operating and traffic departments, by S.M. Gossage. Both Mr. Sinclair and Mr. Gossage have had broad experience in labour and personnel matters with CP.

A lawyer by profession, Mr. Sinclair has been a key figure for the CPR in reorienting the company's policies and programs to meet changing transportation concepts, and has been a leading CPR spokesman before Royal Commissions, Parliamentary committees and other public groups.

## CN THOROLD GRADE BYPASSED

Canadian National recently installed a new connection between the Grimsby and Welland subdivisions at Clifton, Ont., 2½ miles west of Niagara Falls, to bypass what has long been an operating bottleneck at Thorold. In the past, freight traffic from Toronto and Hamilton destined for Fort Erie swung off the main line Grimsby sub. at Merritton and almost immediately encountered a stiff climb up the Niagara Escarpment to Port Robinson. The new route via Clifton is about nine miles longer but will permit an increase of about 90% in drag tonnage capacity; because less power is required, the number of diesels has been reduced by about 100 unit trips per month.

The new connection is fully interlocked, and a new building has been constructed to house the Clifton operator.

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# *World Railway News*

...Edited by Peter Meldrum

* Japanese National Railways has hired 470 more Honorable Pushers to help Tokyo commuters into crowded trains at the height of the winter "crush hour". The new pushers bring to 2,500 the number stationed at key Tokyo rail points to help move nearly 4-million commuters daily.

Passenger coaches operating through the central Tokyo area have a listed capacity of 160, yet often carry as many as 350. Recently, trains have been stalled or tilted helplessly against a curved platform by the weight of the passenger load. More than a million passengers daily board or leave trains at Shinjuku and Tokyo Central, two of the capital's biggest stations.

Worth noting is the fact that CN president Donald Gordon began a week-long inspection tour of JNR by visiting Tokyo Central in mid-April. Optimism?

* A new British Rail service inaugurated April 18th makes train travel between London and Liverpool as speedy as flying. On its maiden run, the electric train covered the 193 miles in two hours, 52 minutes, for an average speed of 68 m.p.h. which included four stops -- top speed approached 100 m.p.h.

BR has cut some fares by as much as 40% for one-day return trips in a bid to lure travellers back to the trains.

* While conventional steam locomotives are rare enough today, those designed for combined rack and adhesion working are almost unheard of. However, their number has been reinforced by a batch of 3'-6" Giesl ejector-equipped engines recently delivered to the Indonesian State Railways by Maschinefabrik Esslingen. The engines are compounds, with four cylinders of equal size; for conventional adhesion working, simple expansion only is used.

* The South African Railways have placed an order with AEI and English Electric for 225 electric locomotives valued at $30-million. Many components of these units will be built by South African subsidiary firms.

# Equipment Notes...

## MORE CANADIAN NATIONAL CAR ORDERS

CN has increased the order for newsprint cars from National Steel Car, reported on page 63 of last month's issue, by an additional 200 cars; the 50½-foot cars will be equipped with cushion underframes.

Delivery will begin in August of 25 90-ton covered gondola cars from International Equipment Co., Ltd. The cushion underframe cars will each have eight compartments for transporting steel cable.

Grand Trunk Western has placed an order with Pullman-Standard for 202 70-ton, 60'-9" box cars. Delvieries are to be completed in December.

## CANADIAN PACIFIC TRADE-INS SUMMARIZED

Following is a summary of builders' data on Canadian Pacific's fleet of DRF-class locomotives, including units traded in, where applicable:

### MONTREAL LOCOMOTIVE WORKS

| ROAD NO. | CPR CLASS | MODEL | SERIAL NO. | DATE DEL'D | ROAD NO. (Trade in) | CPR CLASS | MODEL | SERIAL NO. | DATE TRADED IN | |
|---|---|---|---|---|---|---|---|---|---|---|
| 4200 | DRF-24a | C-424 | 84413 | 4/29/63 | 8474 | DRS-16c | RS-10 | 81063 | | A |
| | | | (4200 formerly 8300, class DRS-24f; renumbered 4/13/65) | | | | | | | |
| 4201 | DRF-24b | C-424 | 84839 | 3/19/65 | 4098 | DFA-16f | FPA-2 | 79174 | 3/ 2/65 | B |
| 4202 | | | 84840 | 3/19/65 | 8469 | DRS-16c | RS-10 | 81058 | 3/ 5/65 | C |
| 4203 | | | 41 | 3/31/65 | 4001 | DFA-15a | FA-1 | 76853 | 3/24/65 | |
| 4204 | | | 42 | 3/31/65 | 4026 | DFA-15b | FA-1 | 77321 | 3/26/65 | |
| 4205 | | | 43 | 4/21/65 | 4043 | DFA-16a | FA-2 | 77715 | 4/ 7/65 | |
| 4206 | | | 44 | 4/21/65 | 4048 | DFA-16a | FA-2 | 77718 | 4/ 7/65 | |
| 4207 | | | 45 | 5/ 7/65 | 4027 | DFA-15b | FA-1 | 77322 | 4/19/65 | |
| 4208 | | | 46 | 5/ 7/65 | 4419 | DFB-15b | FB-1 | 77340 | 4/19/65 | |
| 4209 | | | 47 | 6/30/65 | 4411 | DFB-15b | FB-1 | 77332 | 4/27/65 | |
| 4210 | | | 48 | 6/30/65 | 4422 | DFB-15b | FB-1 | 77343 | 4/26/65 | |
| 4211 | | | 49 | 7/13/65 | 4008 | DFA-15b | FA-1 | 77303 | 5/18/65 | |
| 4212 | | | 84850 | 7/13/65 | 4009 | DFA-15b | FA-1 | 77304 | 5/14/65 | |
| 4213 | | | 51 | 7/21/65 | 4017 | DFA-15b | FA-1 | 77312 | 6/ 7/65 | |
| 4214 | | | 52 | 7/21/65 | 4413 | DFB-15b | FB-1 | 77334 | 6/ 8/65 | |
| 4215 | | | 53 | 7/28/65 | 4018 | DFA-15b | FA-1 | 77313 | 6/18/65 | |
| 4216 | | | 54 | 7/28/65 | 4005 | DFA-15a | FA-1 | 76857 | 6/28/65 | |
| 4217 | | | 55 | 10/ 5/65 | 8405 | DRS-15b | RS-2 | 76100 | 6/28/65 | |
| 4218 | | | 56 | 10/ 5/65 | 4402 | DFB-15a | FB-1 | 76880 | 7/ 8/65 | |
| 4219 | | | 57 | 10/ 8/65 | 8408 | DRS-15b | RS-2 | 76103 | 7/12/65 | |
| 4220 | | | 58 | 10/13/65 | 4023 | DFA-15b | FA-1 | 77318 | 7/28/65 | |
| 4221 | | | 59 | 10/19/65 | 4044 | DFA-16a | FA-2 | 77714 | 8/ 4/65 | |
| 4222 | | | 84860 | 10/21/65 | 4420 | DFB-15b | FB-1 | 77341 | 8/ 5/65 | |
| 4223 | | | 61 | 10/27/65 | 4024 | DFA-15b | FA-1 | 77319 | 8/13/65 | |
| 4224 | | | 62 | 11/ 1/65 | 4043 | DFA-16a | FA-2 | 77713 | 8/14/65 | |
| 4225 | | | 63 | 11/ 8/65 | 4003 | DFA-15a | FA-1 | 76855 | 8/18/65 | |
| 4226 | | | 64 | 11/10/65 | 4021 | DFA-15b | FA-1 | 77316 | 8/19/65 | |
| 4227 | | | 65 | 11/16/65 | 4000 | DFA-15a | FA-1 | 76852 | 8/24/65 | |
| 4228 | | | 66 | 11/19/65 | 4051 | DFA-16a | FA-2 | 77721 | 8/25/65 | |
| 4229 | | | 67 | 11/26/65 | 4400 | DFB-15a | FB-1 | 76878 | 9/ 1/65 | |
| 4230 | | | 68 | 11/30/65 | 4423 | DFB-15b | FB-1 | 77344 | 9/ 8/65 | |
| 4231 | | | 69 | 12/ 6/65 | 4401 | DFB-15a | FB-1 | 76879 | 9/ 8/65 | |
| 4232 | DRF-24b | C-424 | 84870 | 12/ 9/65 | 4013 | DFA-15b | FA-1 | 77308 | 10/ 6/65 | |
| 4233 | DRF-24c | C-424 | M3436-1 | 12/16/65 | 4012 | DFA-15b | FA-1 | 77307 | 10/13/65 | |
| 4234 | | | -2 | 12/20/65 | 4418 | DFB-15b | FB-1 | 77339 | 10/20/65 | |
| 4235 | | | -3 | 12/22/65 | 4007 | DFA-15a | FA-1 | 76859 | 10/26/65 | |
| 4236 | | | -4 | 12/23/65 | 4002 | DFA-15a | FA-1 | 76854 | 10/26/65 | |
| 4237 | | | -5 | 12/29/65 | 4403 | DFB-15a | FB-1 | 76881 | 10/27/65 | |
| 4238 | | | -6 | 12/31/65 | 4011 | DFA-15b | FA-1 | 77306 | 11/ 6/65 | |
| 4239 | | | -7 | 1/ 5/66 | 8461 | DRS-16b | RS-3 | 81050 | 11/ 6/65 | |
| 4240 | | | -8 | 1/13/66 | 4417 | DFB-15b | FB-1 | 77338 | 11/12/65 | |
| 4241 | | | -9 | 1/18/66 | 4010 | DFA-15b | FA-1 | 77305 | 11/16/65 | |
| 4242 | | | -10 | 1/26/66 | 4421 | DFB-15b | FB-1 | 77342 | 11/18/65 | |
| 4243 | | | -11 | 1/28/66 | 4006 | DFA-15a | FA-1 | 76858 | 11/18/65 | |
| 4244 | | | -12 | 2/ 3/66 | 4415 | DFB-15b | FB-1 | 77336 | 12/31/65 | |
| 4245 | | | -13 | 2/10/66 | 4412 | DFB-15b | FB-1 | 77333 | 1/ 7/66 | |
| 4246 | | | -14 | 2/16/66 | 4414 | DFB-15b | FB-1 | 77335 | 1/16/66 | |
| 4247 | | | -15 | 2/23/66 | 4004 | DFA-15a | FA-1 | 76856 | 1/19/66 | |
| 4248 | | | -16 | 2/25/66 | 4022 | DFA-15b | FA-1 | 77317 | 2/ 2/66 | |
| 4249 | DRF-24d | C-424 | M3436-17 | 3/ 7/66 | 4014 | DFA-15b | FA-1 | 77309 | 2/ 3/66 | D |
| 4250 | | | -18 | 3/11/66 | 4046 | DFA-16a | FA-2 | | 2/14/66 | |

NOTES: A - 8474 wrecked on CPR No. 4 at St. Eugene, Que., January 7, 1962.
B - 4098 damaged by interior fire at Cherrywood, Ont., Feb.5, 1965.
C - 8469 wrecked on train 907 at Boundary, Que., February 3, 1965.
D - Chassis of 4014 bought back from MLW and used with parts of 8557 (electrical fire, 1/28/66) to build "new" road A-unit, given road number 4016 (2nd), class DFA-15b, to replace 8557. 4016 outshopped from Angus March 14, 1966. (First 4016 wrecked and rebuilt as 8824 in 1957.)


Two interesting new types of equipment have appeared on CPR rails in the past few months. New additions to the stock car fleet, ABOVE, are converted boxcars. /Tom Henry
The bay-window van, BELOW, is a radical departure from CP's conventional "domed" cabooses. /Percy Booth


### GENERAL MOTORS DIESEL LIMITED

| ROAD NO. | CPR CLASS | MODEL | SERIAL NO. | DATE DEL'D | ROAD NO. (Trade in) | CPR CLASS | MODEL | SERIAL NO. | DATE RE-NUMBERED | |
|---|---|---|---|---|---|---|---|---|---|---|
| 5000 | DRF-22a | GP-30 | A2006 | 3/30/63 | 1902 | DFB-17a | F9B | A602 | 4/12/65 | E |
| 5001 | | | A2007 | 3/30/63 | 1910 | DFB-15a | F7B | A248 | 4/25/65 | E |
| | | | (5000-5001 formerly 8200-8201, class DRS-22a) | | | | | | | |
| 5002 | DRF-25a | GP-35 | A2035 | 5/ 9/64 | NEW | | | | 4/25/65 | |
| 5003 | | | 6 | 5/ 9/64 | NEW | | | | 4/10/65 | |
| 5004 | | | 7 | 5/19/64 | NEW | | | | 4/22/65 | |
| 5005 | | | 8 | 5/19/64 | NEW | | | | 4/26/65 | |
| 5006 | | | 9 | 5/29/64 | NEW | | | | 4/13/65 | |
| 5007 | | | A2040 | 5/29/64 | NEW | | | | 4/22/65 | |
| 5008 | | | 1 | 5/30/64 | NEW | | | | 4/14/65 | |
| 5009 | | | 2 | 5/30/64 | NEW | | | | 4/16/65 | |
| 5010 | | | 3 | 6/11/64 | NEW | | | | 4/ 9/65 | |
| 5011 | | | 4 | 6/11/64 | NEW | | | | 4/14/65 | |
| 5012 | | | 5 | 6/19/64 | NEW | | | | 4/23/65 | |
| 5013 | | | A2046 | 6/19/64 | NEW | | | | 4/24/65 | |
| | | | (5002-5013 formerly 8202-8213, class DRS-25a) | | | | | | | |
| | | | | | | | | | DATE TRADED IN | |
| 5014 | DRF-25b | GP-35 | A2079 | 5/ 7/65 | 4425 | DFB-15c | F7B | A251 | 2/28/65 | |
| 5015 | | | A2080 | 5/ 7/65 | 8413 | DRS-15d | GP-7 | A500 | 3/31/65 | |
| 5016 | | | 1 | 5/29/65 | 8420 | DRS-15d | GP-7 | A507 | 3/31/65 | |
| 5017 | | | 2 | 5/29/65 | 8425 | DRS-15d | GP-7 | A512 | 4/30/65 | |
| 5018 | | | 3 | 6/16/65 | 4426 | DFB-15c | F7B | A252 | 5/ 3/65 | |
| 5019 | | | 4 | 6/16/65 | 4028 | DFA-15c | FP-7A | A100 | 5/27/65 | F |
| 5020 | | | 5 | 7/21/65 | 4429 | DFB-15c | F7B | A255 | 5/27/65 | |
| 5021 | | | 6 | 7/21/65 | 4428 | DFB-15c | F7B | A254 | 7/ 2/65 | |
| 5022 | | | 7 | 8/26/65 | 4430 | DFB-15c | F7B | A256 | 7/ 4/65 | |
| 5023 | | | A2088 | 8/26/65 | 4032 | DFA-15c | FP-7A | A104 | 8/ 5/65 | |
| 5024 | DRF-25c | GP-35 | A2123 | 1/31/66 | 1401 | DFA-15a | FP-7A | A521 | 10/ 7/65 | G |
| 5025 | | | 4 | 1/31/66 | 1906 | DFB-17a | F9B | A606 | 10/ 7/65 | G |

NOTES: E - 1902, 1910 wrecked on CPR No. 4 at St. Eugene, Que., Jan 7, 1962.
F - 4028 damaged by fire; replaced 4431 in rebuild program
G - 1401, 1906 wrecked on CPR No. 2 at Terrace Bay, Ont., Apr 17, 1965.

## FREIGHT CARS TO LOSE RUNNING BOARDS

Formal approval by the BTC is expected soon on a motion by the Association of American Railroads to do away with the running boards on the tops of railway freight cars; ICC approval of the motion has already been granted.

Box car ends will be fitted with an 8-inch wide by 60-inch long platform just above the drawbar, with a handrail 4 or 5 feet above the platform. The hand brake wheel will be relocated from the top of the car to a position within easy reach of a brakeman standing on the platform.

The increasing use of cushioned underframes with sliding sills is one of the factors bringing about this change; the space between two cars could change as much as 40 inches, according to the position of the sills. Another factor rendering running boards obsolete is the ever increasing variety of specialized rolling stock entering interchange service, including high-cube boxcars, tri-level auto racks, bulkhead flatcars, and certain types of gondola, covered hopper and tank cars, none of which have running boards.

All existing cars and those placed in service before October 1, 1966, will be altered by April 1, 1974, while those delivered after October 1, 1966 will be built to the new specifications.

## CN TO GET DOUBLE USE FROM PASSENGER CARS

With the advent of the "Premier" on June 17th, CN's "Rapido" consists will be doing double duty. It is planned that the morning "Premier" in each direction will become the afternoon "Rapido" for the return trip, thus doubling the daily mileage of the equipment.

Work is progressing on the addition of public address equipment to the equipment of the afternoon "Bonaventure". The "Rapido" has had p.a. for announcements since its inception, and tape recorders for background music are expected to be installed soon.

ABOVE: More than 2/3 of the trackage for "Expo Express" has been laid. This view shows the western end of the line at the Mackay Pier entrance to Expo.
/Bob Sandusky

## CN BUILDS BI-LEVELS FOR NEWFOUNDLAND

Canadian National plans to convert 20 surplus ballast cars to bi-level auto rack cars for service on CN's narrow gauge Newfoundland lines. The rebuilt cars will each carry six standard autos as compared with two for a standard flat car; the conversions will release 60 standard flats for other traffic.

Conversion work will be done by railway crews at St. Johns. This is believed to be the first time that the auto-rack idea has been applied to narrow gauge operations.

BELOW: Displaying the relocated headlight characteristic of its class, brand-new CN C-424 unit 3202 idles at Toronto Yard. To date, four of the new units have been delivered.
/Tom Henry


BELOW: Still at work north of the border is B&M Alco switcher 1270, captured here on the Canadian Pacific at Agincourt, Ont.
/P.A. Meldrum

# Greenwood


ABOVE: The arrangement of Greenwood is clearly shown in this aerial view. Visible are (1) Portal to the B-D Subway, (2) the general Repair Shops, (3) Car Shop, (4) Way and Structures building, (5) Heating Plant and (6) storage yard for 250 subway cars. Greenwood Avenue and CN's Toronto-Montreal main line adjoin the property.

/TTC

BELOW: Greenwood's car washer, left, and wheel truing lathes, right, are just two examples of the degree to which this new facility has been mechanized. The wheel lathes can machine and true a complete set of wheels in one hour — up to eight times faster than by grinding.

/TTC

# Greenwood shops

by John Bromley

The new Greenwood car shop is now in full operation. For several months, the TTC has been stepping up the tempo at the facility, although the eight-mile BLOOR-DANFORTH subway along which it is located just opened for service on February 26th, 1966. The TTC has been doing some car work, including the assembly of 162 subway cars and trucks, at the site since May, 1965.

The planning for the heavy maintenance facility was part of the BLOOR-DANFORTH project from its inception in 1958. The maintenance facility at Davisville on the YONGE line had, from the beginning, been planned primarily as a trip inspection point. For the first decade, however, Davisville had to perform all maintenance on cars placed in service on the YONGE, and later, on the UNIVERSITY lines. Wheel work and some other heavy operations had to be performed at the Hillcrest surface shop, with parts trucked between the two points.

The location chosen for the TTC's major rapid transit facility is near the present eastern terminal of the BLOOR-DANFORTH line on the north side of the Oshawa subdivision of the CN. The site itself was a former quarry which had been subsequently used as a trash dump. The TTC, by filling in the areas covered with refuse, was able to make effective and economical use of a problem site, at the same time gaining the enthusiastic acceptance of adjacent homeowners.

As elsewhere on the TTC subway system, consideration was given to the potential development of air rights over the yard and shop. Steps were taken to permit such development of the site should it one day be economically feasible. Tracks were located so that column construction would be possible between them. Foundations and columns of shop buildings have sufficient strength to permit additional floors at some future date.

The virtual doubling of the subway fleet in connection with the BLOOR-DANFORTH line has made necessary the expansion of car storage areas. With almost nine miles of track on the site, space is provided for 250 cars. There are two types of train movements at the yard - service trains proceeding to and from the main line and local movements in the yard itself.

Signals and switches for main line trains are controlled remotely from the central control located at St. George Station, former terminal of the YONGE-UNIVERSITY line. Single-rail, resistance-fed track circuits in this area produce approach locking of all switches. Associated with each signal will be the standard automatic train-stop mechanism.

Local movements within the yard are controlled by a General Railway Signal NX-type local control machine in the car-shop building. The NX control, according to the TTC, permits the speedy routing of trains through yard interlockings. Switch machines within the yard limits are specifically designed for the application, thus permitting trailing movements with proper signal protection. On columns throughout the yard are 48 two-way speakers which allow the control machine operator to communicate with yard crews.

The largest building at Greenwood is the overhaul and repair shop, which consists of 192,000 square feet at ground level with an additional 28,000 square feet on mezzanine level. Because of the location of the shop, which required a dead-end arrangement of the tracks within the overhaul and repair shop, a transfer table is located at the north end of the shop. A Trackmobile is used for most car switching within the shop itself. The transfer table is designed so that the area which normally would be an unusable pit is accessible for movements of materials-handling equipment in the shop.

Operations and areas for which space is provided in the overhaul and repair shop include wheel and mechanical turning, mechanical and electrical overhaul and repair, painting, truck repairs and truck changes, major body overhaul, bench repair and cleaning, machine and welding shops, woodworking and stores.

As with most rapid transit operators, wheel wear is a major problem on the TTC subway. Two Hegenscheidt wheel-truing machines, installed in pits on two tracks in the shops, are used for in-place restoration of car-wheel treads and flanges. The under-floor machines are centerless devices so that they can be operated without the need for removing current-collection apparatus and axle caps from the trucks. Duplicate machines are installed to insure adequate capacity. When wheel replacements are necessary or when other work must be done on trucks, there are two-car hydraulic hoists installed along a nearby track for elevating, simultaneously, two semi-permanently coupled cars a maximum of five feet. When in this raised position, holding posts can be engaged while any, or all, of the trucks are removed. Small turntables placed in the track on which the hoists are installed

make it possible to rotate and roll trucks into the adjacent overhaul area. Nearby are an axle lathe, wheel borer and wheel press for production of new wheel sets.

Cars being moved into the major overhaul and painting areas of the shop must traverse the transfer table. The 82-foot table is capable of accommodating one 75-foot car plus the Trackmobile. Cars being worked on on the four heavy overhaul tracks in the northeast corner of the shop are raised with portable jacks and supported on holding posts while undergoing repairs. Adjacent to these tracks are the welding, woodworking, upholstering, electrical and air-brake work areas, and the machine shop.

The twin painting bays are inter-connected in order that a single paint-spray booth may be used in either one by moving across transverse rails from one bay to the other. This enables one car to be masked and generally prepared for painting, while actual painting is proceeding on another car in the adjacent bay. Painting is restricted to the "G" class Gloucester cars, with the exception of the six experimental units.

Along with the facility for heavy overhaul work, Greenwood also has a 58,000-square-foot car shop where subway cars are cleaned and inspected between assignments. Local winters have necessitated installing the car-washing equipment in a separate section of this building. With the indoor arrangement, it is hoped that continued exterior washing will be possible throughout the coldest winter, a practice previously not possible as cars would ice up in the process. The rotating brushes of the machine are held against the sides of the cars by a constant-force air-pressure system. Sufficient indoor track extends beyond the washing machine to allow cars to properly drain before they emerge in the open. Drying of the cars is further expedited by a high-velocity air-jet system, supplied with warm air, which is installed in an arch over the track. Car interiors are also cleaned and washed in this area.

The inspection bay is used not only for running inspection, but also for minor repairs. The three-level arrangement, like that used in many railroad shops, is seen by the TTC Equipment Department as a significant advance in transit car servicing.

The way-and-structures building has initially been equipped with a forge, welding equipment and various machine tools for track fabrication and roadway equipment maintenance. It is also expected that the rail-bender, presently located at Hillcrest Shop, will eventually be reinstalled at the new facility.

All things considered, Greenwood is by far the most modern and best equipped of any rapid transit facility in the Western Hemisphere, and perhaps the entire world.

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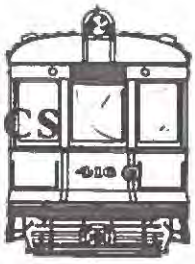
# Traction Topics



**Edited by John F. Bromley**

* Official recognition was given by the TTC to the proposed SCARBOROUGH limited tramline operation on April 19th, when it was revealed that the Commissioners had rejected the plan at a confidential meeting March 1st. The report made on the proposed line has been forwarded to the Metro Transportation Committee.

Basically, the line was to have been a 6.35 mile ground level street car line utilizing existing Ontario Hydro and railroad rights-of-way from the terminal of the BLOOR-DANFORTH subway extension at St. Clair and Warden Avenues to a terminal at Markham Rd. near Sheppard Avenue. The route had already been considered as a future extension to the subway system, and any street car line would have to be designed and built with this in mind. Opposition to the line stems from the large number of grade crossings the line would have, together with the opposition of Metro traffic officials. At grade, the line would cost some $30 million dollars.

The TTC also opposed elevated tracks over intersecting streets, stating that this would increase the cost to $50 million. The TTC also stated that elevated structures would be unsuitable in residential areas. The proposed line would have had 14 stops, and two-car PCC trains would average about 19 miles per hour, carrying 10,000 persons per hour maximum.

It is assumed, although no mention was made about it, that depressed right-of-way was also considered at major intersections encountered on the line. /JFB

* Four persons were slightly injured April 8th in a street car accident at Queen and Coxwell. PCC 4672, turning north while entering service as a DANFORTH SHUTTLE, was struck by PCC 4359 on the QUEEN route. Damage to both cars was confined to the right front and side areas, with 4672 sustaining most of the damage. 4359 is currently undergoing repair, while 4672 reposes at the rear of Hillcrest Shops.. /RM, JFB

* To the summary of electric switch changes on page 76 of the April NEWSLETTER should be added the following. NA switches have been installed at Queen and Broadview, west to north; Queen and Coxwell, east to north; and Queen and Connought, east to south. The NA switch at Bathurst and Adelaide was removed in connection with the de-electrification of part of Adelaide Street, and at the same time the NA switch at King and Bathurst, west to north, was removed. /JFB

* The TTC continues to make adjustments, both major and minor, to its new street car schedules. In early April, KING extras 1X-6X became runs 91-96, with times unchanged. Russell Division placed six more KING cars in service as p.m. extras, numbered 51-56, bringing the total number of KING afternoon rush hour cars to 45. In addition, KINGSTON ROAD TRIPPER run #80 was re-scheduled to leave Roncesvalles Division at 3:50 p.m., running east on Queen, south on Church and west on King Street to Roncesvalles, then making one round trip to Bingham Loop. At the same time, KINGSTON ROAD TRIPPER a.m. runs 87 and 91 reverted to the old schedule and ceased operating first to Dundas West Station. Runs 89, 93, 95 and 96 were not changed. KINGSTON ROAD TRIPPER p.m. run #94 was amended to leave Russell Division forty minutes early, at 4:04 p.m.

Effective April 25th, all KING extras and KINGSTON ROAD TRIPPER special runs were discontinued. In their place is additional scheduled service on KING, which was increased on that day to 50 cars in each rush period. Previously, the total number of KING cars was 33, then 39, then 45. Judging from the changes effected, the travel habit of the KING passenger was not changed drastically from pre-subway days.

Also effective April 25th, BLOOR SHUTTLE and DANFORTH SHUTTLE schedules were amended and each service was cut by two cars in the peak periods. Total number of cars now in use on BLOOR is 17, while DANFORTH has 12 (see February NEWSLETTER, page 34). Also of note is the fact that the new DANFORTH schedule indicates that once again, destination signs of "Woodbine" and "Luttrell" are to be used. Schedules at Russell Carhouse were amended in early April indicating that "Subway" and "Danforth" destinations were official. Regardless of the official schedules, DANFORTH cars are still signed "Subway" in both directions.

Headways of one minute on both the DANFORTH and BLOOR SHUTTLES are to be maintained despite the removal of two cars from each.

Also by the end of May can be expected a major change in the scheduling of QUEEN street cars. To be dropped is the weekend and holiday service of QUEEN cars to Bingham Loop. KINGSTON ROAD-McCaul cars will replace the Saturday QUEEN cars, with bus route 25A-COXWELL replacing at least the Sunday cars and possibly the Holiday cars as well. Evening service with QUEEN cars will be amended only slightly.

The schedule adjustments aforementioned resulted in additional "Rotation" cars being placed in service. As of April 22nd, no less than 60 were in service, double the number originally estimated as being needed after the subway opening. Following is the list of "Rotation" cars in service as at April 28th:

4199, 4200, 4202, 4203, 4205, 4213, 4218, 4220, 4221, 4222, 4223, 4224, 4230, 4231, 4232, 4234, 4235, 4238, 4241, 4245, 4246, 4249, 4251, 4252, 4253, 4254, 4258, 4261, 4267, 4268, 4270, 4274, 4275, 4277, 4278, 4280, 4290, 4291, 4293, 4294, 4299, 4575, 4576, 4577, 4579, 4581, 4582, 4583, 4584, 4585, 4586, 4587, 4589, 4590, 4591, 4594, 4595, 4596, 4597, 4601.

Those cars of the 4575-4601 type not listed were also in service in the early part of April. With 60 cars in service and 3 in storage at Hillcrest, there are only 22 spare "Rotation" cars available, plus, of course, the 25 cars not taken of the 225 presently under option to a Chicago used equipment dealer.

In the "Used PCC Sweepstakes", enter the name Buenos Aires as being among the interested parties. In the Red Face Department, the reliable source which gave us the information that PCC 4114 was shipped to Vera Cruz last year is very much in error. This car was actually shipped from Hillcrest Shops on April 14th, and is destined to run at Alexandria, Egypt. To date, no PCC cars have been shipped to Vera Cruz as demonstrators. /JFB, RM, TTC

* The TTC demanded a written report from Mr. J. G. Inglis, General Manager of Operations, on why the MU PCC cars removed from the BLOOR line were not being used in multiple unit trains on the QUEEN line. Commissioner and Vice-Chairman Charles Walton advised the Commissioners April 20th that such service was promised earlier. Mr. Inglis stated that "running two street cars together slows down service".

Quoting verbatim from a brochure issued by the Toronto Transportation Commission when the MU PCCs were new in 1949, entitled '100 STREAMLINERS "ON THE DOUBLE"' (Ed. Note - there are now 175 MU PCC cars), "The full capacity of a street can accommodate only a certain maximum number of street car movements, together with other traffic, across intersections.

"Experience in Boston, Los Angeles (sic) and Cleveland has indicated that a two-car unit of modern street cars can operate across an intersection as speedily as a single car, thus doubling the number of passengers carried across the intersection in one movement. This achievement is impor-

tant especially on any route on which a large number of traffic lights are encountered.

"Soon Toronto's BLOOR-DANFORTH route will be equipped with two-car units of the most modern streamliner street cars with special couplers and other equipment, to provide more and faster service WITHOUT INCREASING TRAFFIC CONGESTION." (Capitals mine -Ed.)

BLOOR-DANFORTH is, of course, gone, as are the MU PCC cars of the Pacifac Electric Railway (Los Angeles), but with us yet, and for many years to come, is the traffic congestion of Queen Street, not to mention Kingston Road. The loading/unloading of two street cars and the movement of same simultaneously through intersections has very definite advantages, and cannot but help to ease traffic congestion. This editor sincerely hopes that MU service comes to Queen Street, as promised. Before such service is initiated, however, electric switches along the QUEEN route would have to be converted for MU operation. The equipment needed to do so is available, having been salvaged from the BLOOR line. /JFB

* The TTC continued the assault on unnecessary overhead and rail into April. To date, overhead has been removed from the following streets: Danforth Avenue (Cambridge to Coxwell), Bloor Street (Cambridge to Bathurst), Weston Road (Keele to Avon), Church Street (Carlton to Asquith), Parliament St. (Carlton to Bloor), Pape Avenue, Riverdale Avenue and Carlaw Avenue, Bay Street (College to Bloor), Vaughan Loop, Bedford Loop and Adelaide Street (Bathurst to Spadina). Rail has been removed from Bedford Loop and Vaughan Loop, and the diamond and most of the specialwork has been lifted at Bathurst and Bloor Streets. The Bloor-Yonge Transfer Station will be demolished by Dineen Construction Limited, and may well be gone as this is read. Overhead yet to be removed consists of that on Bloor (Bathurst to Dundas), Lansdowne (College to Davenport, not including wire common with trolley buses), Davenport and Dovercourt Roads, Ossington & Harbord (Bloor to Spadina), Spadina (Bloor to College). All overhead is scheduled to be removed by July 1st. Unused rail will be paved over, in a program scheduled to take three years.

On the brighter side, all rail along King Street between Bathurst and Spadina is being replaced. Work began April 18th after the morning rush hour and should be completed by mid-May. Main Street Loop was closed after the morning rush hour on Monday, April 25th, with all CARLTON cars being diverted to Luttrell Loop until approximately Tuesday, May 24th. This will allow time to construct the new Main Station Loop at the site. CARLTON cars will never again operate to Luttrell, and photographers are advised to take advantage of the opportunity. /JFB

S H O R T T U R N

The PCC cars previously stored at Lansdowne Division were moved under their own power to Danforth Division in early April (see April NL, page 73).....Work cars W6 (from Danforth) and W9, S40 and S41 (all from Lansdowne) are now stored at Hillcrest Shops.....all PCC Training Cars, including 4199 and 4601, have been equipped with the new destination signs "Broadview Station" and "Dundas West Station".....cars 4564 and 4565 were returned to St. Clair Division in mid-April, with 4302, 4305 and 4397 being returned from St. Clair to Roncesvalles and Russell.....the TTC called for tenders for Contract WC5 (Subway Extensions) on April 18th. Work consists of 1,750 lineal feet of structure from Aberfoyle Cres. to the CPR line west of Islington Avenue, including Islington Station.....the A13 class PCC stored with the four air-electric PCCs at Hillcrest has been narrowed to one of 4721, 4737 or 4741.....PCC 4700, which is supposedly the new Hillcrest Training Car, remains in regular service as of April 28th.....ten PCC cars of classes A1 and A2, stored on track 26 at Danforth Division have had the front, rear and blind side glass areas covered to protect the cars against local vandals.....sad farewells were given to Pittsburgh's routes 6/14-AVALON/BRIGHTON and spectacular 21-FINEVIEW on May 1st. PAT route 85-BEDFORD will go bus on June 26th.....St. Louis' route 15-HODIAMONT, after an abandonment scare at Easter, looks safe for yet another year..... Philadelphia Suburban's ARDMORE line continues to shuttle back and forth.....the MBTA of Boston is beginning a major repaint program. PCC cars and buses are coming out gray below the belt rail, ivory above. To eliminate the somberness, the doors are being painted---ARE YOU READY?---very bright yellow! Visitors to Boston are advised not to forget their sunglasses.....rumour has it that the MBTA is expecting a demonstrator articulated car from DuWag of Germany sometime later in 1966.....a CARLTON car turning at Main & Danforth pulled down 50' of overhead April 25th. All CARLTON and DANFORTH cars used emergency trackage on Danforth, west of Cedarvale, and Coxwell Avenues.....Cars S-32, S-33 and W-1 were moved from Russell to track 10 at Danforth Division April 25th....."Sputnik" non-driving motors 5113-5112 are now in a semi-permanently coupled train with 5028-5029... ....MU PCC 4698 was seen out of service at Russell Division in early April, without a front coupler..... /JFB, RM, TP

* The possibility of a strike by 5,000 TTC workers looms ahead. Employees are demanding to be placed on equal footing with Montreal and Vancouver workers. The last contract expired April 1st and negotiations between the TTC and the union continue. The union is demanding hourly rates of $2.70 for labourers and $3.58 for skilled workers while the TTC has offered $2.36 and $3.26.

**210C.** Conductors and enginemen must require members of their crew to read aloud and have a definite and proper understanding of the requirements of train orders and clearances as soon as practicable after they have been received. Members of the crew are required, if necessary, to remind conductors and enginemen of their contents.

**211.** Clearance must be filled out by the operator before clearing a train, showing thereon, without erasure or alteration, the number of each train order, if any, for that train with other required information, and will then transmit to the train dispatcher, from the clearance, the numbers of such orders as "Winnipeg, clear No. 17 with orders numbers 1, 2 and 3", or "Winnipeg, clear No. 17 orders nil". The train dispatcher will make the required record in the train order book and check the order numbers, and if correct will respond by giving OK, the time and his initials, which the operator will endorse on the clearance.

If ALL orders held for a train have been made complete and communication fails before clearance has been OK'd by train dispatcher, the operator may deliver such orders, accompanied by clearance bearing notation "wire failure" and the time, which will be acted upon as though OK had been given in the usual manner, except that clearances authorizing train movements under Rules 95 and 97 must in ALL cases be OK'd by train dispatcher with the time and his initials.

When communication is restored, the operator will notify train dispatcher of each train cleared, the time, and the numbers of the train orders delivered, which train dispatcher will record in train order book.

Clearances must be delivered, together with all train orders, to the trains addressed. Train and engine men must see that their train is correctly designated and that train order numbers shown on the clearance correspond with the numbers of the train orders received. Operators must retain a copy of each clearance.

**211A.** When necessary to issue a train order to a train at a station after clearance for that train has been OK'd, but not delivered, such order must not be transmitted by train dispatcher until he has been notified by the operator that the previous clearance has been destroyed. Operator will use the words: "Clearance to (Train) at (Station) OK'd at (Time) destroyed".

When clearances are taken up and destroyed, train dispatcher will record on his clearance record the word "Void" and the time destroyed.

**213.** "Complete" must not be given to a train order for delivery to a train until the order has been repeated by the operator who receives the order for the train being restricted.

**214.** When a train order has been repeated, and before "complete" has been given, the order must be treated as a holding order for the train addressed, but must not be otherwise acted on until "complete" has been given.

If the means of communication fails before an office has repeated an order, the order at that office is of no effect and must be there treated as if it had not been sent.

**215.** When a train is named in a train order by its schedule number, as "No. 10 Eng. 234" (no sections specified), all sections of that schedule are included and each must have copies delivered to it. Particular sections must be specified when it is known the schedule is, or is to be, in sections.

**216.** When the train dispatcher issues a train order that is to be delivered to a train by the dispatcher, a carbon impression must be made in the train order book at the time the order is written. If later the order is to be sent to another office it will be transmitted from the copy in the book. The requirements for delivery are the same as at other offices, except that he will not be required to leave the office to deliver orders.

**217.** A train order to be delivered to a train at a point not an open train order office must be addressed to "_____ at (or between) _____ care of _____" and forwarded and delivered by the conductor or other person in whose care it is addressed and who is responsible for delivery. The person delivering the order will be given copies and a separate clearance for the train addressed.

Unless also addressed to the delivering train, clearance for the train which is to deliver the order will not include order number being sent "in care of", but engineman must be informed and the necessary stops made for delivery.

When a restricting order is sent in the manner herein provided, the operator will be directed to make an extra copy which he will deliver to the person who is responsible for delivery of the order. The person delivering the order must be informed by message to secure the signatures of conductor and engineman of the train addressed on this copy and deliver it to the first operator accessible. The operator must at once transmit the signatures to the train dispatcher and retain the copy. The order must not be made "complete" to other trains affected until the signatures have been received by the train dispatcher.

**218.** An operator must not repeat a train order restricting the movement of a work extra which has received its working order and clearance, until he has obtained the signatures of the conductor and engineman to the order.

When a restricting order is sent direct to a conductor or engineman, signatures of both conductor and engineman must be received before the order is made complete to other trains.

**219.** An operator must not repeat a train order restricting the movement of a train which has previously been delivered a clearance at that station, nor of which the engine has passed the train order signal in proceed indication, until he has obtained the signatures of the conductor and engineman to the order, secured and destroyed all clearances delivered to the train at that station.

**219A.** An order other than a restricting order may be issued to a train at a station where such train has previously received a clearance, in which case another clearance will be issued showing the numbers of all train orders delivered to the train at that station.

**220.** Train orders once in effect continue so until fulfilled, superseded or annulled. Any part of an order specifying a particular movement may be either superseded or annulled.

Orders held by, or issued for, or any part of an order relating to, a regular train become void when such train loses both right and schedule as prescribed by Rule 4, Rule 82, or its schedule is annulled.

When a conductor, engineman, or both, are changed off or relieved before the completion of a trip, or when so directed by special instructions, all train orders, clearances and instructions held must be delivered to the relieving conductor or engineman and known to be understood by them. Before proceeding, the engineman must read his train orders aloud to the conductor.

When a train dispatcher is relieved he must make a transfer, written in ink, in the train order book, of all train orders in effect. Such orders will be carefully read aloud by the relieving dispatcher and initialled by him in the presence of the train dispatcher being relieved. Each must sign the transfer and know that the orders transferred are understood. Necessary information must also be transferred.

When an operator is relieved he must make a transfer, in a book or on a form provided for the purpose, of all undelivered train orders and other necessary information. Such transfer must be signed by both employees concerned. Any undelivered or unfulfilled train orders providing for train movements must be annulled by the train dispatcher before an office is closed.

**221.** When an operator receives the signal 19R he must immediately display the train order signal at Stop for the direction specified and then respond SDR, adding the direction.

When an operator receives the signal 19Y at an office equipped with a three indication train order signal he must immediately display it at Caution for the direction specified and then respond SDY, adding the direction, except that if the Stop indication is already displayed it must be left at that indication and the operator will respond SDR, adding the direction.

To indicate delivery of 19Y train orders at an office equipped with a two indication train order signal when no 19R train orders are held for any train in the direction indicated, the operator will, on the approach of the train, in addition to the stop signal, display a yellow flag by day or a yellow light by night.

At an office not equipped with a train order signal, the operator will respond NS instead of SD.

When an operator receives the signal 19R or 19Y for a train order to be delivered to trains originating only, train dispatcher may direct that display of train order signal in Stop or Caution indication is not required, providing such trains are otherwise required to obtain clearance at that station. When so directed, operator will respond NS instead of SD.

Operators must take extra precautions to ensure delivery of train orders under any unusual conditions, and must have the necessary signalling equipment for this purpose ready for immediate use.

A train must not proceed without a clearance when the train order signal affecting it is in Stop or Caution indication while any portion of the train is passing the signal.

**222.** Except as otherwise provided, operators must promptly record and report to the train dispatcher, from the train register where provided, the time of arrival and departure of all trains and the direction of extra trains.

They must, when practicable, observe trains and report at once to the train dispatcher if the proper signals are not displayed.

**223.** The following signals and abbreviations may be used:

| | |
|---|---|
| ABS | Automatic Block Signal System. |
| CTC | Centralized Traffic Control. |
| Com | Complete. |
| Cy | Copy. |
| Eng | Engine. |
| Frt | Freight. |
| Jct | Junction. |
| Mins | Minutes. |
| No | Number. |
| NS | No Display of Train Order Signal. |
| OK | Correct. |
| OS | Train Report. |
| Opr | Operator. |
| Psgr | Passenger. |
| SD | Signal Displayed, adding R or Y as required. |
| Sub | Subdivision. |
| 9 | To clear the line for train orders. |
| 23 | A message to all. |

Initials for signature of the superintendent or train dispatcher.

Office signals indicated in time table.

The usual abbreviations for the names of the months.

In transmitting, repeating, copying and recording train orders, spelling of station names must be exactly as shown in the time table.

No other abbreviations are authorized.

## FORMS OF TRAIN ORDERS

NOTE: In the following examples of train order forms, names of stations are represented by letters. Underlinings indicate words and figures which are to be pronounced and spelled in transmitting and repeating by telephone, but will not appear in train orders. Form A, Form E and Example (3) of Form G should appear in the train order book and upon train orders as illustrated.

### Form A—(SINGLE TRACK) FIXING MEETING POINTS FOR OPPOSING TRAINS.

(1) No 2 Eng 402
meet No 1 Eng 401 at B.

Second 4 Eng 404
meet No 3 Eng 403 at B.

No 788 Eng 405
meet Extra 701 West at B.

---

(2) No 1 Eng 401
meet No 2 Eng 402 at D
meet Second 4 Eng 404 at C and
meet No 8 Eng 405 at B.

Extra 704 East
meet Extra 701 West at E and
meet No 789 Eng 405 at F.

---

These examples may be modified by adding:

No 2 take siding at B.
Extra 704 East take siding at E.

Trains receiving these orders will run with respect to each other to the designated points and there meet in the manner prescribed by the rules.

Form A must not be used to fix a meeting point between a Work Extra and another train.

### Form B—DIRECTING A TRAIN TO PASS OR RUN AHEAD OF ANOTHER TRAIN.

(1) Extra 594 West
pass No 1 Eng 403
at J.

Both trains will run according to rule to the designated point and there arrange for the rear train to pass promptly.

---

(2) Extra 702 North
pass No 403 Eng 755
when overtaken.

Both trains will run according to rule until the second named train is overtaken and then arrange for the rear train to pass promptly.

---

(3) Extra 701 East
run ahead of No 6 Eng 755
B to M.

The first named train will run ahead of the second named train between the designated points.

---

(4) Extra 704 West
run ahead of No 403 Eng 755
from F until overtaken.

The first named train will run ahead of the second named train from the designated point until overtaken and then arrange for the rear train to pass promptly.

This may be modified by adding:

Unless overtaken at F.

The first named train will let the second named train pass at the designated point if there overtaken.

---

When an inferior train receives an order to pass a superior train, authority is conferred to run ahead of the train passed from the designated point.

Form B orders do not relieve the preceding train from providing protection as prescribed by the rules.

### Form C—(SINGLE TRACK) GIVING RIGHT OVER AN OPPOSING TRAIN.

(1) No 1 Eng 401
has right over No 2 Eng 402
M to B.

If the second named train reaches the point last named before the other arrives, it may proceed, keeping clear of the schedule of opposing train as required by rule.

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(2) Extra 701 East
has right over No 403 Eng 456
A to F.

The regular train must not go beyond the point last named until the extra train has arrived, unless authorized by train order to do so.

---

These examples give right to the train first named over the other train between the points named. If the trains meet at either of the designated points, the first named train must take the siding unless the order otherwise prescribes.

### Form E—TIME ORDERS.

(1) No 2 Eng 402
run thirty 30 mins late
A to G and
twenty 20 mins late
G to Z.

This makes the schedule time of the train named, between the stations designated only, as much later as stated in the order, and any other train receiving the order is required to run with respect to this later time as before required to run with respect to the regular schedule time. The time in the order should be such as can be easily added to the schedule time.

When it is desired to place a run late order on an extra train created under Example (3) of Form G, (1) may be used by adding:

On train order No ten 10

and the same instructions apply.

---

(2) No 2 Eng 405 wait at

| | | |
|---|---|---|
| N until | nine nought five | 905 am |
| P | nine fifteen | 915 am |
| R | nine thirty | 930 am. |

The train named must not pass the designated points before the times given. Other trains receiving the order are required to run with respect to the time specified at the designated points, or any intermediate station where schedule time is earlier than the time specified in the order, as before required to run with respect to the schedule time of the train named.

---

When these examples are used the time specified in the order must not be reduced.

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(SINGLE TRACK)

(3) No 2 Eng 402 wait at
H until ten fifteen 1015 am
for No 1 Eng 401
(or Extra 456 West).

The train first named must not pass the designated point before the time given unless the second named train has arrived. The second named train is required to run with respect to the time specified at the designated point or any intermediate station where schedule time is earlier than the time specified in the order, as before required to run with respect to the schedule time of the first named train.

---

(2) or (3) may be used to place a wait order on an extra train when necessary and the same instructions apply.

### Form F—FOR SECTIONS.

(1) Eng 423 display signals
and run as First 2
A to Z.

To be used when the number of the engine for which signals are displayed is unknown, and is to be followed by (2), both being single order examples.

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(2) Eng 425 run as Second 2
A to Z.

---

(3) No 2 Eng 423 display signals
M to Z
for Eng 424.

No. 2 will become First 2 and must display signals from M to Z. Eng 424 will run as Second 2 from M to Z but will not display signals.

Second 2 Eng 424 display signals
M to Z
for Eng 425.

Second 2 will display signals from M to Z. Eng 425 will run as Third 2 from M to Z but will not display signals.

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(4) Engs 423 424 and 425
run as First Second and Third 2
A to Z.

The first and second named engines will display signals and run as directed. The third named engine will run as directed but will not display signals.

---

To add a first or intermediate section, when there are two or more sections, (5) will be used.

(5) Eng 423 display signals
and run as First 2
G to Z. Following sections change
numbers accordingly.

Eng 424 display signals
and run as Second 2
G to Z. Following sections change
numbers accordingly.

The engine named will display signals and run as directed and following sections will take the next higher number.

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