LAST PASSENGER SERVICE THIS.

Newsletter

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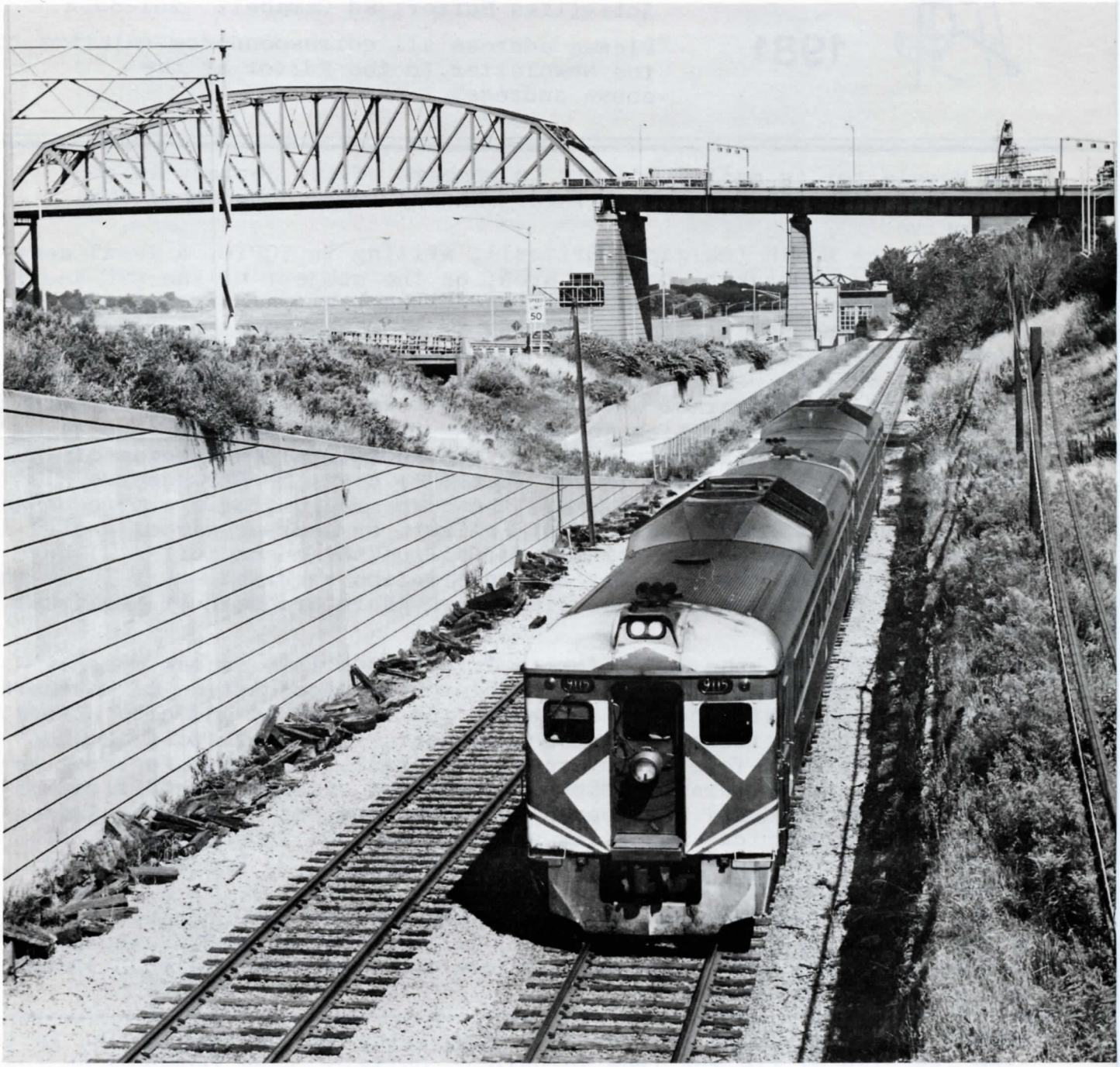

UPPER CANADA RAILWAY SOCIETY
BOX 122 TERMINAL "A" TORONTO, ONTARIO

1941 1981

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The Newsletter is mailed monthly to members of the Society in good standing. Membership fee is $17 for January 1981 to December 1981 inclusive.

Quote of the Month (margaret Britnell, writing in TOPIC, a local newspaper in the Newmarket, Ontario area, on the subject of the CTC hearing on the removal of the agency position at Newmarket, contributed by Dave Stalford): "The politicians appearing at the inquiry emphasized how important it is to the economy of the area to have a good rail transportation system, particularly for handling carload freight. The agents at Bradford and Newmarket were always very knowledgeable and efficient in discharging their duties in regard to rates and service, and in contributing in a significant way to the industrial well-being of their communities. CN's argument is now that they have the Servocentre at Concord with a marvelous computer, these agency positions are redundant ....If I want to send a carload of freight, an express parcel and an overseas container, and get rates for all of those categories, I have to telephone nine times to get the information required--that is if the person at the other end of the line knows where Bradford or Newmarket is."

TIMEPOINTS (The Southern California Traction Review) is the monthly publication of the Electric Railway Historical Association of Southern California Inc. While concentrating on the interurban and city street car systems of California, past and present, Timepoints does include continent-wide and foreign coverage. The April 1981 issue features an interesting and encouraging capsule review of railway electrification as well as HRT and LRT developments in many centres in Europe, Asia, Africa, South America, Australia and New Zealand. Subscriptions, at $7.50 per annum, are available from the ERHA at P.O. Box 24315, Los Angeles, California 90024.

--The Western New York Railway Historical Society has obtained its first piece of equipment for preservation, in the form of ex-NYC caboose 19602, which has been lettered New York and Lake Erie Railroad 19602 and is stored at Gowanda, N.Y.

COVER: VIA Rail Train 181-182-376, comprising two CP Rail RDC's, is in the last lap of its run from Toronto to Buffalo. John Thompson photographed the train on Conrail (formerly NYC) trackage alongside the Niagara River in Buffalo. In the background is the auto-clogged Peace Bridge and the International Bridge which the train has just crossed from Fort Erie. In a few moments the Budds will be easing to a halt at the downtown Exchange St. Station, where passengers will connect with the 'Niagara Rainbow' for points east. September 1980.

NOTES II

by Brian C. Nickle

• Effective April 26, 1981, service to Owen Sound over Canadian National lines was reduced to one return trip a week out of Stratford, from the previous two trips a week. Train 516/517 will be ordered to operate only as far north of Palmerston as required on the days it does not operate through to Owen Sound. This wayfreight now handles all of CN's switching on the branch lines north of Stratford, including the Newton, Kincardine, Southampton, and Owen Sound Subdivisions, as well as the Durham Spur. Less than one year ago, Owen Sound was serviced by three round trips a week from Stratford.

• On March 21, 1981 VIA Rail Toronto-London Train No. 663 had its normal three RDC's replaced by an interesting conventional consist with FPA2 6758 heading ex-Reading Crusader cars 302 and 304 and a 5200 series coach. The equipment, after the engine only was turned, returned to Toronto as Train No. 666, departing London at 1630.

• Equipment problems plagued VIA Rail Toronto-London Train No. 663 on March 24, 1981 as it experienced engine failure on the grade at Limehouse on the Guelph Subdivision. This day No. 663 had been assigned conventional equipment consisting of CN RS18 3127, a steam generator and two coaches, and the engine problems with the RS18 forced the addition of CN GP9 4528 to the head end of the train at Guelph. No. 663 was 22 minutes late leaving Guelph, and the GP9 was left on the train to power it back to Toronto from London that afternoon at 1630.

• The next day, VIA Rail's No. 663 was late again, this time caused by signal problems on the Weston Subdivision, which resulted in its running behind CN Sarnia-bound freight 415 on the Halton Subdivision. The delays on March 25, 1981 left No. 663 running 50 minutes late out of Georgetown.

• Interesting conventional equipment showed up again assigned to Train No. 663 on March 29, 1981. This day CN RS18 3119 headed a steam generator, two coaches, buffet-club-lounge No. 577 "Lake Couchiching", with two more coaches bringing up the rear. The equipment returned to Toronto on Train No. 666, with the steam generator on the rear, as the trains are not normally turned at London.

• On April 10, 1981 VIA RDC-1 6132, which is the ex-CP Rail Budd 9055, showed up in trains Nos. 661/664 on the Toronto-Stratford-London route, with two ex-CN RDC's.

• Track work has been completed for a new wye track which has been built between the Southampton Subdivision and the Southampton Spur. For some time now, the Southampton Subdivision has run to Douglas Point instead of into the town of Southampton. In fact, no movements are allowed between Mileage 1.2 on the Southampton Spur and the town of Southampton itself, so the latter can be considered as another Ontario town which has lost its rail service.

• The number of Canadian National locomotives on the dead line at CN's Rectory St. facility in London has grown over the past year and now the following units are on hand awaiting final disposition: MLW RSC13's 1701, 1709, 1710, 1717; MLW S2 8139; MLW S3's 8459, 8483, 8296, 23 (ex-8471); MLW S4's 8016, 8021, 8025.

--The overhead has been removed from the former Niagara Junction Railway (now part of Conrail) as observed by the Editor and Assistant Editor on April 4th at the north yard in Niagara Falls, N.Y. The yard, upon this occasion, was occupied exclusively by a group of new box cars for the St. Lawrence Railroad.

--Conrail (ex-Niagara Junction Ry.) electric locomotives 4751, 4754 and 4755 were observed in storage beside the Amtrak station in Niagara Falls, N.Y. on April 25th.

VISITING ST. THOMAS (WITHOUT A CAR!) by Mike Lindsay

St. Thomas, Ontario has always been a unique city for the Canadian rail enthusiast to visit, as where else in Canada can one find no less than three major American railroads operating in one's back yard. A convenient intermodal connection makes it possible for the Toronto area railfan to visit this city without relying on an automobile, and has been used many times by a number of UCRS members with great success. A recommended itinerary is as follows:

Lv. Toronto Union 0820 VIA No. 71
Ar. London CN Station 1045
Lv. London Bus Terminal 1105 Charterways No. B5
Ar. St. Thomas Terminal 1155

It should be noted that the London Bus Terminal is less than half a block west of the CN station, and that the connection should not be attempted on Fridays when VIA No. 71 usually runs a half hour late. One may return from St. Thomas as follows:

Lv. St. Thomas Terminal 1630 Charterways No. B10
Ar. London Terminal 1710
Lv. London CN Station 1950 VIA No. 88
Ar. Toronto Union 2200

The total cost of the trip will be approximately $17 if one uses VIA's one-day excursion fare. Tempo equipment is used on VIA No. 71, while conventional coaches are used on VIA No. 88. Charterways uses anything from a deluxe schoolbus to a luxury tour coach on their St. Thomas runs.

For the first time visitor to St. Thomas, here's what one can expect to see on a walking tour of the city. Using the St. Thomas bus terminal at Talbot St. (adjacent to the L&PS grade crossing) as centre, one can walk north one quarter of a mile to find the CN-Norfolk & Western freight facilities. Power to be seen here is usually CN GP9's and Sw-8's, as well as N&W C30-7's, GP9's and GP18's. Conrails's huge station-office building and shops are to be found less than 100 yards from the town centre and slightly east of the bus depot. Since Buffalo-Detroit run-throughs have been dropped, the motive power has become quite mundane. A half-dozen GP7's and GP9's are ample to cover the three (two on weekends) local freights. Chessie System freights seem to make greater use of Conrail trackage (east of St. Thomas) than Conrail itself. Chessie freights from Niagara use the CR line to St. Thomas' BX Tower and then proceed south on the L&PS line to their own facilities, which are approximately a half mile south of the town centre, adjacent to Pinafore Park. Chessie maintains a very "sanitary" roundhouse and shop facility, which usually features the most interesting motive power in town. Anywhere from six to 15 units can be seen here at one time with usually quite a good assortment of engine types: GP7, GP9, GP30, GP35, GP38 (-2), GP39, GP40 (-2), SW9, as well as an occasional U-boat. Although the Chessie System's blue, yellow and vermillion paint scheme seems to be gradually taking over, many blue B&O and C&O units can be found. On occasion, Western Maryland units sneak into town. Chessie runs a minimum of four trains a day, and when business demands, runs second sections on very short headways. The railroad's yard is a half mile west of the engine facility, across a very scenic trestle which is one of no less than three which cross the Kettle Creek Valley.

Finally, adjacent to the Chessie facilities is Pinafore Park, where one can find narrow gauge live steam, as well as a most interesting GE 25 ton diesel locomotive, hauling passengers on a half mile of track behind vintage street cars acting as coaches.

Steam, diesel, and even transit enthusiasts can find something of interest in St. Thomas, which justifiably calls itself "the Railway City."

CP Rail

THE NEPHTON BRANCH by David Hales

In 1935 Industrial Minerals of Canada Limited, through its subsidiary Canadian Nepheline Limited, began mining operations near Lakefield, Ontario. The 2200-acre site, located about 25 miles north of the village, is one of only two deposits of nepheline syenite being mined commercially in the world. For geologists, nepheline syenite is a white crystaline igneous rock similar to granite in hardness and texture. Rock taken from the quarry in open pit operation is reduced by crushers to a very fine dry powdery substance. The end product is shipped either in bulk or in packages, by truck or by train. Nepheline syenite, over 70% of which is exported, mainly to U.S. markets, is used in the production of glass, ceramics and paint fillers. Production has increased substantially, with the 1000-ton per day crusher, built in 1956, operating at capacity.

In its early days the nepheline syenite was shipped by barge down the lakes to Lakefield, thence via the Canadian National Railways to market. The barge service was subsequently replaced by trucks (circa 1949) and since 1954 direct rail service has been used. This was made possible by a 17-mile, $1.5 million branch line constructed north from Havelock to the crushing plant at Nephton. It is the Nephton Subdivision of Canadian Pacific's Trenton Division. Construction of the line encountered some unusual engineering problems. The terrain is a wilderness of rock and swamp, the home of beaver, muskrat and deer. As the beaver is quite an engineer himself, his projects were a hindrance to the railway engineers to the extent that some 24 beaver dams had to be destroyed. At several points along the line, notably between mileages 4.5 and 7.0, swamp earth had to be replaced by more stable rock fill. Before these channels were filled, it appeared that a ship canal, rather than a railway, was being built.

Another interesting construction problem was the sink hole encountered at mileage 14.9. Here 798 cubic yards of rock was required just to advance the line 21 feet. At mileage 12 is located Long Lake. It was decided to cross this lake rather than skirt the western shore. The floor of the lake contains a lot of silt on top of solid rock 38 feet down. Fifty thousand cubic yards of fill, obtained from cuts along the line, were dumped on the silt. With a heavy blast of dynamite in the toe of this rock pile, the silt was blown out and the rock settled into the vacuum.

The branch was completed in December, 1954, seven months ahead of schedule. The loading of the first two hopper cars commenced on December 20th. Official opening ceremonies for the line took place in January, 1955. As there is no need for a full time locomotive at the plant, the cars are moved to and from the loading dock by means of a winch. Bulk shipments are made in CP Rail covered hopper cars specifically assigned to this service. Package shipments are made in standard box cars, with both types of shipments on a five days per week basis. The accompanying map shows the layout of the facilities at Nephton as they were in the late 1960's.

VIA RAIL MAY SWITCH TO ELECTRIC HEATING

VIA

The problems which arose during the Christmas holiday peak travel period, when its equipment could not cope with the record breaking cold that gripped Eastern Canada, has prompted VIA Rail to consider a wholesale change from steam to electric heating. The low temperatures, combined with the wind chill factor created by a moving train, were beyond the capacity of steam generating equipment on the trains. VIA has looked at two ways of making the heat supply on its trains more reliable in cold weather. One method involves piping anti-freeze through the cars in place of steam, but trials during the month of February were reportedly

disappointing. The benefits were only one quarter of what had been anticipated, and the cost of conversion would be unrealistically high. The other possibility, more promising but also more expensive, is to follow the example of Amtrak by converting steam heated passenger train cars to electric heating. The cost of conversion and reconditioning would be about $200,000 per car. Electric power generating units or new locomotives with generating equipment would also have to be purchased.

--Mike Lindsay

A test train was operated between Toronto Union Station and Guelph Junction, over the CP Galt Subdivision, on March 16th with unit 707, seven bi-level coaches (2025, 2012, 2064, 2048, 2029, 2069, 2056) and ACPU 907. It left Union Station at 1200 Noon, and on the Milton-Toronto portion of the return trip a regularly scheduled 52-minute run was simulated, with stops at all stations. Louis Parsons, Chairman of TATOA, was accompanied on the trip by Executive Director Al Leach in addition to CP Rail and GO Transit technical staff. Mr. Parsons informed the press after the trip that the Milton line is projected to carry some 6260 passengers daily, both ways, with 25% of the riders attracted from the Lakeshore line. The new service is scheduled to commence on October 26th.

--Raymond L. Kennedy and Mike Lindsay

GO Transit has called tenders for the second phase of station construction along the Streetsville-Milton line. Two contracts were tendered on April 2nd with closing scheduled for April 23rd, one for the construction of parking facilities and a station building at Streetsville plus ancilliary work at Milton and Meadowvale, and the other for a parking lot at Cooksville. Three further contracts were advertised on April 7th with closing set for April 28th; the first is for the construction of station buildings at Milton, Meadowvale, Erindale, Cooksville and Dixie and completion of the station building at Kipling; the second is for parking facilities, an access road and a platform at Erindale; and the third is for parking facilities and an access road at Dixie and completion of site work at Kipling. The total cost of the work covered in these contracts is estimated at $4.1 million. The project is on schedule and, if no major delays occur, the line will go into service on the planned date of October 26th.

A unit train operation for the carriage of phosphate rock from Central Florida to Port Maitland, Ontario is being operated by CP Rail, its now wholly owned subsidiary Toronto, Hamilton and Buffalo Railway and three CSX Corporation-owned railroads, the Seaboard Coast Line, Louisville and Nashville, and Chessie System. The cars used in the operation are owned by International Minerals and Chemical Corporation, which has a fertilizer and feed products plant at Port Maitland. Four 65-car trainsets are in operation at any one time, covering the 1600-mile route in approximately 120 hours. About 60 trains per year carrying a minimum of 6175 tons of rock apiece are being operated. The service is fully competitive with ocean shipping from the Gulf of Mexico to Port Maitland.

--Mike Lindsay

Bombardier Limited
Mass transit division

Bombardier Inc. has been awarded a $50 million contract to construct an additional 60 commuter cars for the New Jersey Transit Corporation. This order will supplement the 57 such cars ordered by the New Jersey Department of Transportation in 1980 (see Newsletter 372, Page Seven). Deliveries will commence late this year, with completion in 1982. As with the first order, basic construction will be performed at La Pocatiere, Quebec, with final assembly in Barre, Vermont.

READERS' EXCHANGE

• Dana Ashdown, 60 Shendale Dr., Rexdale, Ontario M9W 2B5, (416) 741-9574, has for sale the following Canadian Pacific Railway dining car silverware and china plates. All are in good to mint condition and available in the following sets.

1) One each; mustard cover, sugar bowl, bread tray, medium and large oval bakers, small, medium, large and extra large platters, dinner knife and fork, fish knife and fork. 13 items total, $165.00 (six sets).
2) One each; mustard cover, bread tray, small, large, and extra large platters, dinner knife and fork, fish knife and fork. Nine items total, $105.00 (one set only).
3) Four each; soup plate (Limoges), bread and butter plate (Grindley), dessert plate (Grindley) - all Green Band Pattern. 12 items total, $125.00 (three sets).
4) Four each; luncheon plate (Minton) - Maple Leaf Pattern, four items total, $60.00 (two sets).
5) One each; luncheon plate (Minton-Maple Leaf Pattern), dinner knife and fork, fish knife and fork, fruit knife and fork, seven items total, $50.00 (three sets).
6) One each; dinner knife and fork, fish knife and fork, fruit knife and fork, six items total, $36.00 (two sets).
7) One each; dinner knife and fork, two items total, $12.00 (two sets).
8) One each; fish knife and fork, two items total, $12.00 (one set only).
Due to weight all items must be picked up in person; payment by cash or money order.

• John Thompson, 19 Glencrest Blvd., Toronto, Ontario M4B 1L2, (416) 759-1803, wishes to buy a copy of the September 1961 issue of the UCRS Newsletter, in good condition. Write or call first, stating price.

• F.E. Cooke, Box 5210, R.R. No. 5, Trenton, Ont. K8V 5P8, will buy photos, slides, plans, etc. of the Grand River/Lake Erie and Northern Rys.

• The TTC has installed a home-built mockup of the operating position of a CLRV in the Operations Training Centre at Hillcrest for use in operator training. Included in the full-scale mockup is an instructor's console to simulate, on the car annunciators, the major problems an operator could encounter in either single car or multiple-unit operation. The console carries a working speedometer, brakes, lights, timers, controls, etc., just as in an actual CLPV.

CP Rail Tamper

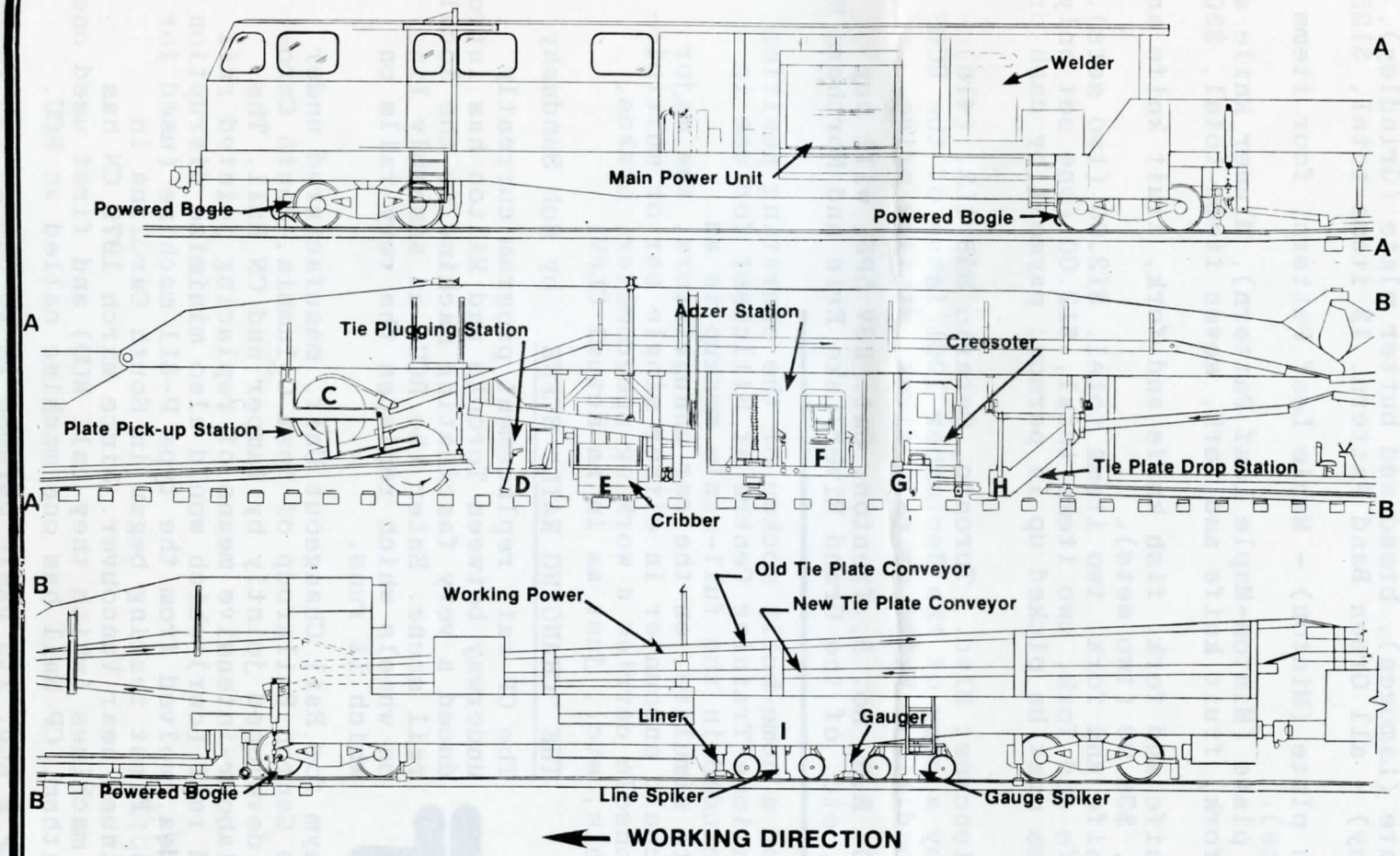
THE "CHANGING RAIL" SCENE by Bob Sandusky

The CP rail replacement program currently underway between Toronto and Milton has introduced a very fascinating machine to the local rail scene. Enter the RCU, an assembly line on wheels which replaces the very rails on which it runs.

RCU is CP Rail's acronym for Rail Changeout Unit, manufactured under the name Tamper by the Canron Railgroup of West Columbia, South Carolina. The machine was developed jointly by Tamper and CN Rail. The latter wanted a less labour-intensive means of replacing jointed rail with continuous welded rail (cwr) which would also minimize disruption of rail traffic. An idea evolved from the type P-811 machine (used for placing concrete ties). First testing began in South Carolina in October 1978 and continued near Vancouver. Since March 1979 CN has taken delivery of two machines (which they call RCO) and first used one in production near Chatham. CP Rail has one machine called an RCU.

Let's have a look at CP's RCU. Its basic purpose is to change out rails and tie plates, then prepare existing crossties for placement of

CP Rail 5001-01 rail change out machine



SPECIFICATIONS

Length Overall	221'
Maximum Width	10'4"
Height from Rail	13'1"
Weight	170 tons

MINIMUM CURVES:

Working 820' (7 degrees)
Travelling 492' (11.5 degrees)

WORKING SPEED: 1500' to 2000'/hour

POWER: Main - 8V92 liquid-cooled diesel, 368 H.P. Auxiliary - 4.71 liquid-cooled diesel, 139 H.P. @ 2100 R.P.M.

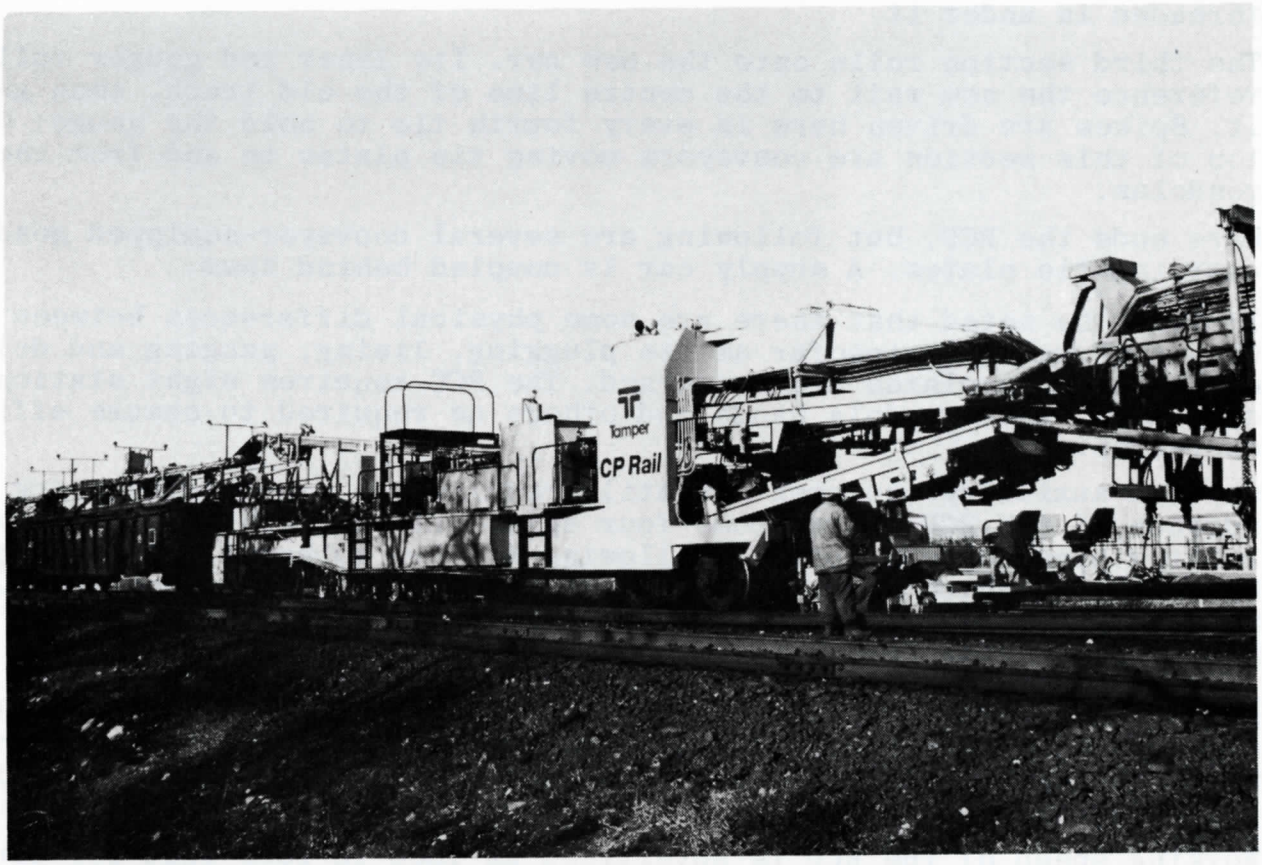
CONVEYORS: S-14D air-cooled. 14 H.P. gasoline. NAILER: 3 H.P. air-cooled gasoline.

DRIVE TRAIN: Working mode through planetary gearbox, disconnected for track travel.
TRANSMISSION: Clark four-speed (forward and reverse), powershift.

TRUCKS: AAR Type 70-ton, 33" wheels (three driven in working mode, one in travelling mode).
BRAKES: Air over hydraulic with failsafe; through air braking for train formation; 100 CPM compressor.
ELECTRICAL SYSTEM: 15 KW generator.
CAPACITIES: Fuel 540 gal. Hydraulic oil 700 gal. Cooling 28 gal. (8V92 main). 14 gal. (4.71 auxiliary).

CANRON RAILGROUP

Photos by Bob Sandusky



incoming plates and rails. This 221-foot, 170-ton machine consists of three sections.

The lead section is the power car with 380 H.P. diesel engine, A.C. generator, power welder and operator's cab. Beneath it two bogies, driven by a four-speed mechanical drive, roll on the old, bolted 100-lb. rail.

The second section is the main beam, suspended between huge cantilevers projecting from the first and third sections. It supports six work stations, each of which is conveniently identified by a white sign atop the beam. These stations are as follows:
1. Plate Pickup. As tie plates are exposed, two rotating, permanent magnetic wheels (one per rail) lift them up to a short conveyor whence a further pair of magnetic wheels raises them to the main conveyor. This transports them rearward, past the third unit and into trailing gondolas.
2. Plugger. Here a dispensing gun fills old spike holes with 'Spike Tite'. This is Canron's urethane filler which sets in 10 seconds.
3. Cribber. This station cleans off the tie plate areas. As it can throw ballast around it is well-covered. Its height is adjustable.
4. Adzer. Here are four adzer heads, two on each side. One pair alternates in use with the other so that changeouts can be made while the unit is in operation. Height and alignment are automatic as the surface is prepared for new plates. (The occasional unlifted plate can give the adzer indigestion).
5. Creosoter. Automatic, self-cleaning nozzles spray the adzed surfaces.
6. Plate Drop. New plates conveyed forward from the trailing gondolas are dropped down a chute onto the ties. Suspended also from this beam are sets of rollers which lift and thread out the old 100 lb. bolted rail as it clears the power car. The new, 136 lb. cwr is lifted and threaded in under it.

The third section rolls onto the new cwr. Its liner and gauger rollers reference the new rail to the centre line of the old track, then gauge it. Spikes are driven here in every fourth tie to hold the gauge. On top of this section are conveyors moving tie plates to and from the gondolas.

Here ends the RCU, but following are several conveyor-equipped gondolas carrying tie plates. A supply car is coupled behind them.

It might be noted that there are some physical differences between the CN and CP machines insofar as tie plugging, lining, gauging and delivery of new tie plates are concerned. The RCU requires eight station operators, four gondola hands and others as required to ensure efficient operation.

Certain auxiliary equipment is still required to prepare the track in advance of the RCU. First come four spike-pulling machines, then two rolling bins for old spikes. Following are two rubber-tired Pettibone Speed Swings which thread the new cwr through a mobile frame. The frame positions the cwr immediately beside the bolted rail for pickup by the RCU. These useful Speed Swings have flanged wheels as well and can climb up onto the rails in 20-30 seconds. Just ahead of the RCU is a small nailing cart which drives a 16 or 20p nail along the centre line of every other tie (every tie on curves). Centreline Followers on the RCU's automatic work stations sense these nails and align the machinery accordingly.

Working speed of the RCU is advertised as 1500 to 2000 feet per hour. Non-working self-propelled speed is 15 m.p.h.

Rail renewal on the north track (the one intended primarily for GO service) was started manually between Streetsville and Cooksville. The RCU picked up in October and completed the work as far west as Main Street, Milton, and east to Mile 3.2 near Lansdowne Avenue. The south track (freight only) has already received a cwr drop and will be renewed this year.

The rail train which delivers the RCU's raw material is worth mentioning. It consists of about 30 open-end gondolas containing racks bearing ¼-mile sections of rail (five high, 10 wide). At the dropping end are four flat cars, the third of which is a Rail Threading Car. It carries two frames with rollers which guide the cwr down onto the ballast. To start a drop, a winch on the Threader draws cwr out across two intermediate flats and gets it threaded. A cable is then fastened to it using a hole burnt through the web. The other end is anchored to a sturdy bar inserted under the rails of the existing track. Locomotives pushing at this end ease the train out from under two, ¼-mile lengths simultaneously. A variation on this is to attach the rail to a stationary locomotive and pull the train out (often at a brisk rate of speed). This requires two to three units.

Changeout operations were to resume at the end of March. Interested readers should be able to see the RCU in action as it works its way back from Parkdale to Milton. Its progress is audible. A warning siren alerts workers as other trains approach. The air horn sounds each time the machine is about to move.

The writer thanks the Canron Railgroup for RCO specifications used here.

MAGNETIC TICKETS TO BE TESTED

The TTC has decided to proceed with a test installation of Magnetic Encoded Ticket equipment at certain stations on the Yonge-University Subway line commencing in mid-1982. This decision is the culmination of studies into improved methods of fare collection which commenced with the setting up of a Working Group in 1979 to determine if an improved collection system which would overcome many shortcomings of the present system could be developed. Four European cities were visited in the fall of that year in order that fare collection procedures and equipment could be studied, and an assessment of collection technology available from suppliers in Europe and North America was undertaken. The Working Group selected four fare collection systems for detailed evaluation, these comprising a Multiple Trip Ticket System, the Flexfare System, the Honour Flat Fare System, and the Magnetically Encoded Ticket System.

The systems were studied in great detail and were systematically evaluated over a range of criteria in comparison with the present system. The factors considered in the evaluation were capital cost, passenger convenience, security features, management information capability, personnel considerations, flexibility for different fare policies and operating considerations. This evaluation indicated that, based on Commission requirements, the Magnetically Encoded Ticket (MET) System was superior to the others. If the reliability of the MET System can be demonstrated, it offers the opportunity for major improvements in passenger convenience and operating efficiency and much more flexibility in fare policy than the current fare collection system. The system proposed for the Toronto test is a relatively simple one wherein tickets and passes are automatically checked for validity in an entry turnstile in the subway. Similar systems have been in use for some years in a number of cities including Paris, Montreal and Mexico City. The electronic equipment now available has been miniaturized and its capacity and flexibility improved since these systems were installed.

The evaluation has indicated that the MET System offers an extensive list of advantages:
--Automatic entry through turnstiles and high gates for all adult patrons using the magnetically encoded single trip tickets.
--Automatic entry for pass holders, both at main and unattended entrances (during peak periods).
--Easier to handle fare media.
--Reduced line-ups.
--Ability to handle innovative fare structures.
--Potential for automatic entry with coded transfers (during peak periods at selected locations).
--Potential for automatic entry for those using reduced fare and off-peak fare tickets.
--Potential for fares or passes which provide a combined TATOA/TTC ride or parking fee/TTC ride.
--Removes the token from circulation thereby eliminating conflict with coinage, both foreign and domestic.
--More effective monitoring of fare payment.
--Reduced weight and bulk of fare media to be distributed and processed.
--Reduced packaging costs.
--Elimination of hoarding.
--Improved counterfeit control.
--Improved collection and flow of management information.
--Improvement in security-related considerations.

The proposed Magnetically Encoded Ticket System would utilize a ticket stock somewhat larger than the present TTC ticket with a magnetic oxide strip on one side which can be used to encode up to 60 characters of digital information. On the reverse side regular ticket information would be printed. Adult tickets, concession tickets, transfers and monthly pass coupons could all be printed on MET ticket stock. Tokens and the current tickets would be discontinued. Existing entrance turnstiles and high gates would be modified to accept and transport MET tickets and pass coupons past a reading head so that passengers could gain automatic entry to the subway system. The equipment design and logic would permit the use of different tickets, passes, etc. in the same turnstile; for example, both full fare and off-peak tickets could be accepted during certain hours.

Fare collection procedures on surface vehicles would be the same as at present, except thst tokens would no longer be used. All adult single ride tickets, being magnetically encoded, could be used for entry through all turnstiles and high gates (in unattended entrances) as well as in collectors' and vehicle fareboxes as at present. While concession fare tickets could be magnetically encoded and accepted in the automatic turnstile nearest to the collector, it is not proposed to consider this until a later stage of the program. Pass users would enter the subway through automatic turnstiles and high gates in peak periods. At off-peak times they would pass the collector as an identity check.

The system would have the capacity to accept magnetically encoded transfers at stations which do not have automatic transfer facilities for persons transferring from surface vehicles to the subway. It is proposed that this feature of the system not be introduced until its effect on passengers and on operations can be determined.

Magnetic encoding on tickets and programming of turnstile logic would permit the use of both old and new adult tickets for a limited period after a fare change, as a deterrent to hoarding. After the limited period, the old tickets would no longer actuate turnstiles. Fare policy innovations such as off-peak fares could easily be accomodated in the MET system. However, fare-by-distance could not be implemented without the installation of extensive additional equipment including exit turnstiles

with ticket reading capability and memory, station encoding logic in entrance turnstiles, etc.

The estimated capital cost for full implementation of the MET System is approximately $7 million dollars (based on 1980 estimates). The net increased operating costs of the system, not including depreciation, are expected to be approximately $300,000 per annum. This cost would be roughly offset by the elimination of revenue losses from hoarding.

While the Magnetically Encoded Ticket System could handle a Metropass, there is concern regarding public acceptance and the overall security as the pass would necessarily be much smaller than the present size. The Commission has been following the use by the MBTA in Boston of a 'swipe-thru' reader for passes which operates with a credit card size pass and has the benefit of not requiring the pass to leave the passenger's hand. A passenger simply slides his pass through a slot as he enters a turnstile and, if the pass is valid, the turnstile unlocks. This is a very simple reading mechanism with no moving parts and has the advantage that the passenger retains possession of his pass and does not have to surrender it to a machine. If ultimately proven successful, this type of equipment may be less complex, more acceptable to the public for passes, and possibly provide a greater throughput of passengers per turnstile.

Testing of this equipment is considered appropriate, as the introduction of Metropass has reduced somewhat the convenience of those pass holders who previously entered the system with tokens.

The test program, in addition to the installation of up to 24 MET turnstiles, will accordingly involve the use of six 'swipe-thru' readers, which would see service during rush hours at certain heavily used subway stations.

In summary, the project would test in revenue service, using adult single trip MET tickets and monthly passes, the key components of the MET System and the 'swipe-thru' readers. The estimated capital cost of the experimental installation would be $800,000. At the conclusion of the test program (the length of which has not been specified) its results would be analyzed and a decision made by the Commission as to whether or not to proceed with full system implementation.

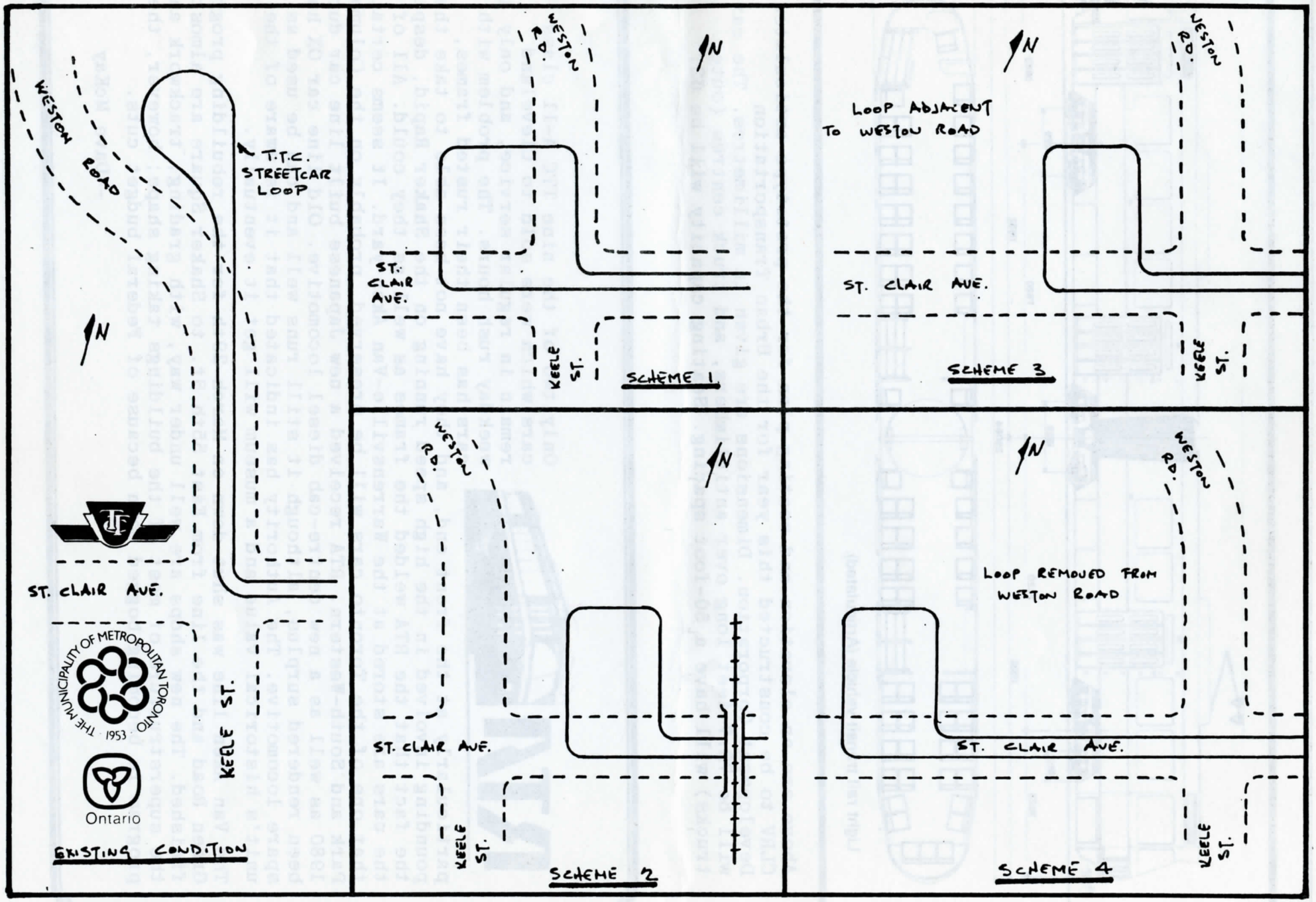
MORE TTC Notes

• Red and cream on the way out: It is now official that the red, black, grey and white livery used on the CLRV's will become the standard TTC paint scheme for surface vehicles. On April 7th the Commission adopted a staff recommendation that all buses and trolley coaches be progressively repainted in the new colours, which were originally approved in July, 1976 for application to the new street cars. The red and cream basic colour combination, which in Toronto dates from the delivery of the first Peter Witts in August, 1921 (and which was at one time used by many transit systems), has thus been terminated after 60 years. To many transit fans, the TTC will simply no longer be the same system under any other livery. However, as long as PCC cars continue to operate there will be a reminder of the old order, as the decision to adopt the new colour scheme includes an explicit exception in relation to these cars. The Commission report on the matter contains the following rather cryptic statement: "It is not proposed to repaint the remaining PCC cars as they are due for replacement commencing in 1983, as set out in the Five-Year Capital Works Budget". As an editorial comment on the new livery, it is gratifying to note that the TTC has resisted the tendency, which has afflicted so much of the transit industry, to resort to psychedelic or

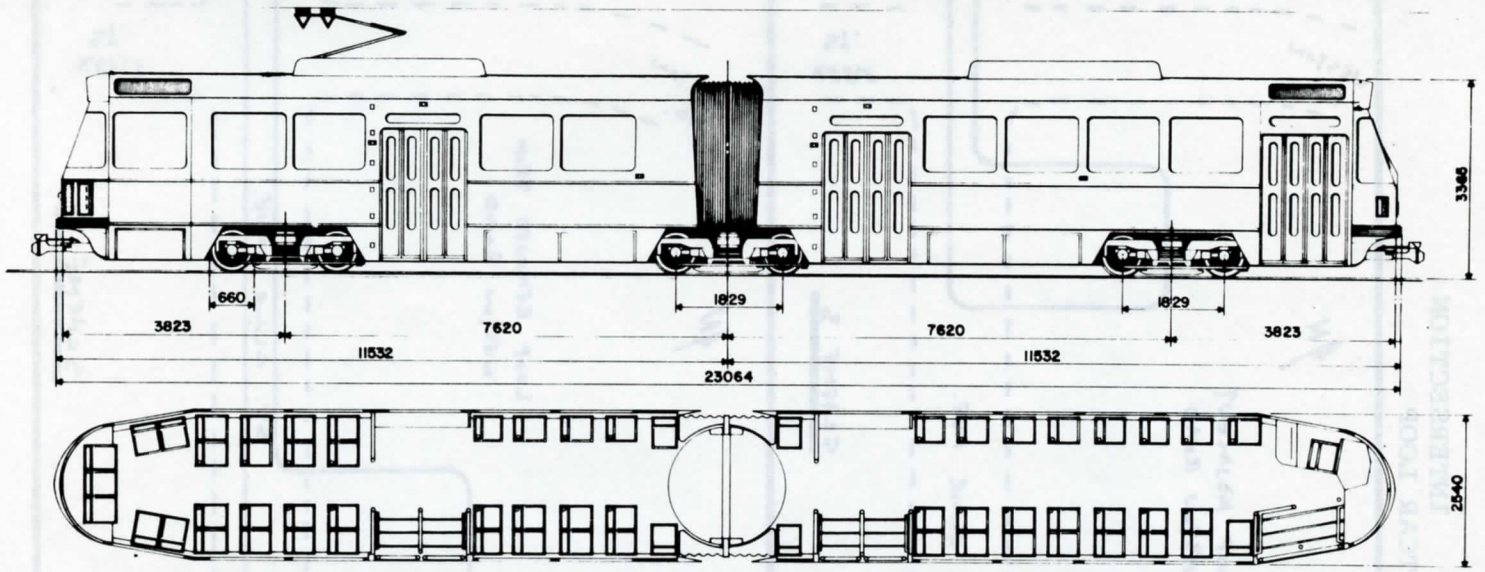
"super-graphics" vehicle paint schemes. While one might wish that the area around the windows in the new scheme be something other than black, the livery has the basic virtue of following the lines of the vehicle, with the various colour elements used in appropriate proportions. Also, the classic "flying keystone" herald, containing the even more time honoured TTC monogram, has happily been retained.

- It is reported that two A-8 class PCC's will be selected for conversion into a rail grinding train to be permanently assigned to the Scarborough LRT line, although its operating range will presumably be greatly broadened in the future with the construction of additional LRT lines. This would reduce the fleet of heavy rebuild cars available for passenger service to 170.
- CLRV 4020 has been equipped with a set of modified PCC car wheels in an attempt to suppress the vibrations which have affected the occupants of buildings adjacent to routes on which the cars have been operating (for some unaccountable reason, most of the complaints relative to vibrations from the cars have been coming from the east end of the city).
- As of April 20th two lines of new overhead poles (wood on the north side and pre-cast concrete on the south side) as well as several span wires had been erected on St. Clair Avenue West between Keele Street and Maybank Avenue. These are in preparation for the relocation of Keele Loop to the intersection of St. Clair and Maybank and the track extension to the latter point, on which construction is expected to commence in July. On an adjacent page are shown a number of the loop locations which were discussed among the TTC, the Metropolitan Roads and Traffic Department, the City of Toronto and the Provincial Ministry of Transportation and Communications; Scheme 4 was that eventually chosen, although, if the sketches are considered to be at least approximately to scale, the loop location will be much further west of Keele Street than indicated. Those readers who are familiar with the location will realize that Scheme 2, in particular, would have been something of an operating disaster.
- A second line of westbound trolley coach overhead has been installed on Davenport Rd. between a point about 100 feet west of Bedford Rd. and Dupont St. The new overhead approaches the Davenport-Dupont intersection over the traffic lane closest to the centre line of the street and thus facilitates the left turn movement to Dupont St. for Annette coaches on their regular route and for Bay coaches returning to Lansdowne Division. A power on-off switch is used at the point of divergence of the two westbound lines (power on to set switch for curve to left turn lane, and power off to reset for straight (Bay route loop). The Bay and Annette routes were dieselized on Sunday, April 26 while final adjustments to the overhead were made.
- The TTC is co-operating with the Municipality of Metropolitan Toronto and the City of Toronto in a major "Central Area Traffic Management Study" which will examine a variety of proposals for radical changes in the way downtown movement is handled. One of these proposals, which is scheduled for detailed investigation in the near future, is for the establishment of transit malls on one or both of Queen and King Streets between University Avenue and Church Street. The transit malls, similar to that planned on Main Street in downtown Buffalo, would be restricted to street cars, pedestrians and emergency vehicles.
- Another study in which the TTC has been involved is the Metropolitan Toronto Transportation Energy Study, designed to determine the extent of the energy problem and its likely effects on transportation in Metropolitan Toronto. The first report on the study makes no definitive proposals but seeks authority for the preparation of a "package of energy conservation measures for the transportation sector suitable for short term action", as well as for longer term analysis of land use/transpor-

WESTON ROAD/ST. CLAIR AVENUE/ KEELE STREET INTERSECTION
ALTERNATIVE LOCATIONS FOR STREETCAR LOOP



MAY 1981



Light rail transit vehicle (Articulated).

Above are an elevation and seating plan for the prototype articulated CLRV to be constructed this year for the Urban Transportation Development Corporation. Dimensions are given in millimetres. The car will be 72.7 feet long over anticlimbers, and truck centres (outer trucks) will have a 50-foot spacing. Seating capacity will be 62.

RTA

Only two of the nine TTC A-11 class cars which were sold to Cleveland remain in regular service, and only in weekday rush hours. The problem with the cars has been their rusted frames, particularly at the front end, and they have not been able to take the pounding involved in the high speed running on the Shaker Rapid, despite the fact that the RTA welded the frames as well as they could. All of the cars are stored at the Warrensville-Van Aken yard. It seems certain that one of the Toronto cars will be preserved, probably on the Columbia Park and South-Western. RTA received a new Japanese built line car during 1980 as well as a new centre-cab diesel locomotive. Old line car OX has been rendered surplus, although it still runs well and can be used as a spare locomotive. The Authority has indicated that it is aware of the unit's historical value and a museum will get it eventually.

The Van Aken line was shut down on March 29th for the rebuilding program; Green Road and the line from East 55th St. to Shaker Square are almost finished. The new shops are well under way, with grading, trackwork and the superstructure of most of the buildings taking shape; however, the program is becoming bogged down because of Federal budget cuts.

--Dave McKay

tation/energy consumption relationships. The report does reveal that alternative future rapid transit lines for the Toronto area are being compared from an energy point-of-view. It also indicates the relative energy efficiency of existing transportation modes on two bases: (1) considering both direct and indirect energy consumption and (2) direct energy consumption only (discounting that expended in permanent way and vehicle construction and maintenance). The ranking (most efficient to least efficient) under (1) is as follows: 1. Trolley Coach 2. Subway 3. Street Car 4. Diesel Bus 5. Commuter Rail 6. Vanpool 7. Private Automobile.
Under (2) above, considering only the energy expended in operations, the ranking is as follows: 1. Subway 2. Street Car 3. Trolley Coach 4. Diesel Bus 5. Commuter Rail 6. Vanpool 7. Private Automobile.

- Metropolitan Toronto's Development Committee, on March 19th, adopted a Planning staff report which calls for accelerated rapid transit planning by Metropolitan Council and the TTC. The Metropolitan Official Plan, which was adopted as recently as October, 1980, fails to show any new rapid transit lines beyond the Scarborough LRT line; a facility on Eglinton Avenue, shown in earlier drafts of the plan, had been deleted partly because of a $600 million projected cost but principally because of the opposition of local municipal councils which fear intensive development pressure, as a rapid transit line on that alignment might bring. The staff report says that deletion of the line from the plan was a mistake, but that a new east-west line could be located on any of Eglinton, Sheppard or Finch Avenues, costing in the order of $1 billion (the Province pays 75%) under any of these alternatives. It is difficult to see how an all-surface LRT line on the Hydro right-of-way paralleling Finch Avenue could have anything like the same costs as a grade separated (probably subway) line on Eglinton Avenue. The staff report pointed out that, as it takes six to eight years to plan and construct a rapid transit line, it is imperative that the TTC be given direction on future rapid transit construction. The report indicated further that TTC ridership is increasing more rapidly than had been anticipated; the projection for 1981 passenger carrying is 375 million, up 9% from the 366.4 million of 1980 which itself was the year of highest TTC patronage to date, up 20.2 million from 1979.
- The east-west rapid transit line mentioned in the last item may ultimately connect with another new transit line--an intramural ICTS line at Toronto International Airport. In connection with plans to construct a third terminal at that facility, the Federal Government is reportedly considering adoption of UTDC's transit system for moving air passengers between the three terminals. This is one application in which use of the dinky trains may make some sense.

the new VIA timetable

BY DALE WILSON

System Folder Number 227 is VIA's official designation for the new spring and summer schedules and there are two major changes to be noted as compared with the previous document.

In co-operation with AMTRAK, VIA is now offering a Toronto-New York City through service, in daylight hours, by way of Niagara Falls and Buffalo. Since the new train, dubbed the Maple Leaf, is equipped with new AMTRAK rolling stock, perhaps a few more Canadians will begin asking the politicians in Ottawa awkward questions about the age of Canadian passenger cars. Using the Maple Leaf, it is possible for the

railfan to make a Toronto to Rochester and return trip with a layover of about 90 minutes in the latter city. Another possibility is a Toronto-Montreal-New York loop trip using either the Adirondack or the Montrealer as well as the Maple Leaf. The coming of this new train means the end of RDC service between Toronto and Buffalo on the former TH&B Line, an event to gladden CP Rail's corporate heart.

The second major change is that the Super Continental and the Canadian will operate independent of one another as far west as Winnipeg, although passenger transfer will be possible in the Sudbury area by means of a complicated, three-way, bus shuffle involving Sudbury CP, Sudbury Junction (CN) and Capreol. It seems that in doing this, VIA refuses to see that one rather important reason for people riding trains is to avoid bus travel. Even long-distance, through travellers may be required to take a bus, first thing in the morning or last thing at night, depending on travel direction, if they really do want particular accommodation to a particular destination, or if they are late getting reservations on these space-limited trains. The use of a suburban station for the Toronto train (the Super) to and from Sudbury has already brought newspaper criticism in the Nickel Belt.

At Winnipeg, the times for the Canadian have been changed just enough to be annoying. One hopes that there were excellent operational reasons for this. Apart from the Sudbury shuffle and the minor time change mentioned above, the transcontinental service is virtually identical to what has been in operation over the past winter.

There are a great number of minor changes and for the most part they are positive and allow VIA to do a better job. The only "bad" news is the slight hike in fares almost across the board, although this shouldn't surprise anyone in this day and age.

The inner covers are decorated with colourful sketches of the accommodations available and it is to be hoped that temperature control in the sleeping spaces will be regulated so that passengers will be as happy as the srawings indicate. Due to the transcontinental trains changing their operation on June 1 rather than as soon as this document was issued, their schedules require complete duplication-a matter of several pages. This should pose no problem if travellers will read the instructions and indications on each page.

"Protect your bike" is the slogan on a small ad promoting the sale of bicycle boxes at baggage rooms. Surely this says something about the changing nature of the rail passenger.

More emphasis is given to the Halifax-St. John services, although no trains are being added at this time. It is presumed that VIA is attempting to capitalize on increased ridership in this corridor over the past year. Rumours have been heard that this route may see LRC equipment - sometime. Also in the Maritimes, a Sunday schedule change for a Campbellton-Moncton train shows that someone at VIA continues to think of the weekend traveller. At first glance, bus service in PEI seems to have increased, but further examination shows this not to be so and that all connections with rail transport are now at Amherst, Nova Scotia.

In Quebec, there are small alterations - hopefully for good reason - in the Quebec/Montreal-Senneterre service. For the summer a train has been added between Quebec and Chambord, as is the case on weekends for the Montreal-Mont Laurier route.

There have been some timing changes for the Montreal-Ottawa trains, apparently a response to actual traffic patterns. VIA-1 service is presented a little more prominently in this schedule, an appropriate

move since VIA seems serious about competing with Air Ugly for the businessman's travel dollar. The Toronto-Sarnia and Toronto-London corridors see a change and an addition. Trains 87 and 82 between Toronto and Sarnia become 681 and 682 respectively, using RDC's now rather than conventional equipment and thus giving a slightly faster trip. RDC-equipped trains 669 and 670 between Toronto and London have been added, giving Friday and Sunday late afternoon or evening departures for either destination - another reflection of effectively dealing with the weekend travel business. An RDC-equipped train has disappeared from the Toronto-Niagara Falls schedule but has been replaced with the aforementioned Maple Leaf. Although there are no changes, the routing of trains through either Orillia or Beaverton on their way between Toronto and Cochrane-Kapuskasing has been made much more obvious in this edition.

The reinstated RDC train between Sudbury and White River is there in all its glory, three times a week until May 31 and six times a week after that. Unfortunately the Canadian, which covers exactly the same route at almost the same time, is still listed as having "conditional stops" at the same places that the RDC serves, and this does seem to be very poor practice. The Capreol-Hornepayne fishermen's special returns to its three times a week schedule this summer, as does the Camper's Special on Friday and Sunday between Winnipeg and Farlane, Ontario, an operation that was facing its end and was saved through positive action by riders.

A number of bus services between Saskatoon and Hudson Bay or The Pas have disappeared from this document, which is strange given VIA's stated policy of attempting to co-ordinate road and rail services. There is one bus added for the summer, however, between Jasper and Banff, no doubt giving a new dimension to the Japanesetourist wishing a look at both the CP and CN mountains! British Columbia Railway service has been cut back, probably because of losses involved. Three RDC's acquired from AMTRAK were never painted in BCR livery and reportedly have been sold to VIA.

In the last section of the timetable, devoted to AMTRAK and connecting services, the Montreal trains both show slight modifications in timing that the frequent traveller would find bothersome. Were these changes made just for the sake of change?

Then there are the things which haven't been changed but should have been. Footnotes remain in the back of the timetable rather than beside or below the schedules to which they refer. The Calgary-Edmonton RDC still depends for amenities on vending machines in Red Deer station and continues using the South Edmonton station. Lest Albertans think they are the only ones singled out by VIA for second class citizen status, there is the case of Quebec (St. Foy) where the downtown station in the capital of the country's second most populated province isn't used at all. The delays in Winnipeg and Calgary continue, perhaps underlining an inability to keep schedules without these cushions. It is strange that VIA would perceive a traveller as one who wishes to travel rather than stay still. For those who wish to sample the delights of beautiful downtown Winnipeg or Calgary, surely stopover privileges are still possible.

Much of the country continues to be without intercity trains, despite the pretense that atranscontinental train on a 2,800 mile schedule can do the job. This is a fault of our elected (by us) representatives in Ottawa for failure to provide VIA with enough capital funds to do the job; and in both Ottawa and the Provinces for keeping fuel and licence costs low enough that highway travel is not yet perceived as an opulent luxury.

CP Rail

10 Year Locomotive Program

Diesel Units Remanufactured: 1980 Program

Compiled by Raymond L. Kennedy (Revised 4-81)

Make	Model	Class	Number	Ex Unit	Tied-Up	Out-Shopped	Notes
GMD	GP9	DS-17	1512	8510	*Jan. 1-80	O-June 27-80	A
			1513	8512	*Jan. 1-80	O-Aug. 28-80	B
			1514	8627	Mar. 11-80	O-Sep. 19-80	
			1515	8545	May 14-80	O-Nov. 25-80	C
			1516	8509	June 20-80	O-Dec. 13-80	
			1517	8486	Aug. 26-80	O-Jan. 13-81	
			1518	8539	Sep. 4-80	O-Feb. 13-81	
	GP9 +		1691	8832	Mar. 11-80	O-Oct. 30-80	D
	GP7	DS-15	1500	8412	June 19-80	O-Dec. 23-80	
			1501	8409	Aug. 9-80	O-Dec. 31-80	E
MLW	RS-18	DRS-18	1800	8794	Mar. 25-80	A-Oct. 2-80	
			1801	8764	Apr. 23-80	A-Oct. 22-80	
			1802	8746	June 3-80	A-Nov. 5-80	
			1803	8762	Aug. 15-80	A-Nov. 17-80	
			1804	8740	Sep. 18-80	A-Dec. 3-80	
			1805	8755	Sep. 26-80	A-Dec. 18-80	

O=Ogden Shop, Calgary.
A=Angus Shop, Montreal.

NOTES:

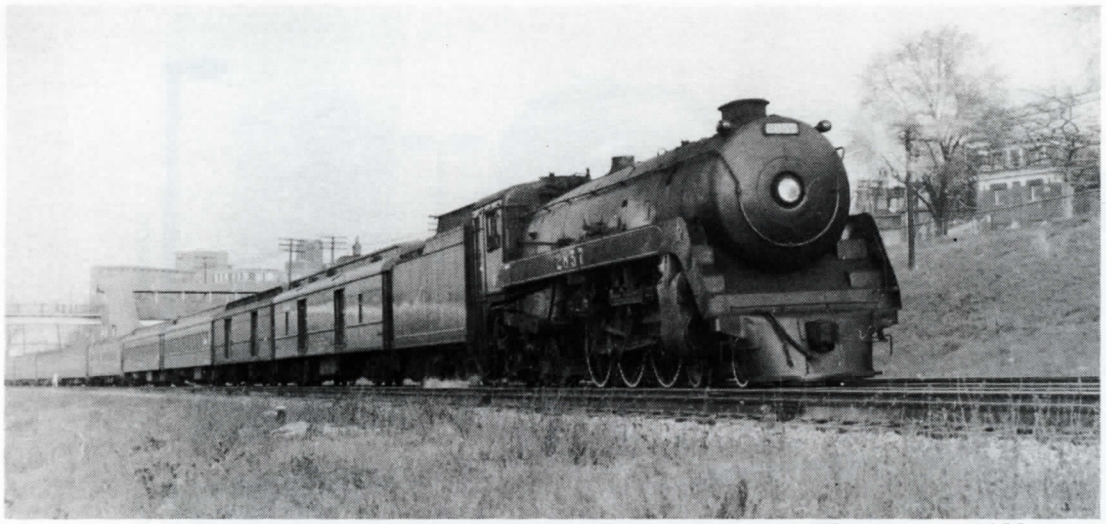
* Arbitrary date. Beginning of Program assumed to be officially January 1, 1980.

\+ 26L brake equipped.

A - Fire damaged Feb. 6-79 Golden B.C. (Tied Up Feb. 6-79). Originally held for complete re-wiring etc. ($54,000).
B - Fire damaged, July 15-79, Revelstoke, B.C. (Tied Up Aug.22-79). Originally held for complete re-wiring etc. ($54,000).
C - Minor collision 4-24-80 with 8485-8495 Alyth Yard.
D - Fire damaged, Feb. 13-80, Coalhurst, Alta.
E - Minor fire damage, July 1-80, Alyth Yard.

8510 and 8512 had steam generator removed account chop nose modification. 8509 had S.G. removed previously.
Originally 8501-8529 were S.G. equipped.
8511 and 8512 were re-geared from 65 mph to 89 mph, May 1960 - 1966.
Only CPR RS units geared for passenger service.

Previously rebuilt units 8492, 8518, 8530, 8615, 8619, could be considered pilot units from which the present program of remanufacturing evolved.



As late as Nov. 10, 1959, part of the NYC's Great Steel Fleet was still hauled by Hudson locomotives, in this case CPR 2857. The magnificent engine, which was to pull the UCRS Pt. McNicoll excursion on June 5, 1960, has just powered the overnight train from New York on the last leg of its journey, between Hamilton and Toronto. Photographed at Sunnyside Station, Toronto, by Jim Brown. --John Thompson collection

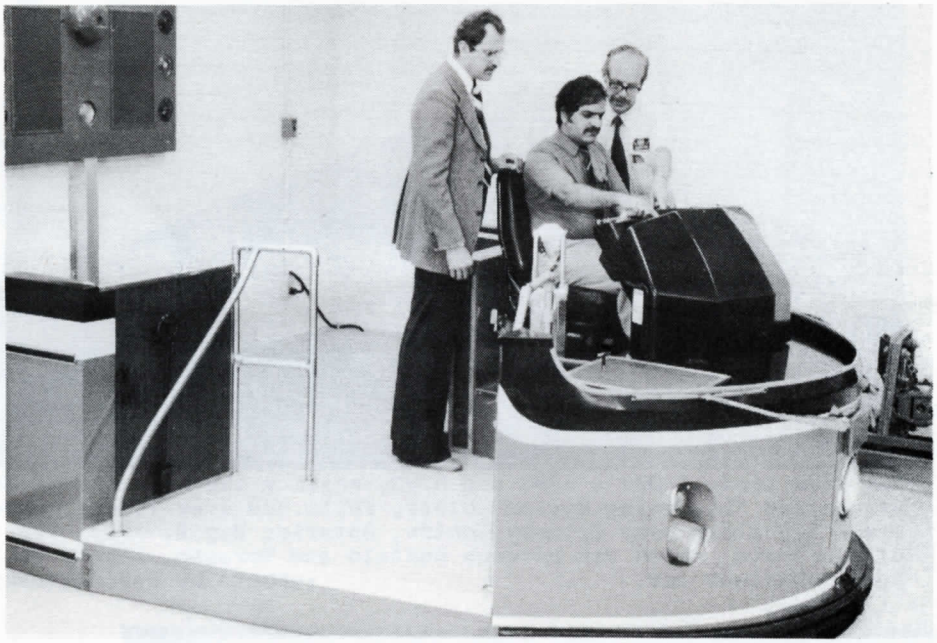
New York Central GP7's 5792 and 5793, wearing the Water Level Route's attractive "Lightning Stripe" black, white and grey livery, move TH&B Train 379 along near Grimsby Centre, Ontario, May 9, 1955. The consist of the train , which ran between Buffalo and Toronto, likely included a Buffet-Parlour car. --Photo by Bob Sandusky

--Photo by John Thompson

A pair of VIA RDC's, still in CP Rail colours, pause at the TH&B's Hunter St. Station in Hamilton on a bright May morning in 1980. Although the demise of this train spells the end of passenger trains stopping at Hunter St., hopefully at some future date GO trains will make use of this spacious, well-kept, and conveniently-located station.

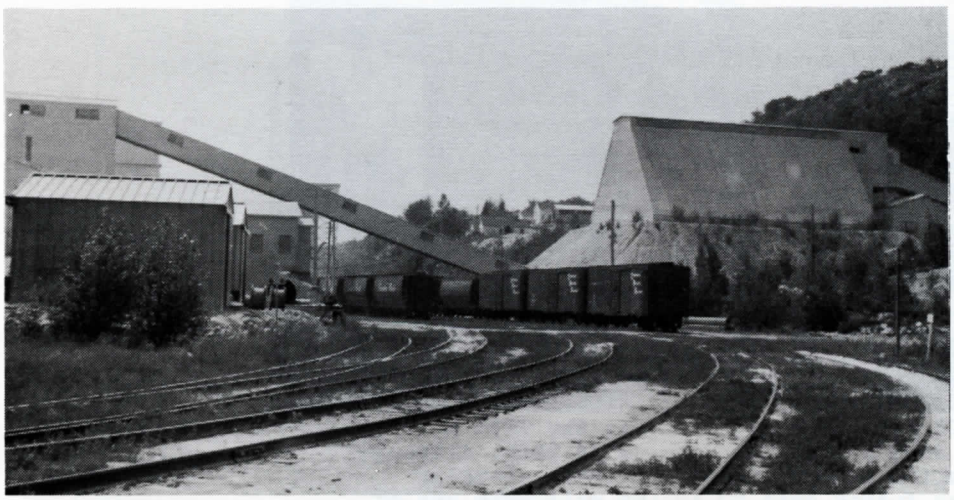
--Photo by John Thompson

Torontonians (including numerous UCRS members) had a preview of the 'Maple Leaf' on Apr. 8 when VIA and Amtrak located a display train, open to the public, on Track 12 of Toronto Union Station. Note the new train shed, opened last year, and the VIA symbol on the unit's nose. The consist included Amtrak F40PH 339, Amdinette 20217, Amcoach 21107, and Technical Training Car 1001 "Amtech" (rebuilt from a conventional car).



A TTC student Operator receives instruction in CLRV operation on the training simulator located in the Operations Training Centre in the Hillcrest Administration Building.

--TTC Coupler photo



--Photo by David Hales

The CPR yard and mine buildings at Nephton, Ontario, end of the comparatively new branch line from Havelock. August 1967.

FAREWELL TO THE TORONTO, HAMILTON AND BUFFALO LINE.
BORN 30 MAY 1897. DIED 25 APRIL 1981.

By John A. Maclean

The demise on 25 April 1981 of Toronto-Buffalo Dayliners 321-376 and 371-322 brings to a close a passenger service which, for all but 84 years, played an important part in the travel habits of several generations of local and international travellers. The Toronto, Hamilton and Buffalo Line, as it was known both officially and popularly, was barely one hundred miles long, yet required the services of three separate railway companies: the Canadian Pacific, the Toronto, Hamilton and Buffalo, and the Michigan Central, later New York Central, then Penn Central, finally Conrail. The first 40.20 miles, from Toronto to Hamilton, were operated by the Canadian Pacific Railway; the next 37.57 miles, from Hamilton to Welland, comprised the main line of the Toronto, Hamilton and Buffalo Railway; while the remaining 25.30 miles, from Welland to Buffalo, were run off on the busy rails of the Michigan Central Railroad's Chicago-Detroit-Buffalo main line.

The scope of the TH&B Railway's early passenger service between Waterford, Hamilton, Welland and Buffalo (the last in co-operation with the Michigan Central) was extended to include Toronto following the granting on 9 April 1896 by the Grand Trunk Railway to the Canadian Pacific Railway of trackage rights between Toronto and Hamilton, and the construction in Hamilton's west end of a short link connecting the GTR and TH&B main lines. Thus, with the announcement on 30 May 1897 of three daily through trains between Toronto and Buffalo, was born the Toronto, Hamilton and Buffalo Line as an entity distinct from the Toronto, Hamilton and Buffalo Railway, which was only one of the three partners involved in operating the Line.

At first rolling stock for the through trains was contributed by each of the three proprietors while engines and crews were changed at both Hamilton and Welland, but in 1905 new cars of classic wooden design were built especially for the Line by Canadian Pacific's Angus Shops in Montreal, and at the same time the TH&B and MCRR pooled their engines and crews to run through between Hamilton and Buffalo. The CPR later added engines to the pool, eliminating the change at Hamilton, and throughout the remainder of steam operation engines of all three companies ran through between Toronto and Buffalo. Train and engine crews continued to change at Hamilton, however, and this remained the case right to the end.

Over the years, motive power development closely followed that on other railways, from 4-4-0's through high-wheeled 4-6-0's to Pacifics, aided in later years by Hudsons. During through operation of steam power, each railway was responsible for a percentage of total engine mileage proportionate to its route mileage: 39.06% by the CPR, 36.46% by the TH&B, and 24.48 by the MCRR. Records were kept of mileage actually performed, and assignments were altered from time to time to conform, as closely as possible, with the required percentages on a monthly basis.

In common with other main lines of the New York Central System, the Welland-Buffalo trackage was equipped for cab-signalling and automatic train control, and all engines operating on it were required to be fitted with the appropriate equipment. This was no problem for the Michigan Central and its successors, as all its road engines were so equipped. Most main line engines of the TH&B Railway were also equipped, permitting them to operate beyond Welland in both freight and passenger service, but the CPR provided itself with only a few sets of ATC equipment, which were fitted to whichever engines were assigned to the pool

at the moment, and were transferred to other engines when assignments were changed.

From the Twenties to the end of steam, the CPR's contribution to the pool usually comprised a few heavy Pacifics of the 2300 series, the TH&B Railway had their three Pacifics, numbers 11, 15 and 16, and later their two Hudsons, numbers 501 and 502, purchased from the New York Central in January 1948, while the NYC provided their share in the form of Pacifics and Hudsons drawn as required from the many always to be found in their Buffalo terminals.

The classic wooden passenger equipment was replaced in 1924 by equally classic heavyweight steel baggage cars and coaches, some of which remained in service until the abandonment of locomotive-hauled trains in 1970. Rolling stock of the Toronto, Hamilton and Buffalo Line was finished in traditional CPR livery: maroon with black roofs and gold lettering, which last included the full name, including the word "Line" in large letters, and the names of all three participating railways in smaller letters below the windows: Canadian Pacific/Toronto, Hamilton and Buffalo/Michigan Central. This last was changed to New York Central in 1936 following the formal amalgamation of the MCRR and other subsidiaries into the parent NYC Railroad. An eccentricity of the lettering, otherwise of standard "railway Roman" style, was that letters such as "A" and "H" having a horizontal crossbar had this formed of two thin parallel lines, giving a distinctive and quaintly old-fashioned touch. The CPR had used this style at one time on all passenger equipment, but it was continued on TH&B Line cars long after it had been abandoned by the parent company.

A feature of TH&B Line trains, unusual in Canada, was that coaches had no smoking compartments: the Line followed the practice of its New York Central parent by providing completely separate coaches for smokers and non-smokers. The first coach on each train was set aside for aficionados of the weed, while all the rest were reserved for those who did not wish to indulge.

Prior to World War 11, parlor cars and/or diner-lounge cars were carried on all through trains, and there was a through parlor car on the day train between Toronto and New York. Under wartime conditions these luxuries were reduced to a Canadian Pacific cafe-parlor car on the morning train from Toronto, returning on the last train of the day from Buffalo, and a New York Central diner-lounge on the six o'clock train from Toronto, returning on the early morning train from Buffalo.

An important function of the TH&B Line during most of its life was the handling of through sleeping cars between Toronto and major cities in the eastern States reached by the New York Central and its subsidiaries. Destinations included Boston, Cleveland, New York City and Pittsburgh; also prior to the war, Philadelphia, reached by the secondary main line of the Pennsylvania Railroad from Buffalo through Williamsport and Harrisburg.

An unsual feature of this operation was that it was joint between the Pullman Company and the Canadian Pacific Railway, which owned and operated its own sleeping cars, and was thus entitled to the revenue from the 40 miles between Toronto and Hamilton. Special tickets were required, with separate coupons for each company, and the CPR had to provide car-miles amounting to a tiny fraction of the total. This was usually accomplished by replacing one Pullman car with a CPR sleeper on the Toronto-Pittsburgh run from time to time, usually for about a week at a time until mileage was equalized. Thus it was possible on occasion to see traditional CPR maroon brightening the smoky city of Pittsburgh, brave among the lines of olive green and Baltimore and Ohio royal blue and gray which normally inhabited the P&LE station.

The numbering of Toronto, Hamilton and Buffalo Line trains was complicated, due to the need to maintain the tradition of odd numbers for westward trains, and even numbers for eastward. Toronto to Hamilton is westward, while Hamilton to Buffalo is eastward; thus each train had to change its number at Hamilton. Additionally, for many years all trains also changed their numbers at Welland, although this was not forced upon them by a change in direction.

Here is how it worked: the TH&B Railway numbered the trains in the 70 and 80 series, the CPR used scattered numbers in the 700 and 800 series, while the NYC added 300 to the TH&B numbers, as the low numbers would have duplicated those of other trains on a system as large as the New York Central. To convert TH&B numbers to CP, the digit "1" was added to the TH&B number from Toronto to Hamilton, while "2" was added from Hamilton to Toronto. Thus the morning train from Toronto to Buffalo was CP number 721 as far as Hamilton, TH&B number 72 from there to Welland, changing there to NYC 372. Returning, the last train of the day from Buffalo to Toronto started life as NYC number 383, changed identity at Welland to TH&B number 83, and at Hamilton changed direction as well as identity to CP number 832. Ticket and information clerks at Hamilton had no soft life; they might be asked for the same train by any one of three different numbers.

Some simplification came in the early Forties when the TH&B Railway renumbered their portions of the through trains to conform with the NYC 300-series numbers, but this was offset on 27 October 1957 when the CPR indulged in a more-or-less system-wide renumbering of passenger trains, and assigned 300-series numbers to their Toronto-Hamilton trains, but not the same 300-series numbers as those used by the TH&B and the NYC. A vestige of this system can be seen in the numbers of the recently-discontinued Dayliners mentioned in the first line of this article.

Train names played a small part in the history of the TH&B Line, most of the trains living out their lives in anonymity; however, in the late 1930's a little class was added to the operation by naming the train carrying most of the through sleeping cars out of Toronto, leaving at 8:30 p.m. or thereabouts, THE ONTARIAN. Surprisingly, this distinction was not accorded the corresponding train bringing most of the Pullmans back into Toronto in the morning. In addition, some of the other trains were occasionally referred to by the names borne by the New York Central trains with which they connected at Buffalo, such as the ADVANCE EMPIRE STATE EXPRESS, but this was strictly unofficial.

Major changes in the operation of the TH&B Line were infrequent. In the mid-1920's trains were transferred at Buffalo to the magnificent new Central Terminal (recently vacated by Amtrak) which had replaced the squalid but more conveniently located downtown terminal on Exchange Street. In 1933 was opened the extensive grade separation and modernistic new station in Hamilton, built on the same ideal downtown site as the original station and of such advanced design that it is difficult today to realize that it is nearly half a century old.

The passenger service improvements originating in the streamliner age of the late 1930's nearly passed the TH&B Line by. About half the coaches were air-conditioned, and a few were given a small ladies' retiring room at one end and semi-bucket type seats upholstered in blue-gray material, but other innovations of the era, such as bright interior colour schemes, improved lighting, picture windows and reclining seats, were conspicious by their absence. Dark interior woodwork, dim lighting, small windows, walk-over seats and green plush remained the lot of most TH&B Line coach passengers, and the cause of much caustic comment from passengers becoming used to the increasing

creature comforts becoming common on most other passenger routes in North America.

In the depression days of the early Thirties the Line settled down into more than a quarter of a century in which little changed, and it is in this form that it will be remembered by the majority of railfans and travellers. Four through trains were provided daily in each direction, leaving Toronto at 8:20 a.m., 1:00 p.m., 6:10 p.m. and 8:30 p.m., and leaving Buffalo at 4:55 a.m., 8:40 a.m., 3:05 p.m. and 5:30 p.m. Exact times varied a little over the years, of course, but those shown, taken from the timetable effective 25 September 1949, are typical. Running time between Toronto Union Station and Buffalo Central Terminal averaged three hours and a quarter, with a few trains taking a little less and a few a little more: the "speed king" was the early morning one from Buffalo, in an even three hours.

Regular stops were made by all trains at Sunnyside, Hamilton, Welland, Fort Erie and Black Rock, and by all except the early morning job at the Terrace Station at the foot of Delaware Ave. in downtown Buffalo. All except the 8:30 p.m. from Toronto and the aforementioned early morning job would stop on flag at Smithville and Fenwick, while a few would also make conditional or flag stops at Grassies and Stevensville. Although the CPR was prohibited under its trackage rights agreement from carrying passengers locally between stations intermediate to Toronto and Hamilton, except Sunnyside, they could and did stop at any station between Toronto and Hamilton by previous arrangement for the convenience of passengers going to or returning from points beyond Hamilton and Toronto. The principal stations in this area, Port Credit, Oakville and Burlington, were later inserted in the timetable as conditional stops.

Speaking of timetables, there never was one that showed all trains and all stations on the TH&B Line in a single folder. The CPR showed the Line in their Eastern Lines and complete system folders, but the part beyond Hamilton was given in condensed form, omitting small stations and local trains operated by the TH&B and NYC. The TH&B Railway's folder showed all stations and all trains on their own line, of course, and even included the additional trains operated by the CPR between Toronto and Hamilton only, but omitted to indicate that they all stopped regularly at Sunnyside, a busy and popular boarding and alighting point in Toronto's west end. The New York Central, which never indulged the travelling public with a complete system timetable anyway, showed the through trains in their appropriate local and regional folders, but in condensed form beyond their own line.

A feature of the TH&B Line from the early 1930's on was its involvement in a number of co-ordinated train-bus routes. All three trains each way which stopped at Smithville connected there with a bus to and from Dunnville operated by a contractor to the TH&B Railway in replacement of the former mixed train service on the Smithville-Dunnville branch.

At Welland connections were made thrice daily with a bus operated by Canada Coach Lines under contract with the New York Central Railroad to and from Niagara Falls, Ontario, Suspension Bridge and Niagara Falls, New York, also replacing local train service. On both of these services, guaranteed connections were made right at the railway station, and railway tickets were honoured on the buses. Timetable also indicated bus connections between Welland and Port Colborne, but this involved regular local buses that happened to pass the end of the station platform on their way from downtown Welland to Port Colborne; connections were not guaranteed, and railway tickets were not honoured.

Scenic highlight of the Toronto-Buffalo trip was, of course, the long climb up the face of the Niagara Escarpment east of Hamilton, a breath-

taking panorama of the suburban sprawl and fruit-growing belt of the Niagara Peninsula, with Lake Ontario in the background stretching to the horizon. As impressive by night as by day, this view was featured in a lyrical write-up in TH&B Railway timetables for years, but was never mentioned by either of the other partners in the Line.

High point of the year for train watchers in the Toronto and Hamilton areas was the Thursday evening before Good Friday, when a mass exodus of denizens of both cities took place with the object of spending the Easter holiday weekend in New York City. Travel agents chartered whole trains of coaches and sleepers for their tour parties, operating as sections of the regular 8:30 p.m. train from Toronto, and resulting, along with augmented independent travel, in as many as seven sections "on the block" from Toronto to Welland, where some were diverted by the New York Central to their otherwise freight-only line via Niagara Falls, Ontario to Suspension Bridge, thence via the Falls Road through Lockport and Medina to join the main line at Rochester, thus reducing congestion in the Buffalo area. The return of the revellers was less concentrated, as some tour parties and individuals returned on Monday morning, while others, lucky enough to have Easter Monday off work, did not return until Tuesday morning.

Rail travel, operating under crush conditions during World War 11, continued at a high level for several years thereafter, and some improvements were made in the facilities offered by the TH&B Line during this period. Through coaches were inaugurated between Toronto and New York on both the daytime and overnight runs: these were supplied by the New York Central from their large stock of streamlined lightweight cars of postwar construction, and featured all the modern improvements so notably lacking in the joint line's own cars. A little later, the morning train from Toronto to Buffalo and the corresponding evening return train from Buffalo to Toronto were completely equipped with New York Central stainless steel coaches, finally providing modern accommodation for local passengers as well as those going through to and from points beyond Buffalo. Unfortunately, the other trains were never re-equipped, and passengers on them had to remain none-too-content with the joint line's own 1924-vintage heavyweights.

Dieselization came to the TH&B Line when, in February and March of 1954, the TH&B Railway took delivery of three steam-generator-equipped GP9's, numbers 401 to 403, which were sufficient to cover their share of locomotive requirements on the through trains. The New York Central had no difficulty providing enough road-switchers from those assigned to their Buffalo terminals to cover their share, but the CPR, not yet as far into dieselization as many other major systems, was not ready at that time to abandon steam operation between Toronto and Hamilton, so the early practice of changing engines as well as crews at Hamilton was reinstated. Later, when the CPR did in fact assign diesels to Toronto-Hamilton service, through running was not restored, perhaps to avoid equipping the diesels with train control equipment, and the power change at Hamilton persisted as long as locomotive-hauled trains continued to operate.

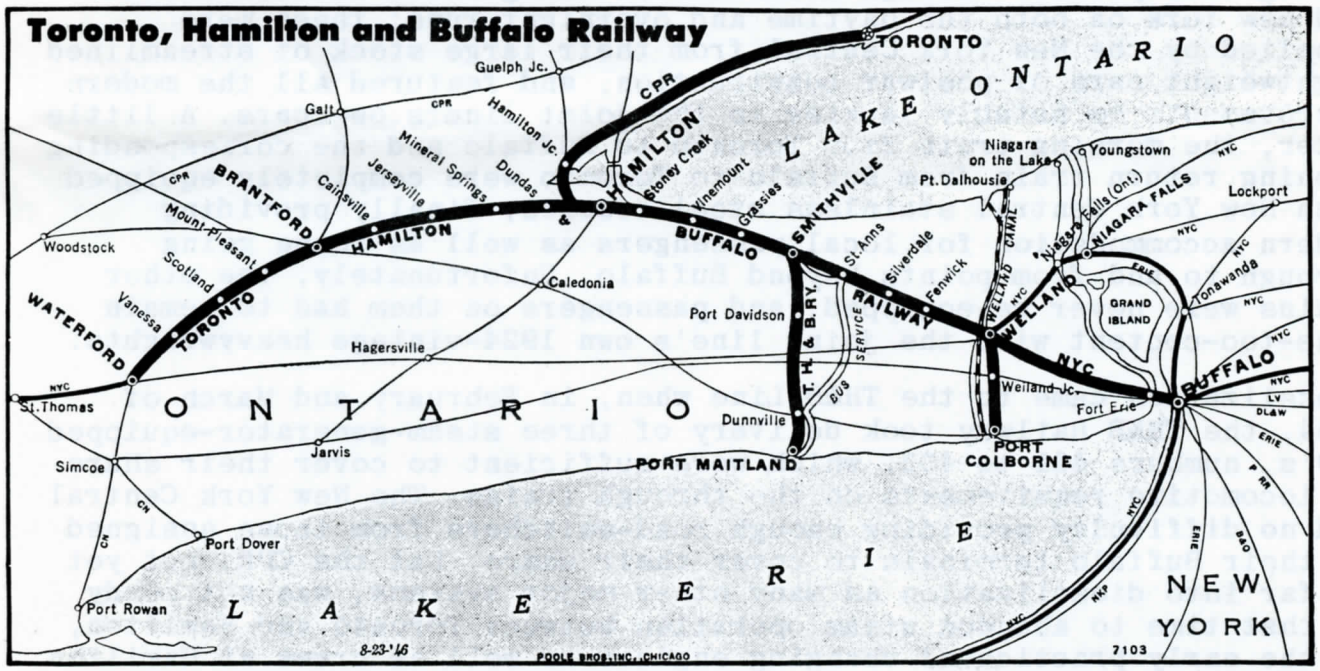
It was the Indian Summer of rail travel, however, and about 1953 a decline set in, slowly at first and then precipitously, as passengers deserted the trains for other forms of transportation. The figures tell the story of the TH&B Line's doom: from 427,924 passengers in 1952, the postwar peak, to just 19,179 in 1975. This collapse was inevitably accompanied by pruning of service. The timetable effective 27 October 1957 reduced the number of trains each way from four to three by omitting the mid-day runs, always the lightest, and rearranging the others to somewhat fill the gaps. Just two years later, effective 25 October 1959, frequency dropped to two trains a day each way, and

finally the 26 April 1964 timetable brought it down to one, this being the evening train from Toronto and the early morning job from Buffalo.

During this period of cutbacks the through sleeping cars to Boston, Cleveland and Pittsburgh were dropped, and the New York run shrank from as many as six cars each night to just one, which continued, accompanied by the one remaining through coach, until locomotive-hauled trains were replaced by the Dayliner, the last vestige of THE ONTARIAN leaving Toronto for the last time at 8:50 p.m. on 24 October 1970. Commencing next morning, the two-car Dayliner soldiered bravely on, connecting at Buffalo with Penn Central (soon to become Amtrak) trains to and from New York City, but lacking though equipment and meal service, although it was on the road in both directions at meal times.

And now even this has gone, replaced on 26 April 1981 by restored through service between Toronto and New York, albeit by a different route which leaves 55 miles of railway (Hamilton to Black Rock) to join the "freight service only" ranks, and two large towns (Fort Erie and Welland) and two small ones (Fenwick and Smithville) devoid of their last rail passenger service. And so the Toronto, Hamilton and Buffalo Line becomes a part of History.

The author is indebted for some of the information in this article to an earlier article by George W. Horner in the April 1952 issue of the Newsletter, and to the book "In the Shadow of Giants, the story of the Toronto, Hamilton and Buffalo Railway", by Norman S. Helm.



• TTC 9239 will be the first trolley coach to be repainted in the new colours, with 9245 being the second. The latter vehicle was seen in Hillcrest Shops on April 24th in readiness for its new dress.

• All TTC inspectors have recently been supplied with portable two-way radios, by means of which constant communication is maintained between the inspectors and the Transit Control Centre at Hillcrest as well as the various operating divisions. Thus, an inspector can be immediately dispatched to a trouble spot, and conversely can radio in reports of delays, breakdowns, etc. The radios will ultimately replace the TTC's private Transportation Department phone system on the surface routes, which was confined to the geographic area of the City of Toronto (only some 34 square miles out of the TTC's total service area of 240 square miles plus). The phones are located in bright yellow boxes on utility and overhead poles at strategic locations along the routes as well as at loops and above ground at subway stations.

UCRS and other events and activities

by Ed Campbell

--A sincere vote of thanks is due the members who helped at the UCRS booth at the Sportsmens' Show in Toronto. Taking an active part in the activities of the Society is one of the best ways to enjoy yourself and to ensure the success of the organization. Those who helped were Mrs. M. Sandusky, Bernice Walters, Ed Misera, Norm English, Mal Marchbank, Chris Spinney, George Meek, Ralph Percy, John Walker, John Carter, Helen and Charlie Bridges, Pat and Robin Scrimgeour, Rick Carter, John Robertson, Jim Walther, Heather Haig, Lloyd Baxter, Bill Corns, John Thompson, Dave Morgan, A. Faber, Marge Seidel, Larry Eyres, and Ed Campbell.

--The Society has now consolidated all of its archives, publications and equipment in a new location which will be announced later. A number of members helped to accomplish this, including Chris Spinney, Mal Marchbank, Raymond Kennedy, A. Faber, Gerry Sturgess, Norm English, Jim Walther, Lloyd Baxter, Mike Lindsay, Tom Thompson. Many thanks are also due to these members.

--The April meeting (Toronto) of the UCRS was held in the auditorium of the Education Centre on College St., at McCaul St. This location proved to be quite satisfactory, with good available transportation by street car and subway (the program featured a top notch slide documentary on the TTC street car system in the countdown period to the opening of the Bloor-Danforth Subway, 15 years ago, by new President Bob McMann). The Education Centre is not available for the May meeting, although it is expected to be used for the June meeting and beyond. The May Toronto meeting will be held on the 22nd, the fourth Friday; again this is the same date as the Hamilton Chapter meeting and efforts are being made to work out a suitable solution to third Friday holiday weekends.

--Negotiations are under way for a Car 13 (CAPE RACE) trip over much of the Ontario Northland Railway. It would include much freight-only trackage and the dates September 13th to 19th should be a beautiful time to see Northern Ontario. Watch for details later; Mal Marchbank is organizing this trip.

--Two attractive rail and chartered bus trips have been organized by the Society for August 8th and September 27th:

1. Saturday, August 8: Leave Union Station at 0900, stopping at railway facilities at Brampton, Georgetown, Orangeville, Collingwood, Owen Sound, Palmerston and Stratford, returning from Stratford to Toronto by VIA RDC's. Pick-ups at Brampton and Georgetown; 90 miles by rail, 220 miles by road. If you are quick in ordering your ticket you may get a seat, so RUSH your order. Price now is $43.95 members, $45.00 non-members. Children's fares on request.

2. Sunday, September 27: Rail and chartered bus from Toronto Union Station at 0830 to Lakefield, Fenelon Falls, Haliburton, Huntsville and other railway locations. Return to Toronto is by the ONR NORTHLANDER. Hot buffet lunch is included in fare; about 400 miles of travel. RUSH your orders for this trip also; fares now $54.95 members and $55.95 non-members; children's fares on request.

Order for the above trips from Upper Canada Railway Society, Box 42, Station "D", Scarborough, Ontario M1R 4Y7. Quote membership number for discounts please; remit by money order or certified cheque.

--Friday, May 22: Regular UCRS Toronto meeting at 8 p.m. sharp at MANOR ROAD UNITED CHURCH, MANOR ROAD AND FORMAN AVENUE, TORONTO. The church is on the north side of Manor Road, one block east of Mt. Pleasant Road. Manor Road is three blocks south of Eglinton Avenue. Take the Mt. Pleasant trolley coach from St. Clair Subway Station.

Enter through the door off Manor Road and go downstairs. Doors open 7 p.m. The entertainment will be provided by Ken Gansel, a very enthusiastic railfan, on the subject "North of Superior" by way of an illustrated talk on railway operations in this area. Do not miss this meeting.

--Friday, May 22: Regular Hamilton Chapter meeting at 8 p.m. sharp in the CNR station, Hamilton. The program will consist of members' 35mm slides. If you live closer to Hamilton than Toronto, why not bring your slides to the Chapter meeting--all members are always welcome.

--There is a possibility of a one-way excursion between Ottawa and Montreal with CPR 1201 and a tuscan red train on Saturday, June 6th. For further information contact the Museum of Science and Technology, 1867 St. Laurent Blvd., Ottawa, Ont. K1G 1A3. Further trips with the 1201 are planned for the summer and fall; details will follow.

--The Chessie Safety Express, featuring recommissioned C&O 4-8-4 614, will operate excursions out of Detroit on May 30, May 31 and June 6 to Clio, Grand Ledge and Grand Rapids respectively. The runs to Clio and Grand Ledge are round trips, while that to Grand Rapids is a "ferry" trip (one way only) although it will be followed by a round trip out of Grand Rapids to St. Joseph, Mich. on the following day, June 7. Round trip fares are $33 coach and $60 dome, observation lounge and parlour car (complimentary buffet and beverages), and ferry move fares are $20 and $40 for the respective accommodations. An open side coach is included in the consist. Runpasts are included in all trips. For further information write to Chessie Safety Express, MSU Museum, East Lansing, Michigan 48824, U.S.A.

--A brief ceremony attended the turning over to CP Rail by the Diesel Division of General Motors of Canada Ltd. of SD40-2 6024, last unit in the recent order for 75 such locomotives, on Wednesday, March 18th at the London plant. Following a plant tour involving about 20 executives and CP Rail representatives, the transmittal ceremony occurred outside the building. Wearing engineers' caps, W.W. Stinson, Executive Vice-President of CP Rail, J.H. Moore of London, a newly-appointed Director of Canadian Pacific Ltd., and Grant Warner, Vice-President and General Manager of the Diesel Division rode 6024 from the plant to an area in the yard where the unit was formerly handed over. Mr. Warner also presented Mr. Stinson with a scale model of an SD40-2. Afterwards, the CP Rail officials were hosts at a noon luncheon at the London Hunt Club. No. 6024 is the 495th SD40 or SD40-2 produced by London for CP since 1966.

--Mike Lindsay

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