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Rail and Transit

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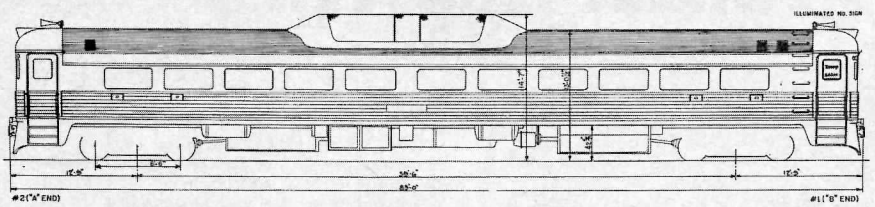

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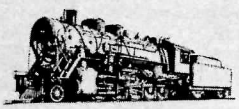

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CONTENTS

FRONT COVER
South African Railways 4-8-2 class 19D (Krupp 1938 manufacture). There were 235 locomotives in this class. The shot shows a southbound freight picking up a single track tablet at Dikgale, Transvaal. Photo taken by Randy Scholl on July 26th. 1973.

OPPOSITE PAGE
An eastbound log train on Crown Zellerbach's tracks near Cassidy, B.C. The usual CZ diesel is substituted for a leased CP Rail unit #7113. Photo taken at Boulder Creek bridge in June 1977. (Ken Perry)

ANNUAL SUBSCRIPTION RATE

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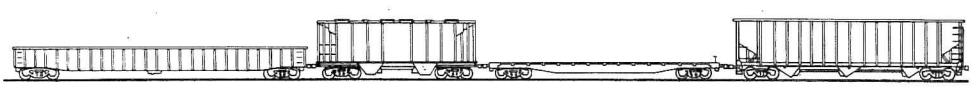


Under the Wire

Edited by Ron Layton

A Queens University study commissioned by the federal Transport Department has concluded that the federal government should finance electrification of 9500 miles of route over the next thirty years. The capital cost would be $60 million a year. Assuming 900 miles were electrified by 1985, fuel savings would amount to between $52 and $65 million a year. A 400 mile start is suggested for either the Thunder Bay - Winnipeg (CP Rail) or Edmonton - Kamloops (CN) routes.

AUSTRALIA

A contract has been let for new trains for the Brisbane commuter lines to Walkers - ASEA Pty Ltd., a Swedish - Australian consortium. The contract, worth $A20 million, is for 13, three car sets. Each set will consist of a power car between a power control car and an unpowered control car. With a maximum speed of 75 mph, the sets seat 248 with a maximum crush capacity of 500. These air-conditioned trains are due to enter service when the electrification is finished in 1979.

AUSTRIA

Through restaurant car service was introduced between Graz and Linz after the track between Linz and Spital am Phyrn was opened to electric traction. Most Austrian restaurant cars can only operate on electrified track as they are equipped with pantographs to draw power for the on-board services.

BELGIUM

Belgian National Railways (SNCB) has been authorised to electrify five more routes by 1985. They are Luttre - Manage - Braine le Compte, complete 1979; Manage - La Louviere - Mons, complete 1980; Antwerp - Leuwen, complete 1980; Marchienne - La Louviere, complete 1982; and Ottignes - Charleroi, complete 1985.

FRANCE

Recent high speed (175 mph) pantograph trials carried out between Mulhouse and Strasbourg have showed that for more efficient operation the pantograph should be mounted closer to the centre of the vehicle than is normal common practice. A streamlined fairing on the pantograph or even the aerodynamical redesigning of it may be neccessary.

In order to provide an improved local service on electrified main lines, a new 2-car emu has been developed. Designated class Z2, the first 36 1500v dc units will be ordered for delivery between 1979 and 1981. The dc will have conventional control equipment but later 25kv and dual-voltage units will have thyristor controls.

ITALY

Completion of electrification work between Caserta and Cassino has allowed through electric operation on the inland route between Rome and Naples. The 40 mile single track branch from Treviglio to Cremona has also been energised.

NETHERLANDS

The ageing class 1100 B-B units are to have a rebuild to extend their life until at least 1985. The trucks and suspension are to be modified and roller bearings fitted. All of the class should be through the shops by year end.

SPAIN

RENFE has finished work on a 35 mile section from Valencia to Jativa via Silla and Carcagente. A commuter emu service of 24 daily round trips has been instituted. Long haul trains will still be diesel hauled over this section. All Spanish railway equipment is to be converted from vacuum to air brakes now that the last steam has been retired.

SWEDEN

Swedish Railways are now operating the first of six class Rm freighters on the Lulea - Kirune - Narvik iron ore line. These new 4800HP units differ from the current Rc4 units with the addition of rheostatic braking, autimatic couplers, extra cab heating (for Arctic conditions) and a static frequency converter in place of the usual motor-generator set. A typical ore train will be triple headed by these units.

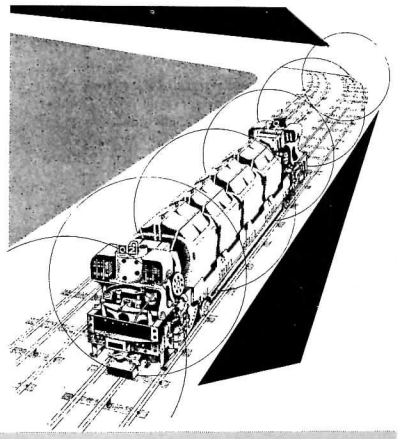
A further 40 class Rc4 thyristor controlled units have been ordered from ASEA for delivery next year. This is the largest single order yet placed by SJ with ASEA.

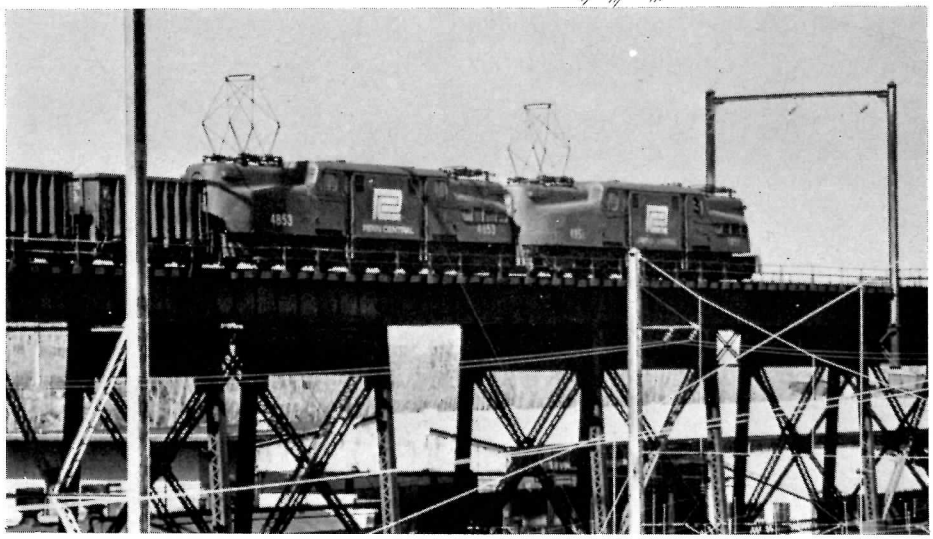
UNITED KINGDOM

During October the first electric train entered London's Kings Cross station. They are currently operating as substitutes for diesel trains on the old diesel schedule. Early in the year the full electric schedule will take effect. The new schedule will provide three trains an hour in the off-peak periods with seven trains an hour during the peak hours. These are in addition to the already operating inner suburban elctric and inter-city diesel trains. The through Kings Cross - Cambridge trains have been cancelled and transfered to the Liverpool St. (ex Great Eastern) route. The balance of the old Great Northern route (Royston - Cambridge) is to be covered by rebuilt diesel sets. It is expected that ridership will increase upwards of 30% on the introduction of the full electric service.
The Eastern Region will shortly submit an investment study as to the wiring of the Royston - Cambridge section and also the GE's Bishops Stortford - Cambridge line. Extension from Colchester to the North Sea port of Harwich is also to be included in the study.

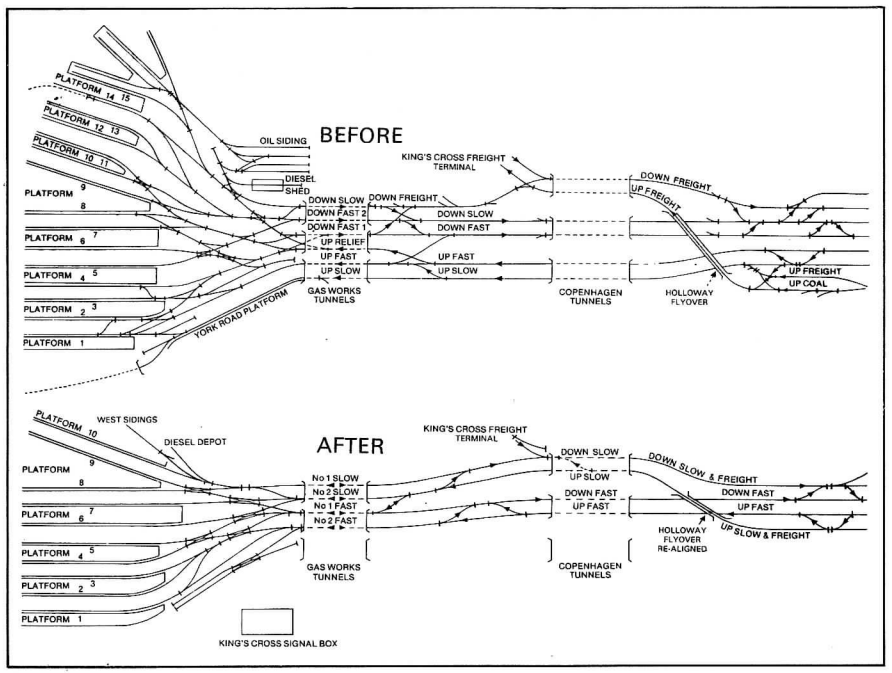
The Moorgate/St. Pancras to Bedford commuter electrification scheme will be designed to accomodate Southern Region 750v dc third rail trains. It is planned that ultimately, Southern trains will run across the centre of London to West Hampstead. This will ressurect a cross - London service that was abandoned at the beginning of World War 2.

50th Anniversary of the Post Office Railway





Penn Central GG-1 units 4851 and 4853 take a northbound freight over the Philadelphia by-pass trestle.(R.W. Layton)



Track diagrams showing the alterations to London's Kings Cross Station prior to electrification.

October 4th. last saw the Golden Jubilee of the Post Office Railway. A short cerimony w was held in its tunnels beneath London to mark the occasion. The narrow gauge POR runs from Paddington to Liverpool St. with stops along the way. The robot trains haul mail. Like an HO layout the trains are operated and kept apart by energising and de-energising the centre live rail.

Work is progressing on upgrading the voltage of the Shenfield - Southend branch of the Great Eastern system. Originally electrified in 1955 at 1500v dc, the line was converted to 6.25kv ac on November 1960. When the present work is complete the line will be operating at 25kv.

UNITED STATES

Amtrak's NE corridor system conversion now has the official blessing of the Federal Transportation secretary. The NRPC plan was for complete conversion to 25kv ac, but the New York Metropolian Transportation Autority had its own plan for using 12.5kv (also at 60Hz). Since MTA trains are the major track users on the ex-New Haven section they have won a court order to have the Newark - New Haven section converted to their system. This unfortunate situation leaves both Amtrak and Conrail with having to operate dual voltage locomotives.
It is the writers opinion that the MTA order may prove to be a blessing in disguise for Amtrak. In order to bring 25kv catenery into Penn station a very expensive rebuilding of the Hudson and East River tubes would be neccessary. It should be remembered that the Pennsylvania RR barely got their 11kv through the tunnels. The MTA's 12.5Kv would use most of the old PRR fixed plant so that only marginal work will be neccesary. When the conversion is complete the overhead is to be extended, at 25kv, from New Haven to Boston.

Burlington Northern's Transportation President attacked coal pipelines in a paper delivered to a railroad electrification conference in Washington DC. The paper suggested that withdiesel fuel price increases and scarcity in the future, the railroads must have the coal traffic to pay for the (then) needed electrification. Future fuel prices are expected to rise from a current 34¢ a gallon (US) to $1.65 a gallon in the year 2000, which will make the electrification of high density main lines "inevitable". BN considered that it could electrify without government assistance but at a cost of $1½ million a mile it is not likely that the expenditure will be made.

Amtrak has returned locomotive X996 to the SNCF after only three months of a planned six month trial. Pantograph contact problems and poorly riding trucks are apparantly responsible.

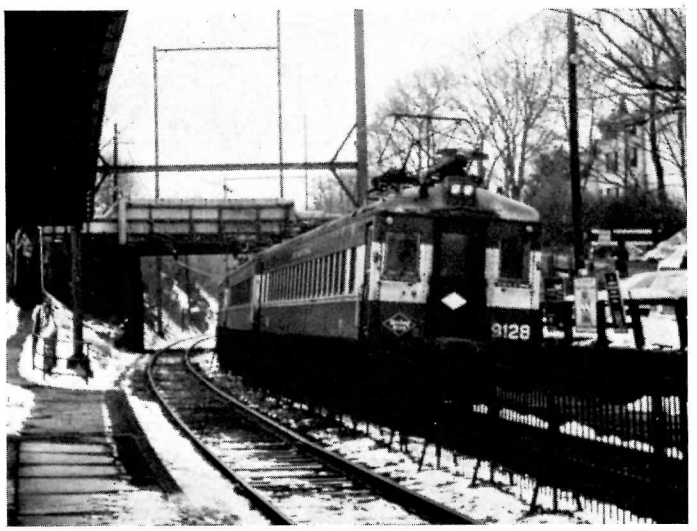
After spending time in a bicentennial paint job, GG-1 #4800 is the first G-motor to be outshopped in Conrail blue. The GG-1 class are probably the only locomotive class to survive two ownership changes without renumbering.

The federal DOT is to spend $250,000 on a study of high voltage electrification. A 20 mile test track is to be built at the Pueblo test site with trials scheduled to start early next year.

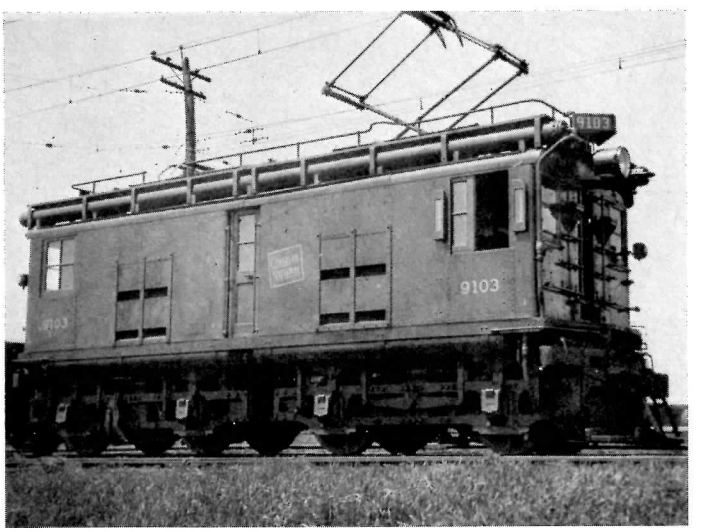
WEST GERMANY

Electric operation has been extended from Villingen to Kontaze in the Black Forest in addition to the line between Harbond and Hottingen on the GHubahn. Electric operation is now possible from Stuttgart to Singen.

BELOW
Reading Lines commuter unit 9128 leaving Fort Washington PA station early in 1975. Although still painted as Reading owned they are operated as part.of SEPTA's system.(RWL)



BELOW
Canadian National GE built box cab 9103. Seen here on freight switching chores, these units can still be found on commuter trains in Montreal. Photo taken in the 1930's (UCRS Coll.)



RAILFOTO

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ABOVE - Stelco's Notre Dame plant uses the GE 50 tonner for interchange and yard switching. Number 3 is seen here at Pointe St. Charles shops for wheel trueing. Photo by Pierre Patenaude taken in May 1977.

LEFT - C.I.L. #56 "Brookville" at their Valleyfield, Quebec plant in September 1976. (P. Patenaude)

OPPOSITE PAGE

TOP - The Dominion Bridge Company operates #N-16 at Lachine, Quebec. N-16 was formally CN #8020 and was purchased in August 1971. Seen here in January 1977. (P. Patenaude)

MIDDLE LEFT - GE 25 tonner #1 is operated by Turner and Newell at their Atlas Asbestos plant. This locomotive was built in 1947. (P. Patenaude)

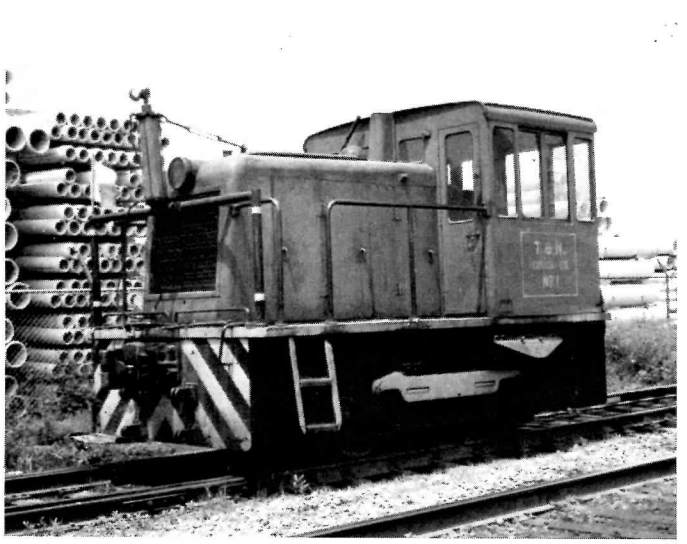
MIDDLE RIGHT - Singer Manufacturing (St. Johns Works) #1 seen here at Sensen Wein Brothers Railway Equipment in February 1974. This plant is located in Dorval, Quebec. (P. Patenaude)

BOTTOM - Burned out engines have sidelined this GE unit at the Sidbec-Dosco plant. Note the side rod drive on this unit. (P. Patenaude)

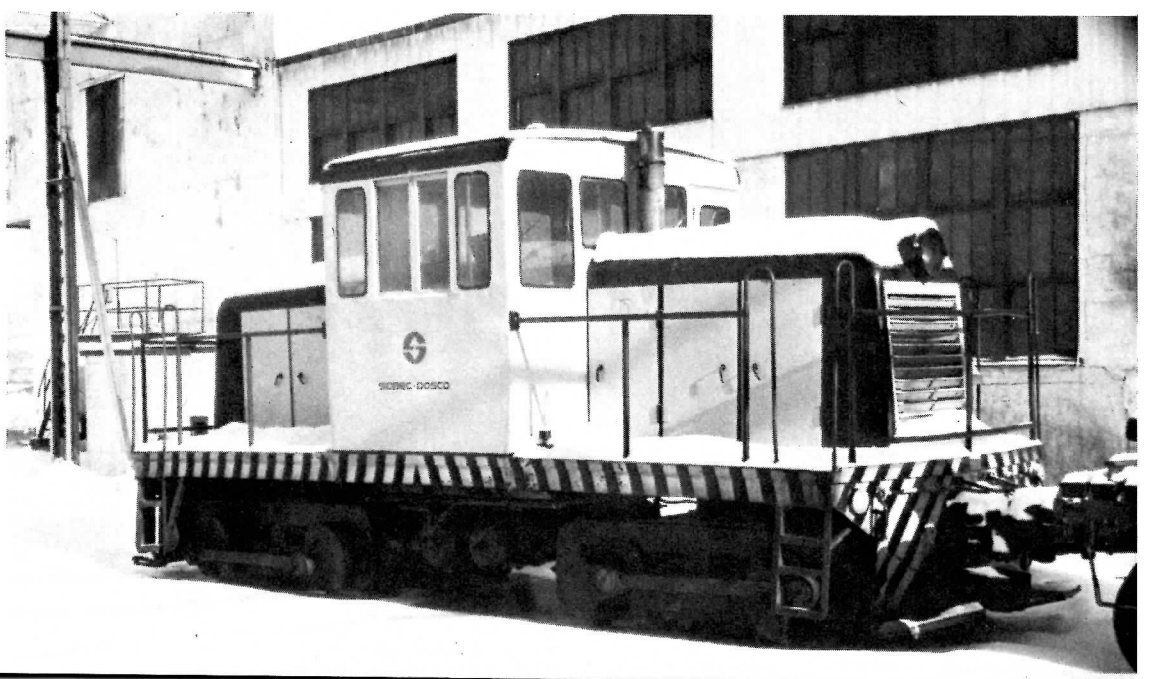
OVERLEAF

Francon Industries #250-60 was rebuilt by MLW in 1970. Prior to that this S-4 switcher was Penn-Central #9792 and started life as PRR #8892 in 1950. Seen here at their Jarry St. (Montreal) facilities in 1976. (P. Patenaude)


BCN
N16
DOMINION BRIDGE
DOMINION BRIDGE
N16




THE SINGER M'G. CO.
ST. JOHNS WORKS


SIDERC-DOSCO


250-60

F
FRANCON
250-60

NORTHLANDER SERVICE SAVED

It was announced by the Ontario Northern Affairs Minister in mid-December that, as an economy measure, the Northlander service from Toronto to North Bay would be slashed by 50%, leaving only the afternoon Timmins departure. The morning southbound and evening northbound trains were to be discontinued. The axe was to fall on January 9th.

After this announcement, fast work by the CTC and Federal Minister Jean Jaques Blais has resulted in the saving of the service. The Federal Government is to subsidise (retroactively to June last) the service, although whether the subsidy is total or 80% of losses is not yet known. The CTC has ordered CN to reduce its operating charges from $13 to $8 per mile and has stated that the Northlanders will be operated under the same terms as CN's Turbos in a corridor type service.

Based on information recieved from various official sources it is understood that the future Toronto - North Bay service will be consolidated on CN's Newmarket Subdivision from Toronto to Washago. It is also understood that CN will rescind their "power car first" order on the units and that the subsidised service will eventually replace CN's "Muskoka Special" (Trains #96 and #97).

Future plans from Ontario Northland are believed to include a request to CN to increase the speed limits on the Newmarket Subdivision for Northlander equipment. Whether or not CN co-operate with this request, the ONR have included funds in their current year budget for service advertising in the Toronto area. They are also considering opening their own ticket wicket at Union Station with reservations tied into their North Bay computer centre.

It is our hope that this change will not result in the discontinuance of CN trains #673 and #674 which currently provide a useful Sunday night return service to Toronto.

PHOTOS:TOP ONR Train 120 Southbound at Washago 1 July 1977.BOTTOM:ONR No.120 Southbound at Flemingdon Park 24 June 1977.Both by T.Wickson.

10 years ago

News and Information from January-February 1968

MEET PENN CENTRAL!!

The U.S. Supreme Court in mid-January approved the merger of the Pennsylvania and New York Central Railroads in the biggest consolidation in U.S. corporate history.

The court's decision in Washington cleared the tracks for the creation by February 1st of the world's largest privately-owned railway system, with assets of more than $4.5 billion. Serving 14 states and two provinces, the Pennsylvania New York Central Transportation Co. connects New York, St. Louis and Chicago, among major points, with 20,000 miles of road. Second place Canadian Pacific operates just over 16,500 miles of road.

Eventual savings for NYC and PRR have been estimated at more than $80 million annually. More than 95,000 employees are affected but the merger agreement protects them against loss of jobs. As a condition of the merger, however, Penn Central will take over the faltering New Haven, buoying it up with a $25 million loan.

The court also approved ICC terms calling for the prosperous Norfolk & Western to take over three smaller eastern roads -- Erie-Lackawanna, Delaware & Hudson and the Boston & Maine.

SLIGHT DAMAGE TO TURBOS IN MLW BLAZE

A five-alarm fire in the old tender shop of Montreal Locomotive Works' east end Montreal plant on January 9th damaged some equipment destined for installation in CN's Turbotrains. Assembly jigs and mechanical components such as air conditioning units were stored in the gutted building. No trains were damaged however; one virtually complete set was standing outside when the fire broke out, while a second was being assembled in the erecting shop in a separate building.

BRIDGE IN WINNIPEG MAY HAVE TO CLOSE

The Arlington Bridge, spanning CP's vast yard in north Winnipeg, may have to be closed "on very short notice" because of its deteriorating condition. Work is expected to get underway soon on the design of a $17-million replacement span to replace the elderly bridge. The new structure will not be completed until at least 1971.

A long-time favourite vantage point for rail photographers, the Arlington Bridge itself appeared in many locomotive photos, as a backdrop for views of 0-6-0's and 0-8-0's in the yard below.

CN, CP TELECOMMUNICATIONS END COMPETITION IN 51 CITIES

A proposal by Canadian National and Canadian Pacific Telecommunications to end their competition in 51 cities across Canada, leaving only one telegraph office in each, has been approved by the Canadian Transport Commission's railway committee. In their application a year ago, the two companies said telegraph message traffic has declined by about five per cent a year between 1956 and 1966 and the drop is accelerating. The previous establishment of joint offices in 20 cities had not proved satisfactory.

REQUIEM FOR THE U.S. PASSENGER TRAIN

On Sunday, December 3rd, 1967, New York Central's latest passenger train schedule took effect, and with it the great 'name train' fleet of the Water Level Route disappeared forever. Trains such as the Empire State Express, Wolverine, Twilight Limited, Ohio State Limited and New England States -- and the most famous of all, the Twentieth Century Limited -- were dropped in favour of a smaller slate of numbered trains. (NYC's only remaining name train is the James Whitcomb Riley between Chicago and Cincinnati with connections via C&O to the Atlantic Seaboard.) All through passenger train service from New York to St. Louis and Cincinnati has disappeared, as have most sleeping car services to Chicago.

In place of Central's name fleet is a fast bi-hourly service from New York to Albany, with trains every four hours west to Buffalo. Six trains a day in each direction carry passengers between Chicago and Buffalo, three of these operating via NYC's Canadian line. Through coaches are available on some trains, but connections at Buffalo are not the best.

NYC's service changes have resulted in New York-to-Canada schedules being altered as follows:

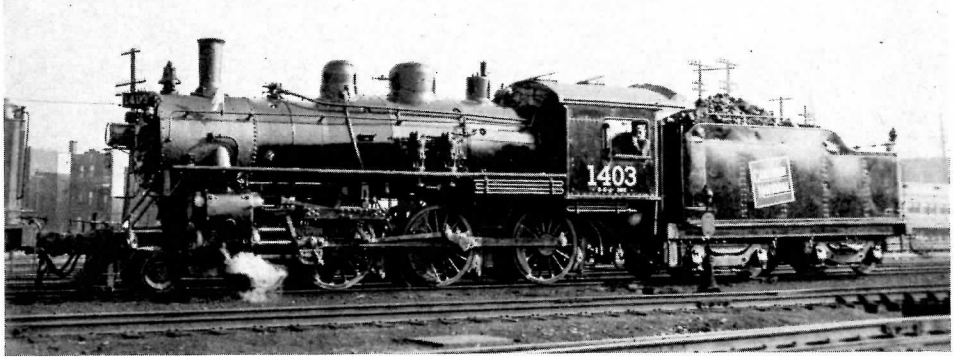
(1) Toronto-New York service lengthened to over 13 hours, nearly two hours longer than Greyhound; sleeping car service is still operated.
(2) Montreal-New York service has been shortened by 45 minutes southbound on the day run, with an earlier Montreal departure. The overnight schedules are virtually unchanged. The Toronto and Montreal sleepers are now handled into New York on the same train.

Hard on the heels of Central's cuts came word from the PRR that the Broadway Limited, last of the all-Pullman trains in North America, would be combined with the General and given a slower schedule. From Chicago, Santa Fe announced its plans to drop all but three of its passenger trains, retaining service only to Texas, Los Angeles and San Francisco. The Chief -- like the Twentieth Century and the Queen Mary -- becomes a memory of a grander time.

In the far west, the news does not improve. Western Pacific is renewing its application to drop the California Zephyr. Great Northern and Northern Pacific are moving to cut their second transcontinental runs.

Other passenger-minded companies are taking a second look at their first class services. Illinois Central added coaches to its Panama Limited, dropped two Chicago-New Orleans trains south of Memphis and will replace all connecting service to St. Louis with buses. Seaboard Coast Line has dropped the East Coast Champion and is taking a hard look at secondary Washington-Florida service, now that most railway mail service has been withdrawn. For those who are interested, now is the time to ride that favourite name train, for the train-off petitions south of the border keep coming in, and in, and in..

BELOW
Ten wheeler 1403 is seen here in Montreal in September 1942. Built by MLW in 1913 as Canadian Northern 1403, the class H-6-g locomotive was scrapped in 1955.(UCRS Coll.)



CANADIAN NATIONAL LOCOMOTIVE DISPOSITIONS -- 1967

* During the past year, CN retired a total of 90 diesel units from its roster, for reasons which included wreck and fire damage, sale or need for excessive repair.

By builder, the retirements broke down as follows (with the number of units withdrawn in parentheses):

GMD (12), MLW (39), Alco (1), CLC (35), GE (3)

Although some of these retirements have previously been reported in the NEWSLETTER, the entire list is reproduced here as a matter of interest:

Number	Date	Remarks	Number	Date	Remarks
4	5/11/67	(A)	3694	11/ 1/67	(9)
31	12/31/67	RNEJ	3805	9/12/67	RNEJ
42	12/31/67	RNEJ	3806	4/20/67	RNEJ
			3809	8/ 7/67	RNEJ
912	4/14/67	(3)	3819	4/20/67	RNEJ
920	4/14/67	(3)	3822	4/20/67	RNEJ
			3854	12/31/67	(10)
1602	8/ 7/67	RNEJ	3882	12/31/67	(10)
1605	11/30/67	RNEJ			
1607	9/13/67	RNEJ	4800	6/23/67	(4)
1609	3/ 3/67	RNEJ	4808	6/23/67	(4)
1611	1/10/67	RNEJ	4810	11/ 1/67	(8)
1612	1/10/67	RNEJ	4815	2/20/67	(1)
1615	12/19/67	RNEJ			
1616	3/ 3/67	RNEJ	6522	11/ 1/67	(9)
1618	1/10/67	RNEJ	6538	12/ 1/67	(9)
1628	12/31/67	RNEJ	6704	12/31/67	RNEJ
1629	11/30/67	RNEJ	6766	12/31/67	(10)
1630	4/14/67	RNEJ	6800	12/31/67	RNEJ
1632	9/13/67	RNEJ			
1637	12/31/67	RNEJ	9032	10/17/67	(7)
1638	1/10/67	RNEJ	9043	10/17/67	(7)
1643	12/31/67	RNEJ	9066	2/ 2/67	(2)
1646	8/22/67	RNEJ	9124	2/20/67	(2)
2200	1/16/67	RNEJ	9300	1/16/67	RNEJ
2202	4/14/67	RNEJ	9302	10/ 5/67	RNEJ°
2203	8/10/67	(6)°	9306	1/16/67	RNEJ
2204	4/14/67	RNEJ	9314	11/17/67	RNEJ°°°
2205	1/16/67	RNEJ	9316	1/16/67	RNEJ
2206	4/14/67	RNEJ	9338	1/16/67	RNEJ
2212	1/16/67	RNEJ			
2214	4/14/67	RNEJ	9406	6/22/67	RNEJ
2215	4/14/67	RNEJ	9410	1/10/67	(B)
2217	4/14/67	RNEJ	9411	12/31/67	RNEJ
			9415	10/ 5/67	RNEJ
3006	1/10/67	(B)	9419	9/12/67	RNEJ
3012	9/12/67	RNEJ	9423	12/ 7/67	RNEJ
3019	11/30/67	RNEJ	9425	10/ 5/67	RNEJ
3020	11/30/67	RNEJ	9426	4/14/67	RNEJ
3023	8/ 7/67	RNEJ	9433	1/10/67	(B)
3026	12/31/67	RNEJ	9434	12/31/67	RNEJ
3031	8/ 7/67	RNEJ	9435	11/30/67	RNEJ
3032	4/14/67	RNEJ	9446	8/ 7/67	(5)
3033	11/30/67	RNEJ	9448	8/ 7/67	RNEJ
3034	11/30/67	RNEJ	9450	1/25/67	(B)
3035	4/14/67	RNEJ	9452	10/ 5/67	RNEJ
3037	1/25/67	(B)			
3041	12/31/67	RNEJ			
3063	8/ 7/67	RNEJ			
3086	9/12/67	RNEJ			
3221	11/ 1/67	(9)			

NOTES:

RNEJ: Repairs not economically justified.
(A) : Sold to Steel Co. of Canada, Edmonton, Alta.
(B) : Trade-in to MLW on units 3229-3240.
° : Last unit of class CR-16a.
°° : Last unit of class CFA-16a.
°°° : Last unit of class CFA-16b.
(1) : Wreck at mile 68.5 Nechako Sub, B.C., 8/3/66.
(2) : Wreck at mile 120.7 Ashcroft Sub, B.C., 3/13/66.
(3) : Wreck at Cornerbrook, Nfld., 9/13/66.
(4) : Rockslide, mile 40.7 Skeena Sub, B.C., 2/3/67.
(5) : Wreck at Maccan, N.S., 5/29/67.
(6) : Fire damage at Courtland, Ont.
(7) : Wreck on Telkwa Sub, B.C., 5/8/67.
(8) : Fire damage.
(9) : Wreck at Dunrankin, Ont., 8/2/67.
(10): Wreck near Drummondville, Que., 11/15/67.

As a belated footnote to CN's 1966 retirements, it should be noted that because of late processing through capital accounts, the last seven units physically removed in 1966 -- 3001, 9429, 3036, 3075, 9417, 3080 and 3076, all trade-ins on new units 3229-3240 -- were not retired from capital until 1967, producing a somewhat misleading 1967 capital retirement figure of 97 units.

CANADIAN NATIONAL LOCOMOTIVE DELIVERIES

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

5022 - Dec 22/67°
5023 - Dec 22/67°
5026 - Jan 3/68
5027 - Jan 3/68
5028 - Jan 11/68
5029 - Jan 11/68
5030 - Jan 17/68
5031 - Jan 17/68
5032 - Jan 24/68
5033 - Jan 24/68

°; although delivered from GMDL on Dec 22nd, these units did not enter CN service until Jan 1st, 1968.

All of the above units are assigned to Calder (Edmonton).

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

2004 - Jan 4/68
2005 - Jan 6/68
2006 - Jan 6/68
2007 - Jan 10/68
2008 - Jan 12/68

* Significantly, CN's order for 68 SD-40's from GMDL was the largest single order placed by any North American road during 1967. Runner-up was PRR, with an order for 65 SD-45's, from EMD.

* The TTC recently authorized the continued use of High Park and Earlscourt Loops, both of which are situated on land owned by the city of Toronto. Until now, rental on each loop was $1.00 annually. Now however, much higher rates have been levied.

High Park Loop will continue to be used until about 1972, at which time several changes are to be considered. KING cars would be cut back to Roncesvalles carhouse, and trolley buses would take over between that point and Dundas West Station. CARLTON cars would either be cut back to College Loop or be rerouted to Dundas West Station, and a bus service instituted on Parkside Drive.

* With the introduction of m-u service on QUEEN on October 2nd, 1967, equipment assignments were altered on several routes, although the assignment of equipment to carhouses was unchanged from February, 1966

Following is an up-to-date table of assignment to routes, on a regular basis only. Irregular assignments could include almost any type of car. Classes are listed in order of maximum use:

ROUTE	BASE HOURS	RUSH HOURS	WEEKEND/ HOLIDAY
BATHURST	A8/A9	A8/A9	A8/A9
BLOOR	A7/A6/A13/A9	A7/A6/A13/A9	Ditto
CARLTON	A6/A7/A11/A13 Air/A12/A9	A6/Air/A7/A13 A11/A12/A9	A7/A12/A6 A13/A11/A9
DANFORTH	A11/A12/A7/A6	A11/A12/A7/A6	A11/A12
DUNDAS-Bdvw.	A6/A13/A7/A9	A6/A13/A7/Air A9	A6/A13/A7 A9
DUNDAS-City H.	A6/A13/A7/A9	A6/A13/A7/A9	A6/A13/A7 A9
EARLSCOURT	None	A14/A8/A9	None
KING	A6/A13/A7/A9	A6/A13/Air/A7 A11/A9/A12	A6/A13/A7 A9
KINGSTON RD.	A10/all-elect.	Air/all-elect.	None
" (tripper)	None	all but A8/A14	None
LONG BRANCH	A7/A6/A13/A9	A7/A6/A13/A9	A7/A6/A13 A9
QUEEN	A7/A11/A12	A7/A11/A12	A7/A11/A6 A13/A12/A9
QUEEN-Races (During afternoon or evening meets at Greenwood Raceway only.)	Air	Regular cars	Air/A7/A13 A6/A11/A12 A9
ROGERS	A8/A9	A8/A9	A8/A9
ST. CLAIR	A14	A14/A8/A9	A8/A9

* H-1 class subway cars 5440, 5441, 5466 and 5467 were recently the recipients of a second experimental paint scheme. The cars were painted red over the aluminum fluting below the windows, with a yellow band above the red and an orange stripe over the windows. Apparently only one side and one end of each car were painted, excluding doors. The train was viewed by the Commissioners in early January.

* Opening date of the BLOOR-DANFORTH subway extensions has been set for Saturday, May 11, 1968. With the opening of the extensions, the BLOOR and DANFORTH shuttles and DUNDAS beyond Dundas West Station will be abandoned. May 11th will also see inauguration of trolley coach route 40-JUNCTION, although diesel buses will likely handle the first day's operations while final overhead connections are made at various points along the route.

The roster of air-electrics will probably be reduced to 25 cars at this time. Presently, 70 cars of the total fleet of 83 are available for service at any one time. Car 4226 recently received a major overhaul and was completely painted inside and out, the first air car since 1965 to receive this treatment. It also was the first air car to receive all-new destination signs, front and side, including the legend 'Main Station'. In contrast, 4226 recently operated on KING with a 'Subway' destination sign and yellow window cards for the two terminals.

* An ice storm, followed by ten inches of snow, played havoc with TTC streetcar schedules on January 13th and 14th. Trolley overhead was down in 30 places, and at one time or another buses replaced or augmented street cars on all routes except QUEEN and ST. CLAIR. KINGSTON ROAD, normally served by COXWELL buses on weekends, was augmented by one street car on January 14th, operated in service between Bingham and Russell Carhouse. This is a little-known practice on KINGSTON ROAD, designed to keep the line open during storms when buses are in use. Car 4524, among others, was fitted with an ice cutter and operated over several routes normally not using this equipment -- it was spotted on various occasions at City Hall, McCaul and Queen Streets. Sweepers were out in force from 11.00 p.m. on the 14th, and ran all day on the 15th with the exception of rush hours. All trolley bus routes were operated by buses on the 14th, while a few trolley buses equipped with ice cutters remained in service. Multiple-unit service on QUEEN was suspended from January 15th to 19th, with cars of all classes except A-14 filling in.

No less than seven class A-8 PCC's were temporarily assigned to Roncesvalles Division in mid-January to relieve a car shortage. Cars involved were 4500, 4504, 4517, 4529, 4531 4538 and 4544; they operated over all routes assigned to that division. Car 4387 was at St. Clair Division on January 21st, replacing 4544 which was shipped to Roncesvalles by Hillcrest Shops.....Most of the overhead for trolley coach route 40-JUNCTION is now in place, and the new signs have been added to all trolley buses at Lansdowne Division.....Routes 48 and 53 in Pittsburgh are scheduled for replacement by a new bus route in early March, probably operating via Carson, S. 18th Street and Arlington Avenue, while the rush hour route 47 will replace the outer end of 53 to Carrick on an all-day basis.....Signs are being posted on all TTC subway car doors warning passengers not to lean on them. Several incidents of inadvertent door opening, mainly on the wrong side of the train, have occurred in recent months on H- and M-class equipment.....Work on the YONGE subway extension will begin in August, 1968. .....The Philadelphia Suburban 'rail-bus' experiment on the high-speed NORRISTOWN line has been pronounced a total failure.....Cars 4299 and 4575 were in service on BLOOR on January 16th, and 4598 operated a DANFORTH schedule the following day. In addition, air cars and A-12 (4675-4699) class cars have been seen frequently on both LONG BRANCH and BLOOR..... The report on page 130 of the August '67 NL regarding track removal from Riverdale Avenue was unfounded. This one block of the old HARBORD route remains in place.... ..Rail on Roncesvalles between the east gate of Roncesvalles Carhouse and Boorstead Street was replaced where necessary in late December in connection with street repairs performed by the city. Queen Street, between Shaw and Dufferin, will be the next track job to be undertaken.....Rail Grinder W-27, which has been at Greenwood Subway Yards for over 18 months, will become a permanent fixture there. Conversion will be made to third-rail operation and the car will be renumbered RT-7.....New Japanese-built cars RT-10 and RT-11 (garbage car and flat car respectively) should be ready for service by March 1st.

WORTH NOTING

Compiled by Mary F. Layton

Miss Kathryn Sullivan began work in 1935 as the first train hostess. She rode "The Rebel" one of America's first streamlined trains and travelled some 151 miles between St. Louis and New Orleans on the Gulf on the Mobile and Ohio Railroad.

The earliest recorded elopement by train was in 1842 when Hercules Macdonnel abducted Emily Moylan. They travelled from London to Gretna Green partly by train and were married.

The first railway film was called "Black Diamond Express" with some 43 ft. of train and was produced in the U.S.A. by Thomas Edison. The film showed Locomotive No. 665 of Lehigh Valley Railroad on transit to Buffalo.

Steam reversing gears were first used by James Sterling (1800-76) on the Glasgow and South Western Railway in 1894.

Bells were first fitted on American locomotives in 1835 when the state of Massachussets passed a law requiring a warning device.

The Italian Railway in 1898 introduced the 24 hour train service. Between 1898 and 1912 it was adopted in Belguim, France, Spain and Portugal.

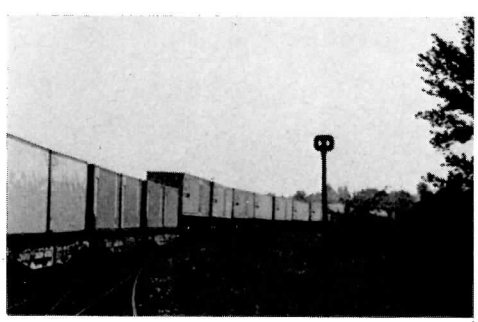
The Rotary Snow Plough was invented by J. W. Elliott, a Toronto dentist, and was patented as a "compound revolving snow plough" in 1867. The first rotary snow plough was built by the Leslie Brothers of Orangeville, Ontario in 1883-84 and was listed by the C.P.R. The sucess led to an improved design constructed in 1887 by Dunforth Cooke Co. and was put into service on the Union Pacific Railroad.

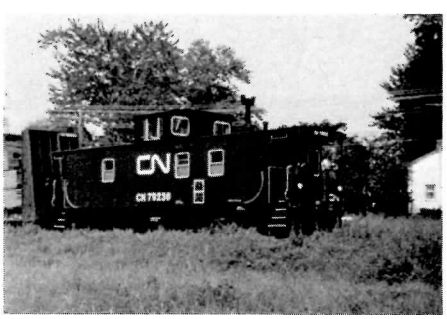
Canadian National Railways operate 24,575 miles of standard gauge and 704 miles of 3'6" gauge.

The first postage stamp with the railway theme was produced in a set of three and were produced in New Brunswick, Canada, in 1860. The stamps were a 1 cent value with a colour of brown-purple, purple and dull claret and showed a side-cylinder 4-4-0 with a spark arresting chimney.

Steam sanding gears were devised by Gresham and Holt and was introduced on the Midland Railway in 1886. By forcing sand beneath the driving wheels brought about a revival of single-wheeler locomotive in Britian when it was built until about 1900 and lasted until the mid 1920's.

CN GP-40-2W #9652 at the point of a special freight put together to make a TV commercial. The train consist showed CN freight cars of various types from the traditional red oxide box car (left) to intermodal cars (centre) to a shiny caboose at the rear (right). The scenes were shot on the Uxbridge Subdivision between Markham and Stouffville. The three photographs were taken on between takes layovers at Markham. (all three M.F. Layton)



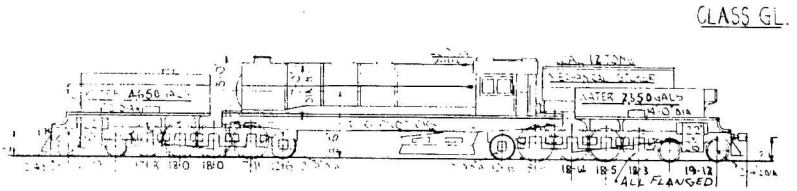


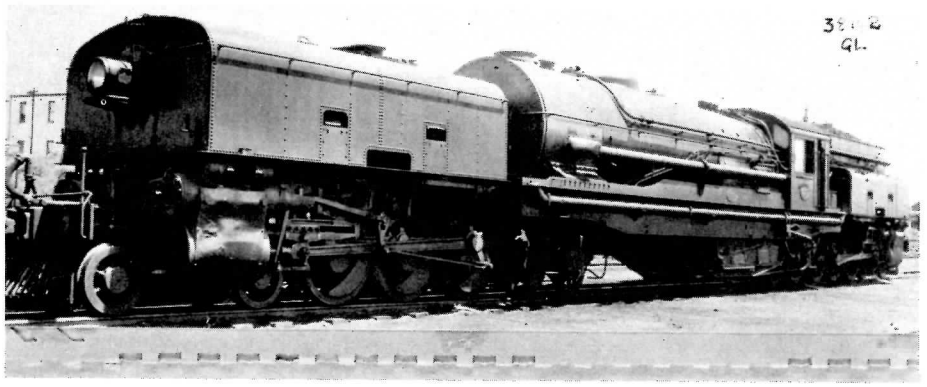
SOUTH AFRICA:

STEAM STRONGHOLD

Part 2

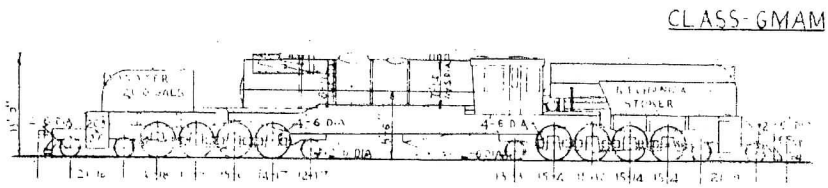
by Mike Roschlau



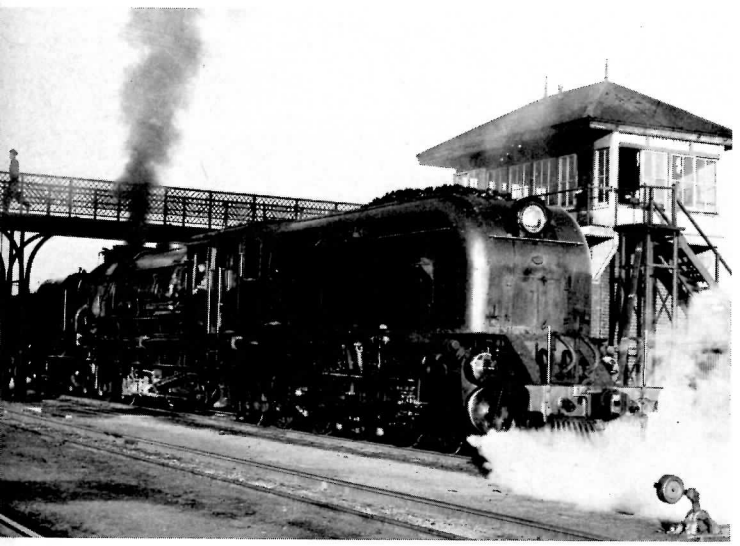


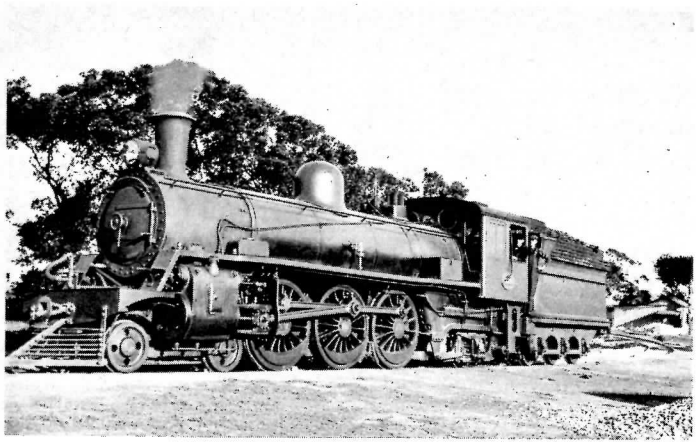
LEFT:
Class GL, an extinct class of Garratts, had only eight members in 1965, numbers 2350-2357.
(South African Railways)

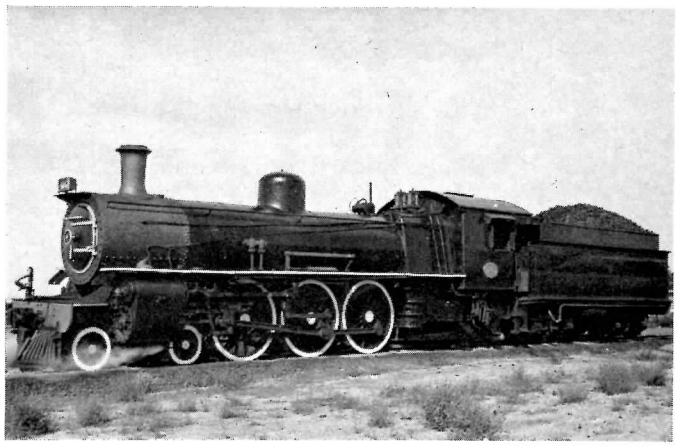
BOTTOM LEFT:
A GMAM Garratt, number 4089, sporting an old-style headlight.
(South African Railways)



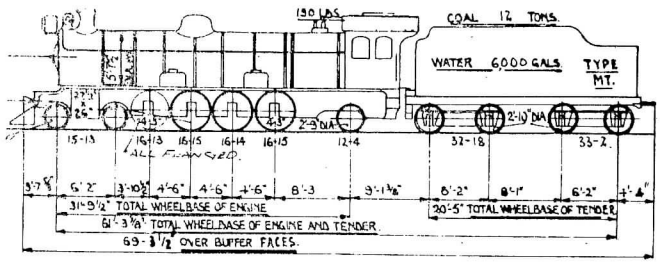
BELOW:
Prior to tackling the Montagu Pass, GMA Garratt, "Fanie", number 4071 takes water at Camfer, Cape Province. Note the new sealed-beam headlight, which is standard on all locomotives, as compared to the old headlight in the picture at left. (Randy Scholl)







CLASS 12A.



TOTAL WEIGHT OF ENGINE. 94 TONS 14 CWT. TOTAL WEIGHT OF TENDER. 66 TONS 0 CWT. WORKING ORDER.

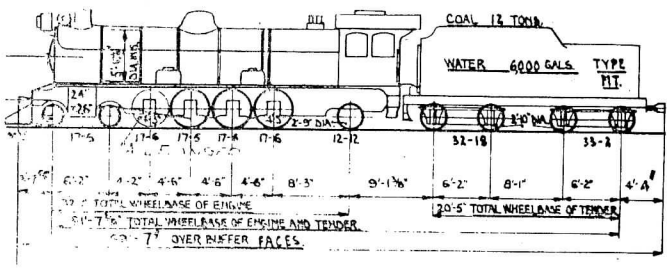
ABOVE LEFT: CLASS 5B

Number 723 represents this long-extinct class of 4-6-2 locomotives. (South African Railways)

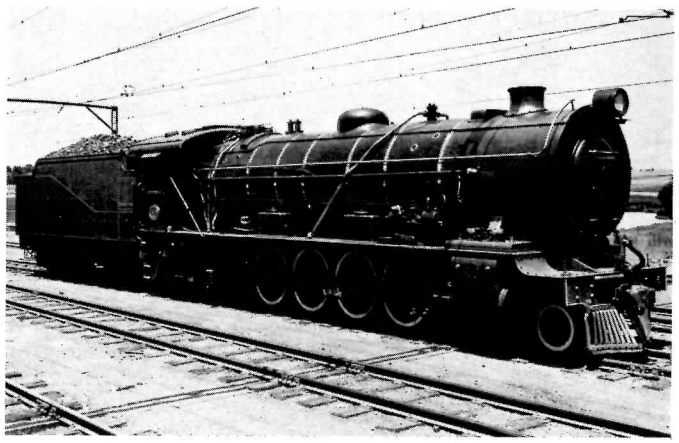
ABOVE: CLASS 10

Another 4-6-2, number 735, complete with sealed-beam headlight represents this class which had only 13 members. (South African Railways)

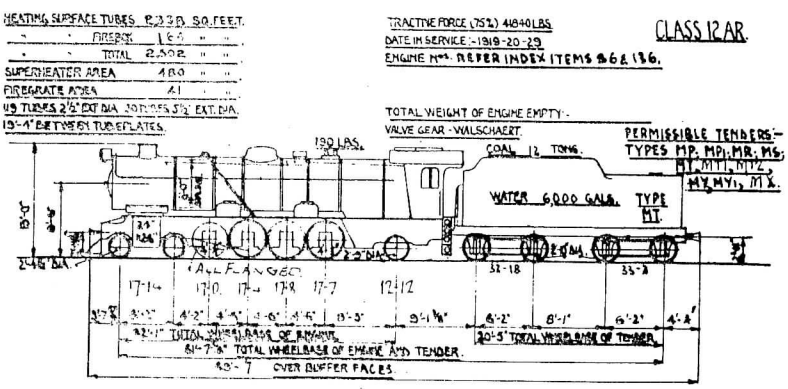
CLASS 12B



TOTAL WEIGHT OF ENGINE 99 TONS 1 CWT. TOTAL WEIGHT OF TENDER 66 TONS. 0 CWT. WORKING ORDER.



CLASS 12AR.



TOTAL WEIGHT OF ENGINE 99 TONS 5 CWT. TOTAL WEIGHT OF TENDER 66 TONS 0 CWT. WORKING ORDER.

ABOVE:

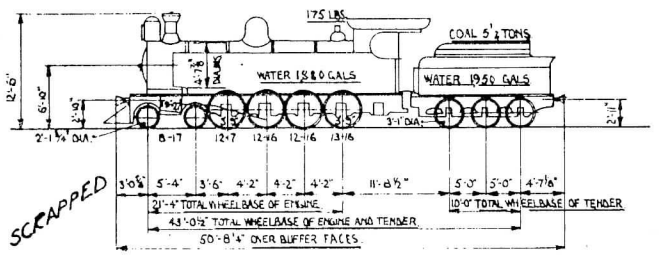
Number 1542, one of nineteen 4-8-2s comprising the 12AR class, seen here under catenary. Note the short stack as compared to class 12A and 12B locomotives. Note also the smaller cab size.
(South African Railways)

CLASS 13.
(CONVERTED H1 & H2.)

HEATING SURFACE TUBES 1,359 SQ. FEET.
" " FIREBOX 135 " "
" " TOTAL 1,494 " "
FIREGRATE AREA 21 " "
287 TUBES 1¾" EXT. DIA
10'-4" BETWEEN TUBEPLATES

TRACTIVE FORCE (75%) 28430 LBS.
DATE IN SERVICE :- 1900-1903
ENGINE Nos. REFER INDEX ITEM 67.

TOTAL WEIGHT OF ENGINE EMPTY :-
VALVE GEAR - STEPHENSON.



TOTAL WEIGHT OF ENGINE 60 TONS. 12 CWT.

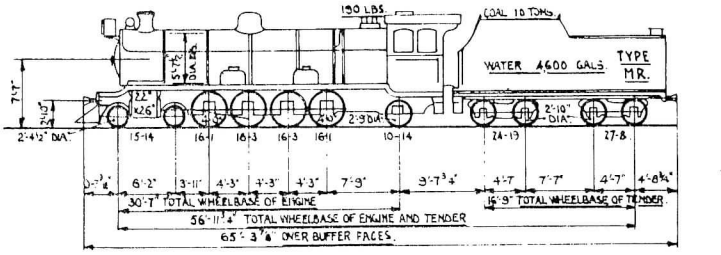
TOTAL WEIGHT OF TENDER 24 TONS. 0 CWT. WORKING ORDER.

CLASS 14.

HEATING SURFACE TUBES 2212 SQ. FEET.
" " FIREBOX 150 " "
" " TOTAL 2362 " "
SUPERHEATER AREA 540 " "
FIREGRATE AREA 37 " "
139 TUBES 2¼" EXT. DIA. 24 TUBES 5½" EXT. DIA.
19'-0" BETWEEN TUBEPLATES

TRACTIVE FORCE (75%) 37360 LBS.
DATE IN SERVICE :- 1913-15
ENGINE Nos. REFER INDEX ITEM 99.

TOTAL WEIGHT OF ENGINE EMPTY - 173,410 LBS.
VALVE GEAR - WALSCHAERT.
DRAWING SERIAL C.E. Nos. A 4942, 6093 & 6239.



TOTAL WEIGHT OF ENGINE. 90 TONS. 16 CWT.

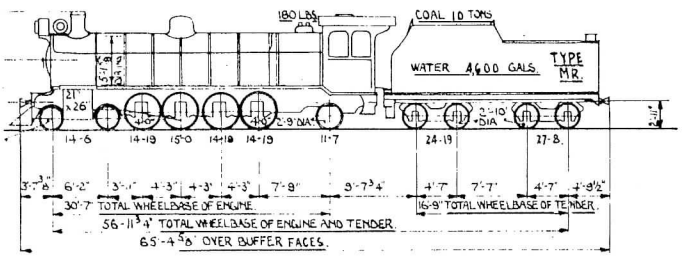
TOTAL WEIGHT OF TENDER 52 TONS. 7 CWT. WORKING ORDER.

CLASS 14A

HEATING SURFACE TUBES 1909 SQ. FEET.
" " FIREBOX 150 " "
" " TOTAL 2059 " "
SUPERHEATER AREA 483 " "
FIREGRATE AREA 37 " "
118 TUBES 2¼" EXT. DIA 21 TUBES 5½" EXT. DIA
19'-0" BETWEEN TUBEPLATES

TRACTIVE FORCE (75%) 32250 LBS.
DATE IN SERVICE :- 1914-15.
ENGINE Nos. REFER INDEX ITEMS 92 & 113.

TOTAL WEIGHT OF ENGINE EMPTY :- 178100 LBS.
VALVE GEAR - WALSCHAERT
DRAWING SERIAL C.E. No. A 6103



TOTAL WEIGHT OF ENGINE 85 TONS 10 CWT.

TOTAL WEIGHT OF TENDER 52 TONS. 7 CWT WORKING ORDER.

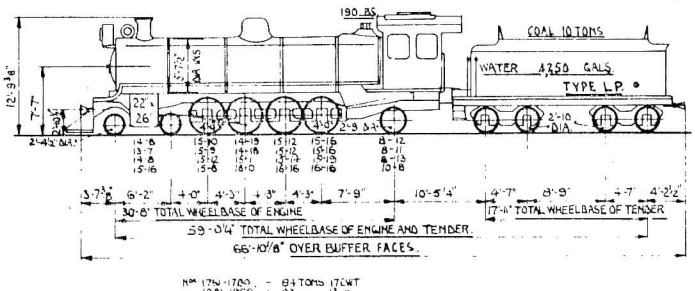
CLASS 14C.

HEATING SURFACE TUBES 2212 SQ. FEET.
" " FIREBOX 138 " "
" " TOTAL 2350 " "
SUPERHEATER AREA 526 " "
FIREGRATE AREA 37 " "
139 TUBES 2¼" EXT. DIA 24 TUBES 5½" EXT. DIA
19'-0⅜" BETWEEN TUBEPLATES

TRACTIVE FORCE (75%) 37360 LBS.
DATE IN SERVICE :- 1918-1922
ENGINE Nos. REFER INDEX ITEMS 102, 111, 121, & 125.

TOTAL WEIGHT OF ENGINE EMPTY - 168000 LBS.
VALVE GEAR - WALSCHAERT.
DRAWING SERIAL C.E. No. A 8210.

B.P. INCREASED TO 195 LBS. □" WHEN CYLS. BUSHED TO 21¼ DIA.
TRACTIVE FORCE (75%) - 37480 LBS.



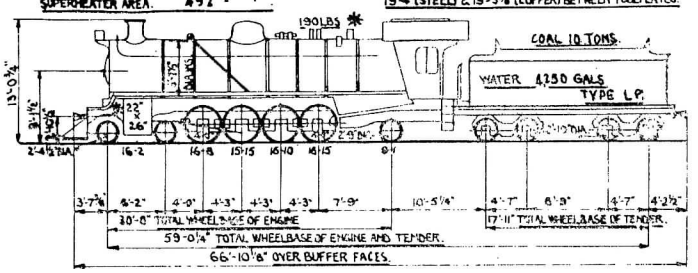
TOTAL WEIGHT OF ENGINE. Nos 1760-1780 - 84 TONS 17 CWT
" 1801-1900 - 83 " 13 "
" 1951-2010 - 85 " 7 "
" 2026-2038 - 81 " 4 "

TOTAL WEIGHT OF TENDER. 50 TONS 18 CWT.

CLASS 14CR.

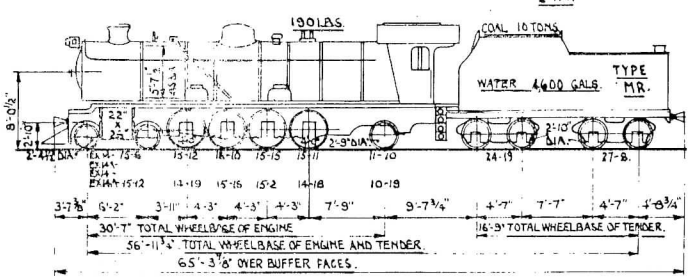
HEATING SURFACE TUBES 1935 SQ. FEET.
" " FIREBOX 142 " "
" " TOTAL 2075 " "
SUPERHEATER AREA. 492 " "

FIREGRATE AREA. 37 " "
87 TUBES 2¼" EXT. DIA. 30 TUBES 5½" EXT. DIA
19'-4" (STEEL) & 19'-3⅝" (COPPER) BETWEEN TUBEPLATES.



CLASS 14R.

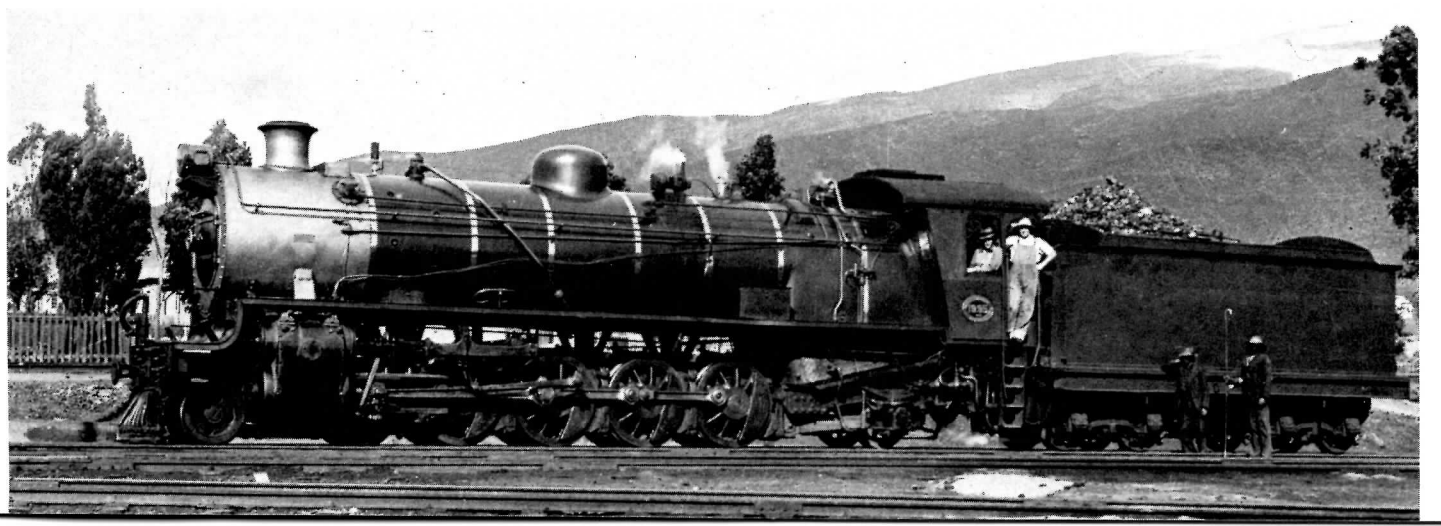
TRACTIVE FORCE (75%) 37360 LBS
DATE IN SERVICE - 1913-15
ENGINE Nos. REFER INDEX ITEMS 93, 100 & 114.
STD. BOILER No. 2.

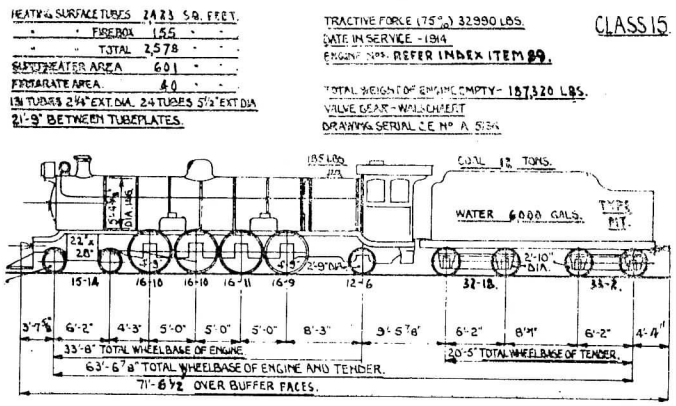


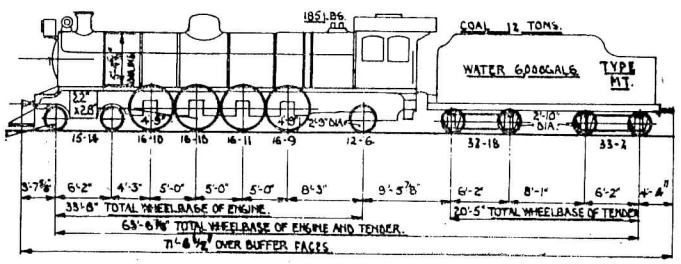
TOTAL WEIGHT OF ENGINE. EX 14 - 90 TONS. 4 CWT. } COPPER F BOX.
EX 14A - " " } COPPER F BOX.
EX 14 - 87 " 6 " } STEEL F BOX
EX 14A - " " } STEEL F BOX

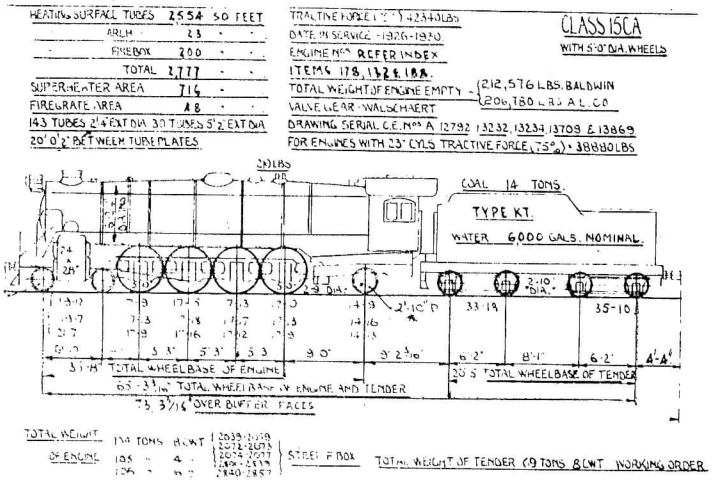
TOTAL WEIGHT OF TENDER. 52 TONS 7 CWT

BELOW: Number 1995, one of 20 locomotives making up the 14CRB class, posing here with its entire crew. (South African Railways)

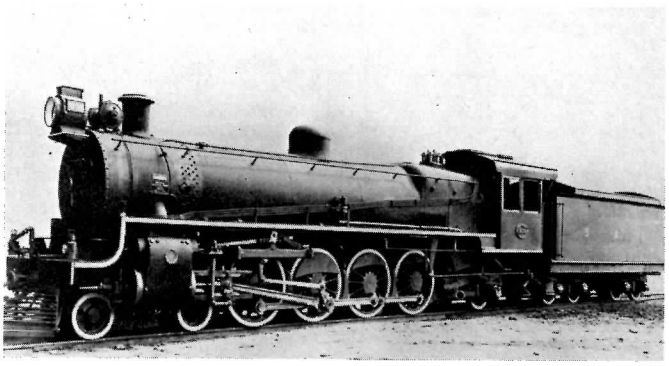








TOTAL WEIGHT OF ENGINE 94 TONS 0 CWT. TOTAL WEIGHT OF TENDER 66 TONS 0 CWT WORKING ORDER

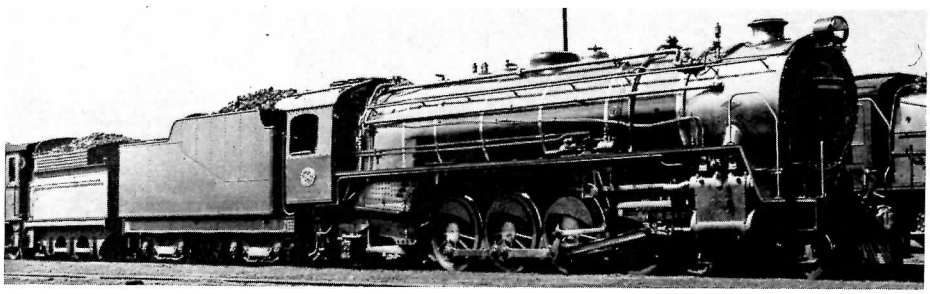


TOP RIGHT:

15B number 1838 is one of ten locomotives in this class built by the Montreal Locomotive Works in Canada. (South African Railways)

RIGHT:

A Baldwin product, 15CA number 2842, represents part of this class, as ALCO also produced some 15CAs for the South African Railways. (S.A.R.)



SOUTH AFRICA

LEFT:

15CA number 2806 is assisted by GMAM Garratt number 4142 is moving a trainload of iron ore out of Roossenekal in the Transvaal. Only rarely do articulated and straight locomotives doublehead on the South African Railways. Yet for the lucky this occurred on the last days of steam on the Derwent - Roossenekal branch line on 27 August 1975. Truly a magnificent spectacle!

(Randy Scholl)

ABOVE RIGHT:
Class 15E number 2889 poses with driver holding an oil can. Forty-three locomotives belonged to this class.
(South African Railways)

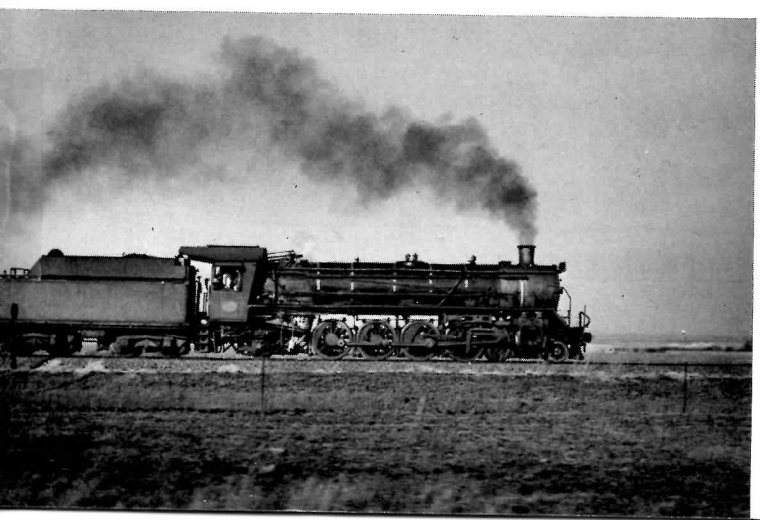
ABOVE:
Class 15F number 2908 poses for a broadside shot with stop-cocks open. This is a large class, for there were over 250 locomotives built for the South African Railways to these specifications (numbers 2902-3156). (South African Railways)

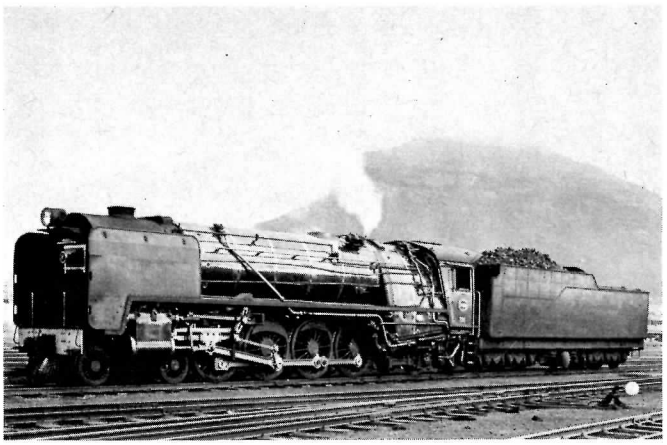
LEFT:
With a huge type MX tender capable of holding 6500 gallons of water, class 19D number 3321 steams up. There were a total of 235 19Ds owned by the SAR, numbers 2506-2545; 2626-2770; and 3321-3370. (South African Railways)

RIGHT:
A class 16E locomotive, number 858, sports its huge 6-foot diameter driving wheels, the largest in South Africa. Only a half dozen locomotives had this feature.
(South African Railways)

BELOW:
A domeless 19D, number 2709, rambles across the flat western Transvaal near Bamboesspruit on 1st August 1975. Note the lack of dome when compared to the other two 19Ds pictured. Number 2709 also has a square, type MR tender holding 4600 gallons of water as opposed to the circular type MX. (R. Scholl)
(Randy Scholl)

BOTTOM RIGHT:
A 19D with a type MX tender storms eastbound out of Oudtshoorn with a passenger train bound for Port Elizabeth on 9 August 1975. The evening sun glistening off the boiler creates a beautiful effect for any steam fan to savour. (Randy Scholl)





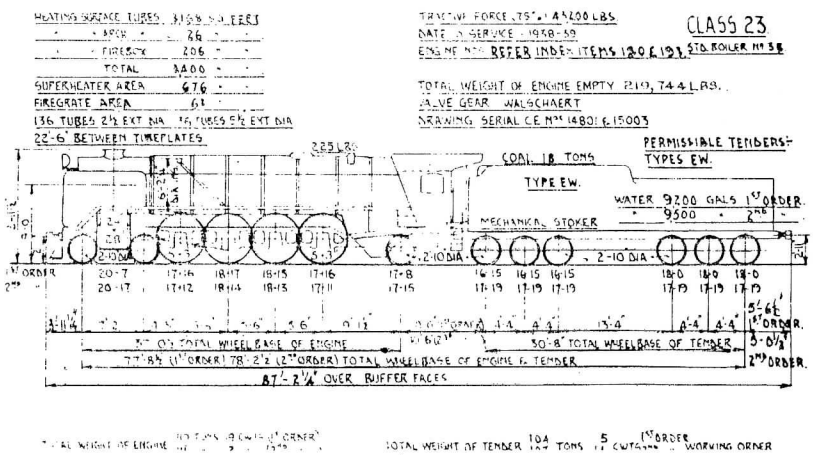
ABOVE:
A class 21 heavy freight locomotive with a 2-10-4 configuration.
(South African Railways)

TOP RIGHT:
Number 3268, one of 135 locomotives in the Class 23, still with an old headlight was a streamlined passenger locomotive. Class 23 consisted of numbers 2552-2571 and 3201-3316.
(South African Railways)

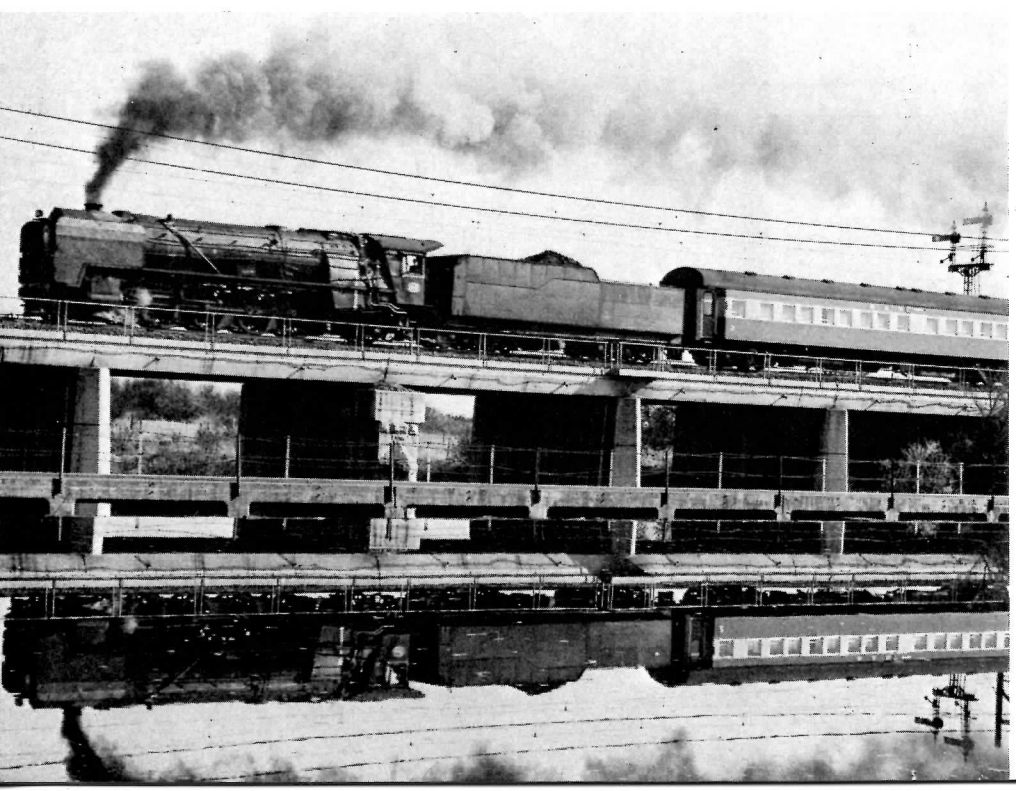
BELOW:
A class 23 4-8-2 comes roaring past Glen Dam north of Bloemfontein heading south from Kroonstad with the Orange Express. A fabulous sight, but all is over now, to which the catenary wires attest. In 1976 the line was electrified. (Randy Scholl)

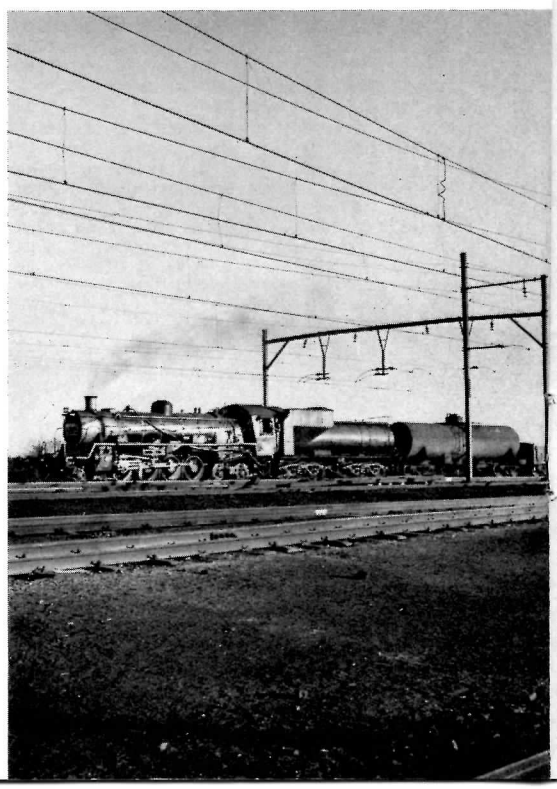
BELOW LEFT:
Amidst a maze of overhead wires, a class 24 2-8-4 rolls briskly into Kimberley after a day out on the line with a local. The date: 2 August 1975.
(Randy Scholl)

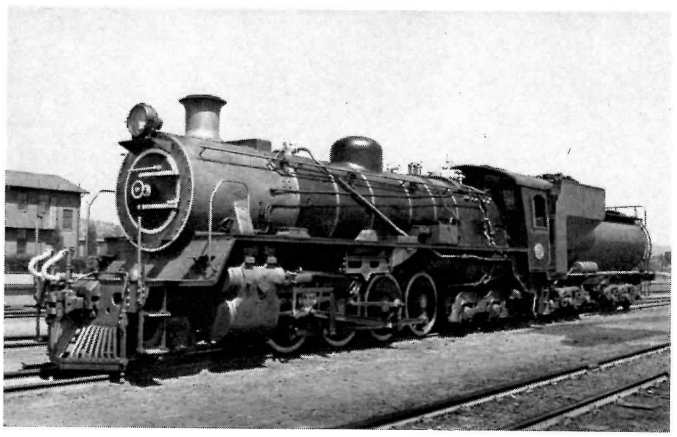
SOUTH AFRICAN RAILWAYS

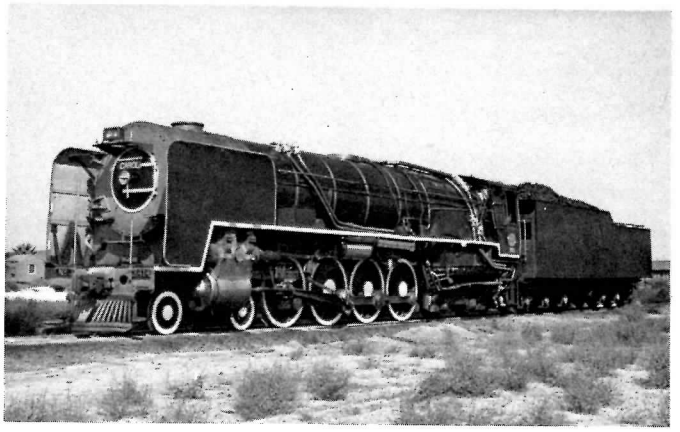


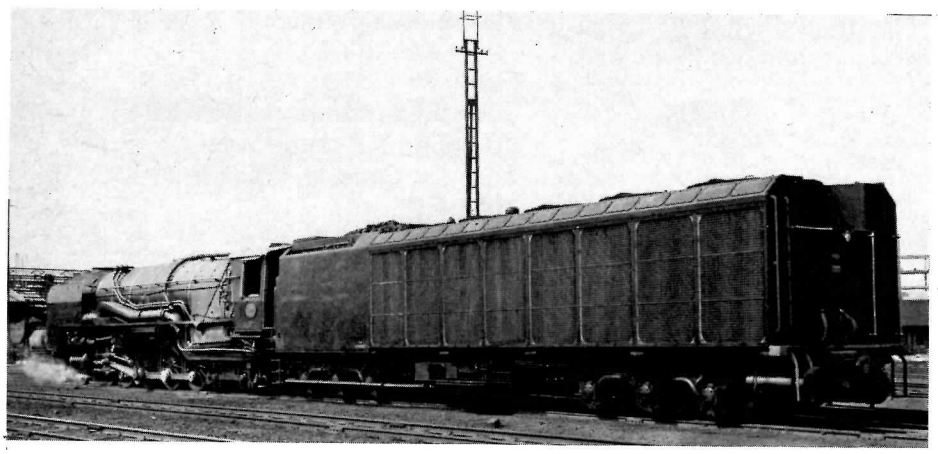
SUID-AFRIKAANSE SPOORWEË











TOP LEFT:
19D number 2519 is seen on a passenger out of Kimberley heading for Mafeking. This line is operated only with 19D class locomotives.
(Randy Scholl)

TOP RIGHT:
A passenger train heading from Bloemfontein to Bethlehem is hauled by class 25NC (NC means non-condensing) number 3420 through rocky country near Ficksburg, Orange Free State.
(Randy Scholl)

CENTRE LEFT:
Number 3606, one of 100 class 24 2-8-4 locomotives built by Baldwin for the South African Railways. (S.A.R.)

ABOVE:
"Carol", another 25NC, number 3414 looks immaculate for its official photograph. (South African Railways)

LEFT AND BOTTOM LEFT:
Two class 25 condensing locomotives, number 3450 at left and 3471 below. This was a unique class of locomotive, most of which have now been converted into non-condensers because the mechanical equipment is so expensive to maintain. These locos have a total length over coupling lines of a stunning 107.5 feet! Of this length, 53% is tender and only 47% is the actual locomotive!
(both photos - South African Railways)

With the stoker going wide open, a 25 NC, Number 3520, hauls a passenger train out of Bloemfontein on 20 August 1975. (R. Scholl)

AN AMTRAK RAMBLE

by Peter Oehm

The trip began on Tuesday 23 of November at Toronto Union aboard the Rapido,Train 62 destined to Montreal and lead by FP9A 6528.For a Tuesday, the train was well patronized with a consist of seven cars.Even with the trackwork ,we were only 10 minutes late into the City of the Expos.

Enroute I met Ted Wickson and Mike Filey who were representing the TTC and the CNE respectively at the opening of the Ontario Government's new intermediate mode transit test track site in Kingston that day.

Sharp on time,Amtrak's "Montrealer" pulled out from Central Station with what I thought was an unusually long train.However,once we crossed the US border,I soon knew the reason for this consist.The 14 cars filled up with students travelling home for the American Thanksgiving.Two new Amtrak units powered us to New York,where electrics took over to finish the run to Washington.The Montrealer was the first train on my three week U.S.Rail Pass,which was a great bargain at $220 ($213 Canadian).

While in Washington,I rode the first leg,4.6 miles,of the Metro System which serves 4 stops in the area of Union Station.In several years,the full 100 mile system will be operative.It is a steel wheel configuration,but is much smoother and quieter than Toronto's Subway System.The rush hour fare is 55¢ and during the off peak,fare is 40¢.

Washington's Union Station has been beautifully restored as a Bicentennial Project.It serves as a Union Station for Amtrak and Southern and as a Government Information Center.

After a pleasant long walk around Washington,I boarded Southern Railway's "The Southern Crescent #1" for New Orleans.Due to the Thanksgiving crush, the first section operated to Atlanta, whereas the second section ran to New Orleans.The first section was led by 6901 and had a consist of 12 cars.

Train #62 headed up by CN FP-9A 6528 seen here prior to its Toronto Union departure. Photo by Peter Oehm.

The units on the second section were 6903,6910,and 6902.The consist was a baggage car,diner,2 sleepers and 11 coaches.Who said train travel doesn't appeal to Americans?I immediately went to the diner and launched into a sumptuous southern fried chicken dinner with all the trimmings.

The next day,all the engines were changed at Atlanta: F units 6901,6915,6900, and 6913 took us all the way to New Orleans and caught up some of the time we were behind. At Atlanta,Southern also changed diners and added an observation car.

The sojourn on the Southern was relaxing,the food excellent and the train exceedingly clean.Many of the meal menus and the murals throughout the train featured photos of some of the Southern's famous steam roster.

After a refreshing pause for three days in New Orleans,I left for Los Angeles on the "Sunset Limited" which was powered by 2 SDP40F's,572 and 554. The load was relatively light from New Orleans,but the number of people who boarded the train at Houston was a bit surprising for a Monday evening.The track speed was mainly 55-60 mph,except between Houston and San Antonio where the speed was reduced to about 30 mph.The consist was a baggage car, 3 high levels,diner,lounge,4 sleepers, and a dome car.

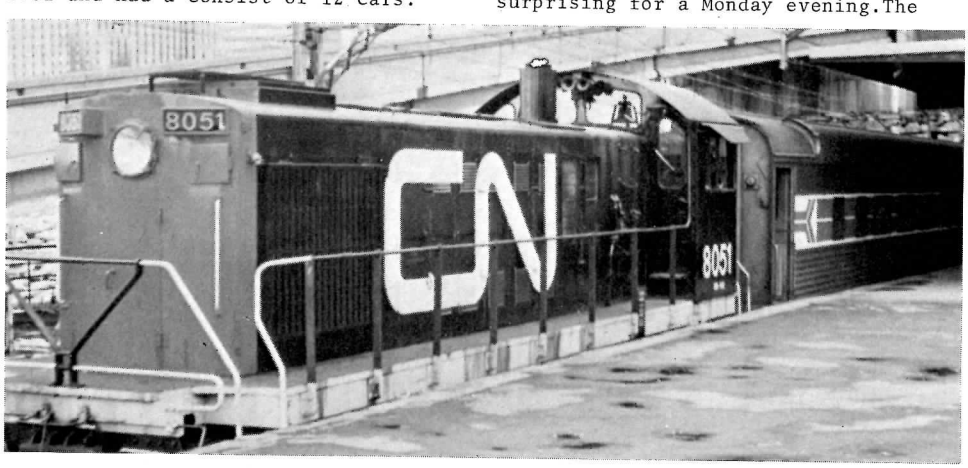
The "Sunset Limited" arrived in El Paso Texas at 14.35 on 30 November,a sunny day with temperatures at 18 F (record low for day).

Arrival in Los Angeles was 20 minutes early to the joy of sunny warm weather at last (80 F).I then connected with the 08.30 San Dieagan No.770 to Fullerton before continuing on to San Diego.The Fullerton stop was to permit my first one day stop to Disneyland. The Disneyland steam train affords the visitor an excellent circumferential appreciation of the total Disneyland spectacle.

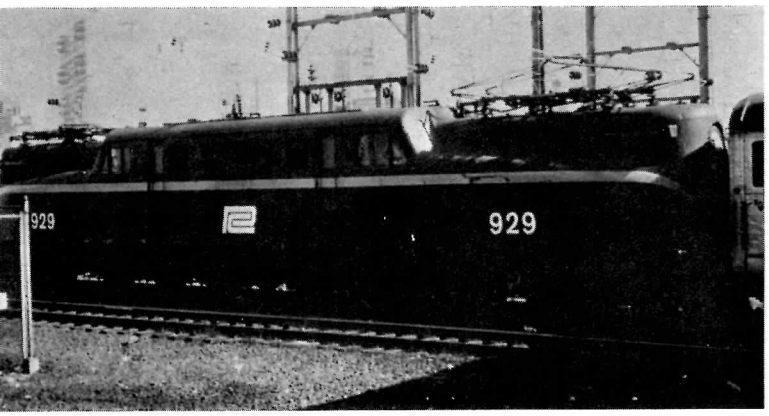
The entire San Dieagan fleet of trains is using the new Budd-built Amfleet train sets.The consist on 1 December 1976 was F40H 224,Amcoach 21136,Amcafe 20025 and Amcoaches 21138 and 21143. For a Wednesday,the train was well patronized.I travelled northbound the following the following Tuesday to Los Angeles behind F40 223:train 771.The train was well utilized for a Tuesday in mid December.Our total consist was engine 223,Amcoaches 21136,21139,Amcafe 20025 and Amcoach 21134.

Arrival and departure from Los Angeles was on time.The train from Los Angeles was the "Coast Starlight" made up of SDP40F's 568,570,baggage car 1161,crew car 1502,5 4800 series coaches,dome/lounge,diner,3 sleepers,and Northern Pacific business car 9110.

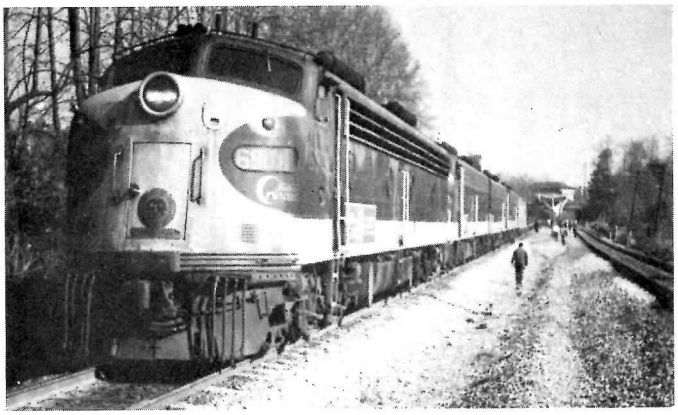
The trip between Los Angeles and San Francisco is a spectacular one.From Santa Barbara to San Luis Obispo,we travelled along the Pacific Coast and then north from San Luis Obispo we traversed the coastal mountain range.The weather was ideal and the vistas were absolutely marvelous until we were overtaken by darkness.



Montreal Central, where Amtrak and VIA meet. CN switcher #8051 hostles the "Montrealer" equipment into the station. (R.W. Layton)



In Pennsy. stripes, Penn-Central logo and Amtrak numbers, GG-1 #929 hauls the Southern Railway's New York - New Orleans pullmans. Seen here at Philadelphia. (RWL)



BELOW - Southern switcher #1032 with the New Orleans bound dome and diner. Seen here at Atlanta. (PFO)

A string of covered wagons wait at Atlanta, Georgia to take the point of the Atlanta - New Orleans section of the "Southern Crescent" (PFO)

After some time on San Francisco's BART cars and the ex Toronto MUNI cars,I boarded the eastbound "California Zephyr" operating over Southern Pacific lines.The consist on 9 Dec.,76 was:

Engines SDP40F	623	
	627	
Mail	1189	
	1096	
Baggage/Crew	1591	
Day Coach	4818	
" "	4475	
Lounge	3335	
Diner	8050	
Sleeper	2670	Silver Terrain
"	2624	Pacific Patrol

We traversed the central California plain for several hours and then began the assault on the Sierra Nevadas until we reached Lake Tahoe just as darkness was taking over.The Reno stop was too short to crank any handles and lose any nickels.The schedule for the San Francisco Zephyr is so padded that we arrived in Ogden 1 hour and 10 minutes early.

There was a three hour layover at the beautiful and historic Station.Apparently in the 1950's,Ogden had 16 passenger tracks in operation and on occassion,trains were held out due to terminal congestion.Now there are only two Amtrak trains a day using this station,which has been declared a state historic site.

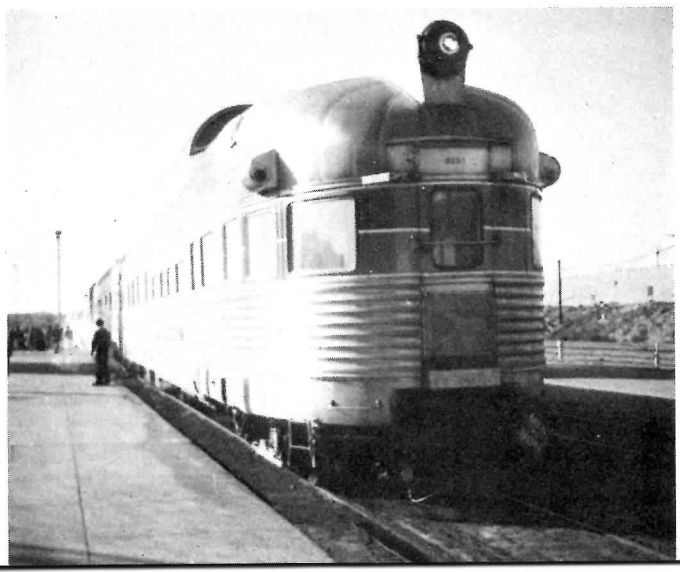
BELOW LEFT - Amtrak SDP-40F 572 on the point of the "Sunset Limited" at Sanderson, Texas. (PFO)
BELOW RIGHT - The "Sunset Limited" has a dome/lounge to bring up the markers. Seen here at El Paso, Texas. (PFO)

The Denver and Rio Grande Western provides a mini bus connection between Ogden and their terminal at Salt Lake City.There were thirteen people who made the transfer.D.R.G.W.'s Salt Lake City terminal is in excellent condition and is very pleasing architecturally. The one way fare to Denver was $39.00.

Departure from Salt Lake City was at 7.00 am sharp,the first indication of the D.& R.G.W.'s competence.Here began one of the best train rides in North America.

The consist was A unit 5771,3 B units, baggage,dome coach #39,coach 1185 (Silver Bronco),Diner 1115 (Silver Banquet), and Dome Coach Club 1148 (Silver Shop Club).These cars were built in the 1950's but are still in fine condition and rode like a dream.The D.& R.G.W. is a rode that still cares.

The first 100 miles of the route traversed some of Utah's best agricultural acreage.Then we gradually transitioned into pastureland and cold semi-desert conditions before the half way point of the trip was reached.We reached the western front of the Rocky Mountains and the scenery became spectacular.We wound along canyons and traversed through mountain peaks of over 10.000' altitude for the next 100 miles. Then,we followed the Colorado River for some time through the intermountain plateau region which was resplendent with mesas and buttes.As darkness



ABOVE LEFT - Amtrak train #770 "San Diegan" in San Diego, California. F40H #224 is on the point of this Amcoach equipped train.(PFO)
ABOVE - San Francisco MUNI PCC car 1007 in service downtown. (PFO)
LEFT - SDP-40F #623 heading up the "San Francisco Zephyr. (PFO)
BELOW - Caught in passing. SP 2-8-0 #3420 on display at El Paso, Texas. (PFO)
BOTTOM - The D&RGW use FP-9's on the "Rio Grande Zephyr". On this occasion #5771 was on the point. (PFO)

approached,we reached the eastern front of the Rockies.We had travelled through 26 tunnels in less than 100 miles.An hour from Denver,we emerged from the mountains and ran along a high altitude ledge for 5 miles,from which we could see the lights of Denver and the western half of Colorado stretching out before us to the east. We arrived at Denver Union Station exactly on time at 21.00 hours.

The meal facilities aboard the Rio Grande were reminiscent of those experienced on Canadian transcontinental services in the 1950's.The choices on the menu for every meal were many. I was informed by the chef that all food was prepared on board.Well done Rio Grande! This unfortunately,ended the rail portion of the journey and return to Toronto was by air.

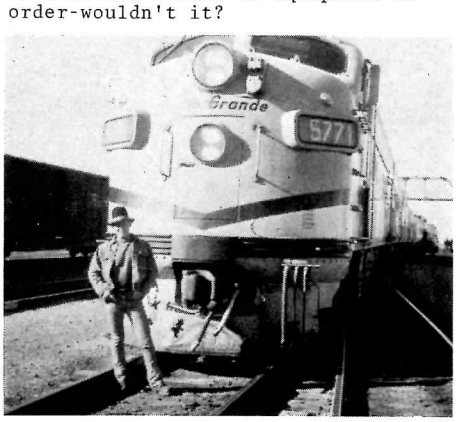
In summary,Amtrak's U.S.A. Rail Pass is one of the best bargains in Town. Amtrak has come a long way in two years and made many improvements.On time performance was good,equipment clean and comfortable and the number of passengers carried was very good for the month of November,a slack period.However, Amtrak still has many areas for improvement.The operating crews need more direction in how to deal with the public.Many Southern Pacific crews especially were obnoxious,compared to the extreme helpfulness of the Southern and Rio Grande personnel.The tracks need upgrading, particularly in Texas.The Amtrak menus can be monotonous.Each train could feature a speciality and,thus,provide variety for a passenger using a number of the trains consecutively.Many of the Amtrak schedules have too much slack in them,the "San Francisco Zephyr" being a flagrant example.

With all their new equipment coming on line,Amtrak should place greater emphasis on "hot shot" intercity service.I talked to a number of people and they regretted not being able to make better use of Amtrak for business and recreation purposes. Several corridors come to mind where a substantial market must exist for several daily trains:

-Detroit-Dayton-Cinncinnati
-Cincinnati-Columbus-Cleveland
-Chicago-Indianapolis-Cleveland
-Chicago-Detroit-London-Toronto
-New York-Buffalo-Toronto
-New Orleans-Houston-San Antonio
-Houston-Dallas/Fort Worth
-Vancouver-Seattle-Portland

In sum.I really enjoyed the 6.259 mile junket mostly with Amtrak.I feel that Amtrak deserves a vote of confidence. Wait until they get more of their new equipment and get the rail upgraded!

It would be nice if Rail Canada had a substantial amount of equipment on order-wouldn't it?



GO BILEVELS UNVEILED

In a December 5th. ceremony at Toronto Union Station, GO Transit unveiled the first new commuter rail car design in North America in more than a decade. Some ten years in development, the bilevel coaches will be used to increase the capacity of GO's rush-hour services by almost 75% to accomodate the present heavy demand and anticipated future needs. The first of the 162-seat cars are expected to replace existing 94-seat coaches in service in February, with vertually all of GO's Lakeshore rush hour trains being bilevel equipped by next fall.

The cars are being constructed by Hawker-Siddeley Canada Ltd., of Thunder Bay, Ontario, whose bis was chosen in a design competition staged by the Toronto Area Transit Operating Authority. The design Submitted by Hawker Siddeley in the 1975 competition had been on the company's drawing boards since 1968.

The GO bilevels are of a completely new design from the wheels up , with even the wheel assemblies being of a new concept, providing a mush smoother ride. Unlike other bilevel commuter designs in North America, these cars have a full upper deck, rather than the upper gallery design prevelent in other equipment. The result is a much improved passenger flow to the upper level and a more intimate atmosphere in each fully carpeted section of each car. Passenger flow has also been improved by providing two full-width doors on each side of the car, rather than the single centred door popular on older bi-levels.

The engineers came up with a totally changed seat which for the first time provides proper support to the lower portion of the back, thus establishing a new standard in seating comfort.

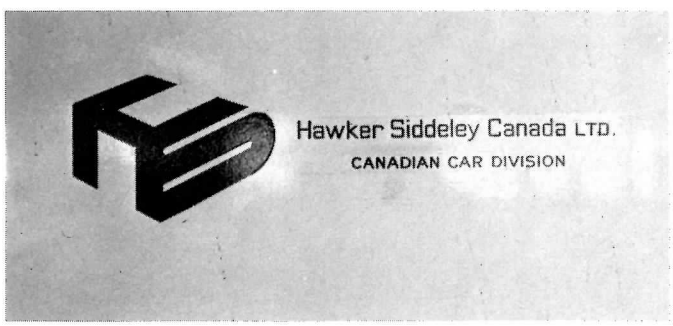
The bilevels are the first GO cars to offer washroom facilities and the first GO equipment to allow passengers to pass between cars, a feature which should provide for more evenly distributed passenger loads and proved popular with passengers during the CP Rail bi-level exchange of 1975.

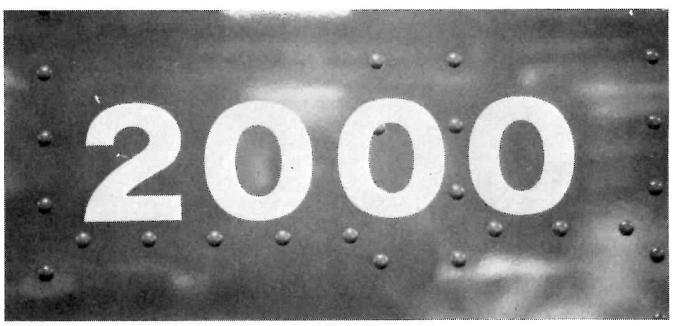
Another new feature will allow trains laying over for several minutes at the ends of their runs to close all doors preserve interior air-conditioning or heat. One door on each side of each car is equipped with an external push button which, when activated by the train crew, will allow a passenger on the station platform to open the single door and let him or herself onto the train.

VITAL STATISTICS

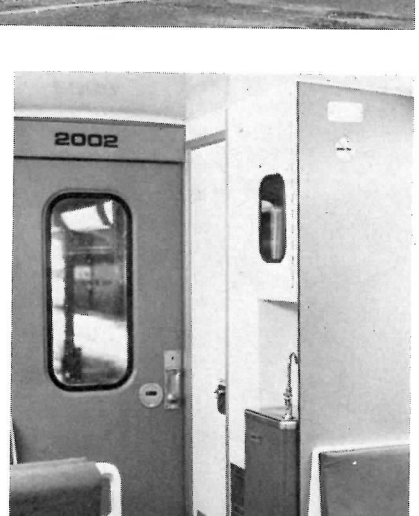
Length	85ft.
Width	9ft. 10ins.
Height	15ft. 11ins.
Weight	54 tons
Seating	162
Number ordered	80
Order value	$40 million
First in service	Feb. 1978
Full service	Oct. 1978

ABOVE- GO's new bilevels arrive at Union Station prior to their unveiling ceremony. APCU #907 leads #2002 and #2000 whilst a GP-40-2W does the pushing work. (Ted Wickson)
BELOW - Hawker - Siddeley Canada Ltd's logo displayed on the cars, whilst (right) the first of a new GO number series. (D.W. Smith)

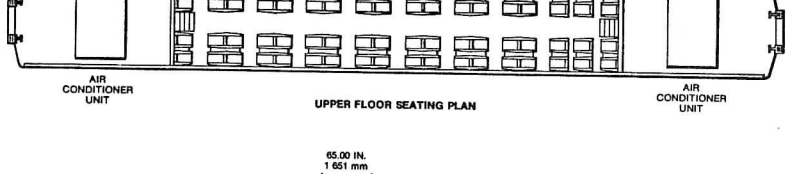




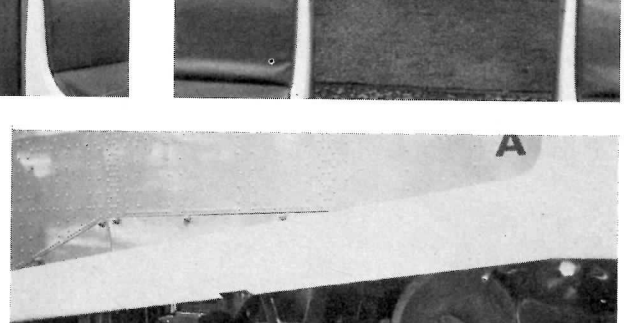
ABOVE - GO bilevel #2000 at Toronto Union Station. (Ted Wickson)
ABOVE RIGHT - The upper deck interior of the new cars. Note the less subway like interiors and the newly designed seats. (Ted Wickson)
RIGHT - For the first time these GO cars have washroom and water fountain facilities as well as passenger use interconnecting doors. (DWS)
FAR RIGHT - The intermediate level entrace lobby is shown here. (D.W. Smith)
BELOW RIGHT - The new truck design with the main body weight supported on a secondary bolster instead of directly on the centre pin. Note also the disc brakes on the inner wheel and the show brakes on the outer wheel. (D.W. Smith)

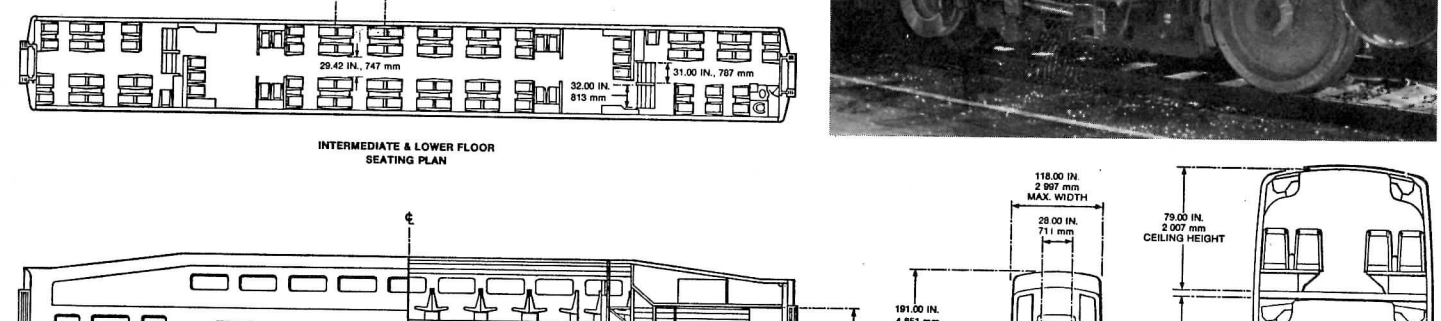


UPPER FLOOR SEATING PLAN



INTERMEDIATE & LOWER FLOOR SEATING PLAN





SECTION AT CAR ℄

IN TRANSIT

Edited by
Rod Semple &
Pat Semple

FIRST TORONTO CLRV ARRIVES

The noon hour of Thursday 29 of December 1977 saw a large crowd of TTC personnel and representatives of the media gathered at the rear of the TTC Hillcrest Shops on Bathurst Street The object of their attentions was the first new Canadian Streetcar in 25 years.The bright red white black and grey LRV had just been unloaded from a railway flat car,this having been switched into Hillcrest's spur track from the CPR's North Toronto subdivison which skirts the southern boundary of the shops.

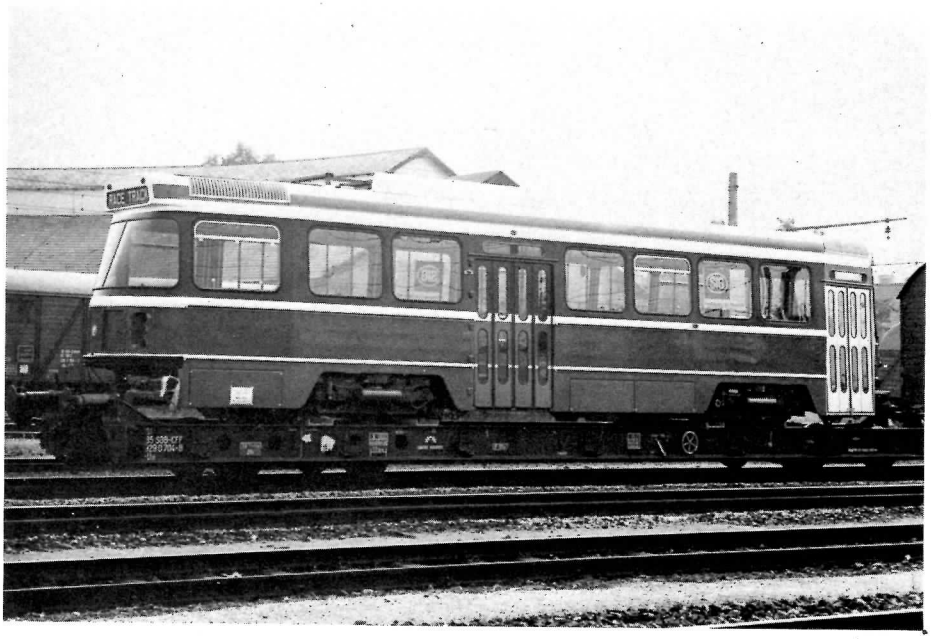
The unloading ramp at Hillcrest,which of recent years,has seen a one exodus of trams- out of Hillcrest to the USA and other parts,now saw the first example of what will be an influx of new streetcars. A Front end loader pulled the car off the flat car and then with the aid of a small tractor pushed the car towards the entrance of the shops.The car paused for a few minutes while the media got busy with their cameras.Although no crests or numbers were on the car,it is 4002. At approximately 12.15 the small tractor began to haul the car towards the shop entrance,past a number of PCC's which were parked outside,an interesting contrast.

Slowly the car was pulled out of sight into the shops,where it will be prepared for service.The actual "in service " date has yet to be determined. It is understood that seats and poles have yet to be fitted.

The Swiss built LRV is the first of 6 prototypes to be delivered.An extra set of trucks was delivered with the car but at that time there was no sign of another body.

This issue sees two changes for "Rail and Transit" magazine.The first is the obvious change from "Traction Topics" to a more appropriate title of "In Transit".The change is one that takes note of the fact that,although traction is a subject of major interest,the title of "In Transit" allows a wider range of subjects to be covered in the entire transit spectrum.This is in line with the title of the magazine as a whole,"Rail and Transit".The second change is that effective with the Novemebr-December 1977 issue,Mike Roschlau resigned as Traction Topics editor.Mike is attending university and he felt that he could not in fairness to both the magazine and himself,devote the amount of time required for both the magazine and his studies.Mike has done a fantastic job is going to be missed.The new editors for "In Transit" are Rod Semple and Patrick Semple and no-they are not related.Again from all of us Mike,a big THANK YOU.

PHOTOS:LEFT:Canadian Light Rail Vehicle #4000 (incorrectly numbred 4004) at Orbe (SBB Station) on the Orbe - Chavornay Railway,located in Switzerland. The car is there for testing.Photo taken 7 Oct.77 (Toronto Transit Commission).RIGHT:CLRV on the OCB (Orbe-Chavornay Bahn) uder test.Although the car used a pantograph for the tests,a pole will be fitted for operation in Toronto.(T.T.C.)BELOW:CLRV in Vienna at Hutteldorf-Hocking station.The car was sent to Vienna to undergo testing in the U.I.C. testing center.Included in the tests were wind tunnel and cold chamber tests.(Harald Hermann)



On Friday January 27th 1978,Ontario Premier William C. Davis cut a ribbon to officially open Toronto's latest subway,the 6.17 mile $212 million Spadina Subway line.The public had to wait until the next day to ride the line,but since the ride was free on that day,they probably didn't mind.

The Spadina line differs from previous subway construction in several ways. Approximently half of its milage is on the surface,in the median strip of a highway;true the other lines have surface sections,but none as long or as continuous.

The other feature worthy of note is the design of the stations and the once controversial artwork installed in them.

SPADINA:One of the most intriguing stations,this is an old house which was both restored and converted to provide an entrance to the subway on the east side of Spadina Ave.Two artworks are featured in this station, "Morning Glory" by Louis de Neverville and "Barren Ground Caribou"by Joyce Wieland.The station is connected to the Bloor Danforth Subway Spadina Station by a moving sidewalk.

GLENCAIRN:The line at this point is on the surface (it emerges at Eglinton West).Passengers sitting in the wind breaks on the island platforms will be able to contemplate "Joy" by Rita Le Tendre.It is the multi-coloured glass skylight over their heads.

LAWRENCE WEST:"Spacing Aerial Highway" by Claude Breeze is the name for the overhead artwork at this location.

YORKDALE: Stainless steel exterior walls mimic a subway train,whilst overhead is an arched roof which includes multicoloured neon tubes,"Arc en Ciel" by Michael Hayden,lights up from one end of the station to the other in a flowing motion with the coming and going of trains.

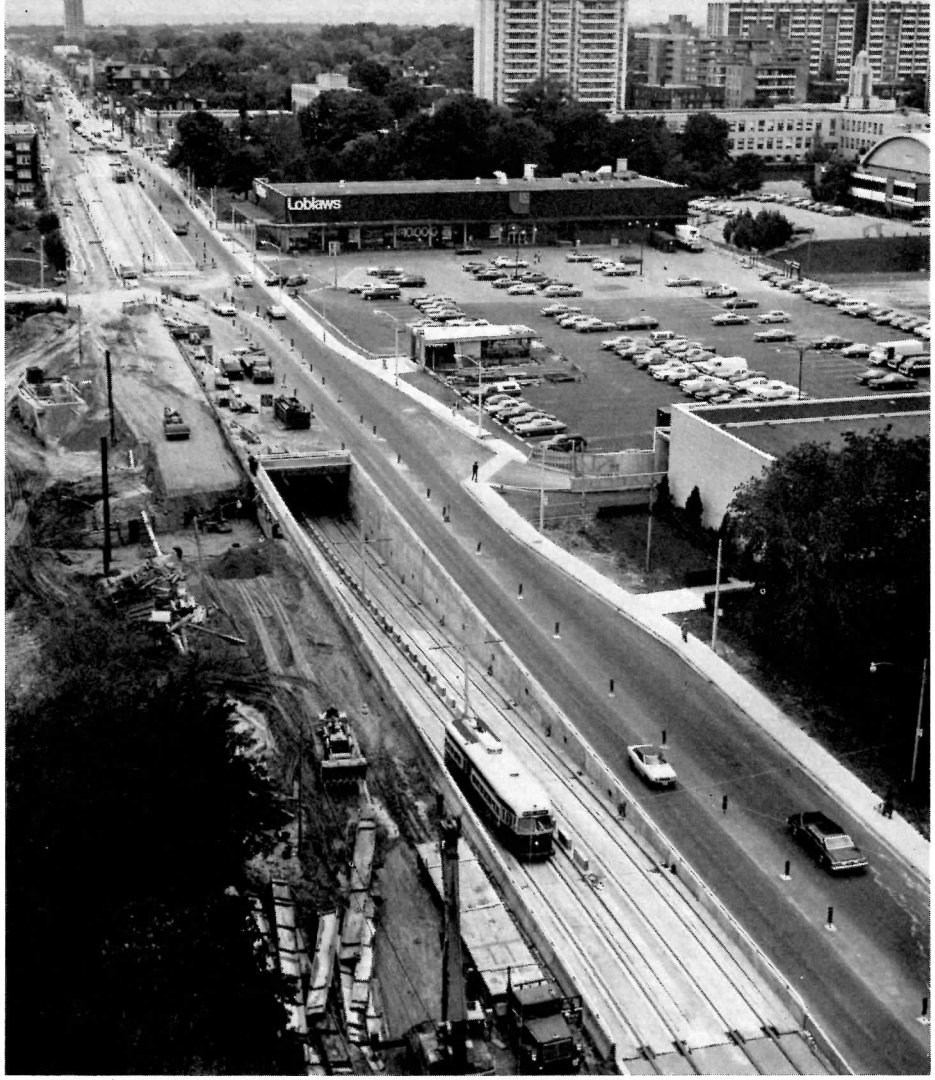
WILSON: Northern terminus of the line. Large parking lots,Kiss and Ride Facility and interchange with bus routes are features of the station."Canyons" by Ted Bieler is the artwork.

North of Wilson station,the line dives under a roadway to emerge in Wilson Yard which will provide the trains for the new line. 134 new subway cars are of course being delivered from Hawker Siddeley of thunder Bay.These were ordered for the new line a couple of years ago. The most noticable exterior feature of these cars is the new car end design,this is basically quite plain,but is painted black,giving a surprisingly attractive appearance.However some of the cars have appeared with unpainted silver ends, this reportedly being due to track maintanence workers being unable to see the trains in tunnels.

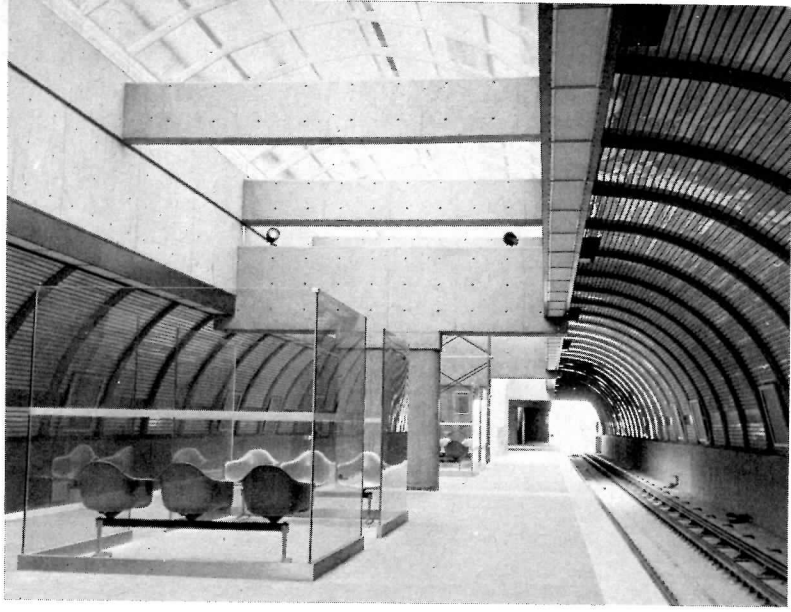
DUPONT:"Glass Bubbles" describes the entrance to this station at the intersection of Dupont and Spadina.Once down the platform,one is regaled with James Sutherland's "Spadina Summer Under",a mosaic tile artwork on the wall.

ST. CLAIR WEST: Probably the most complex station on the line,it will be served by St. Clair streetcars using the new underground interchange along with buses.One can enter the station from Nordheimer ravine.The resident artwork is "Tempo" by Gordon Rayner.

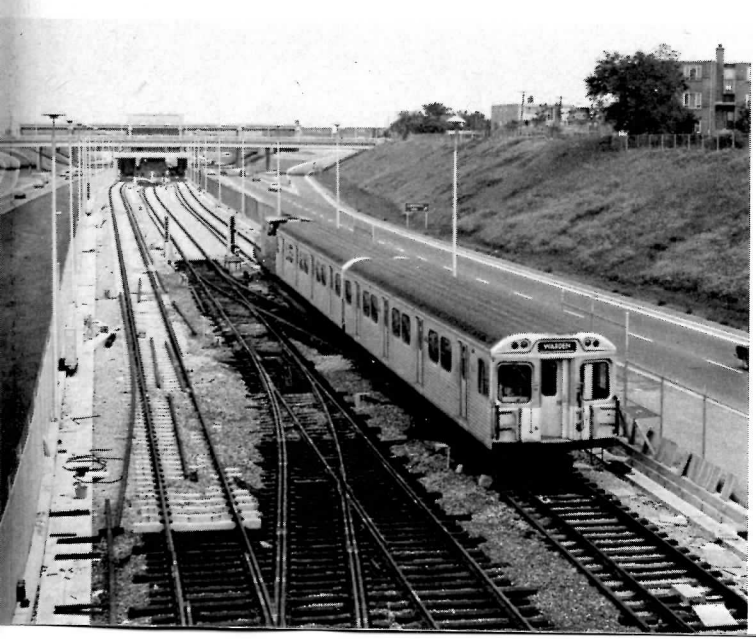
EGLINTON WEST: Streetcar buffs will like the artwork at this station,Gerald Zeldin's "Summertime Streetcar" featuring the classic PCC design decorating the platform walls.The Ossington trolleybus has been extended to serve this station.



Two views of the streetcar ramp into St. Clair West Station on the Spadina Subway line.TOP:Looking to the northwest during the final clean up of the construction site.At this time,the east bound lanes of St.Clair Ave. had not been reopened after the lifting of the temporary streetcar tracks around the site.RIGHT:East end of the ramp looking west with PCC 4545 heading down the ramp.(Both.T. Wickson)



TOP LEFT:PCC 4520 underground at St. Clair West Station on the Spadina Subway.(T.Wickson).TOP RIGHT:Interior of Glencairn Station.October 4 1977.(T.Wickson).LEFT:2 car train of H5 Class Subway cars at Davisville Yard.Not all the cars have yet been delivered and already,there has been a change:The black paint on the front of the cars is being dispensed with,as they are too hsrd to see in tunnels.(TTC).BELOW LEFT:5 October1977 saw a special train consisting of 2 H class cars and locomotive RT18 to take the TTC Commissioners on a tour of the Spadina line.Northbound approaching Lawrence West Station.BELOW RIGHT: The special train at Lawrence West Station.Both photos T.Wickson.



ABOVE:Flyer 9331 eastbound on St Clair Ave.,on new MT.PLEASANT 74 trolleybus route,Dec.9 1977.(T.Wickson)

ABOVE:PCC 4504 22 July 1976 at the same spot.(T.Wickson)

Mount Pleasant 74 Trolleybus Renaissance

On June 18th 1922,4 solid tired Packard 'trackless trolleys' commenced operation of Toronto's pioneer trolleybus route.

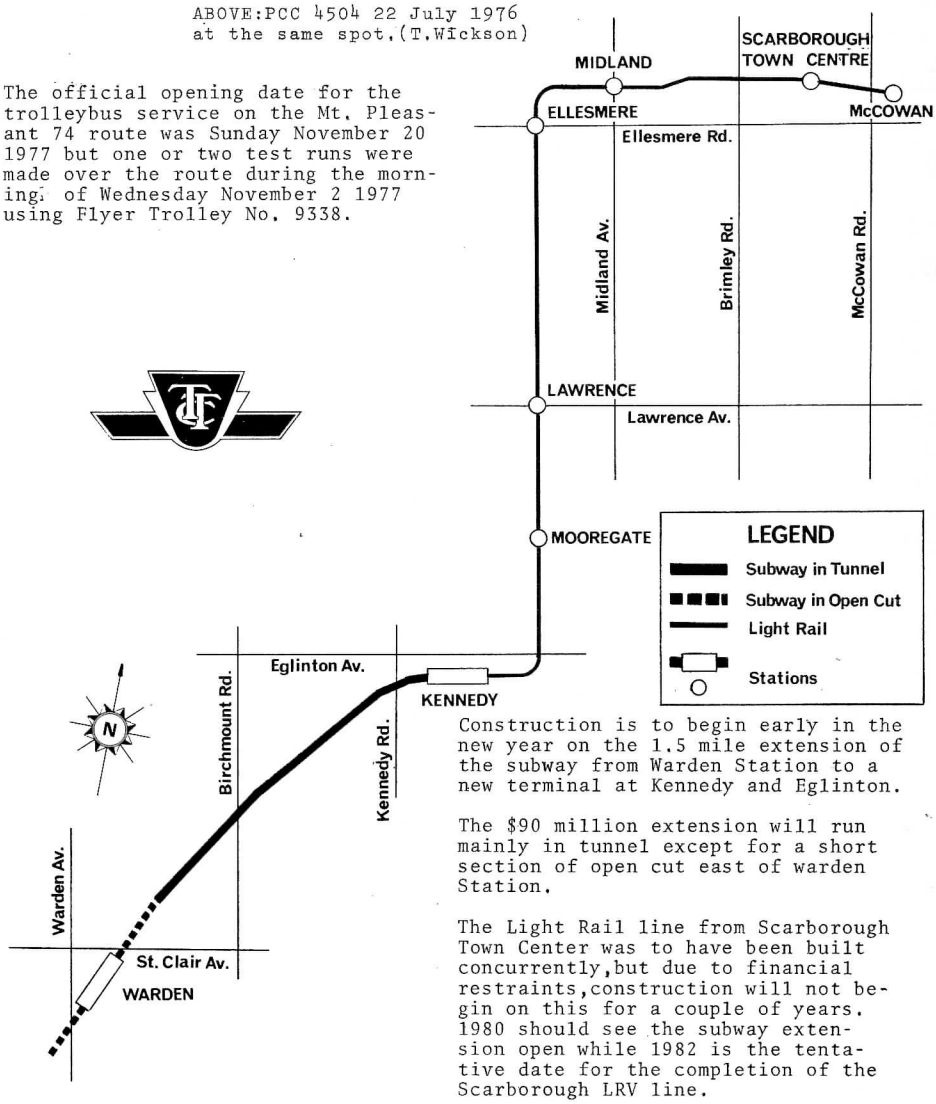
Initially starting from a wye on Merton street near Yonge,the route ran east on Merton and north on Mount Pleasant to Eglinton.Here they reversed by means of another wye.

The terminal arrangements were altered somewhat at a later date with a loop replacing the wye at Merton and Yonge.To replace the temporary shed on Merton which had housed the trolley buses,the wires were extended to the west along Eglinton to Eglinton Carhouse.

August 31 1925 saw the demise of the pioneer tracless route.The St. Clair carline had been extended up Mount Pleasant Road to a loop just north of Eglinton Avenue. 51 years of rail operation then followed.The last few years saw that part of the route which ran from St. Clair station to Eglinton Ave.,operated as the Mt. Pleasant route seperate from the St.Clair line. Eventually it was decided that since the rails needed renewing and that major road alterations were in the works,the streetcars would go,so far as Mt. Pleasant was concerned.

The Mt. Pleasant streetcar line was abandoned on July 25,1976 being replaced by a temporary service of GM diesel buses which operated the route for over a year.Work meanwhile progressed on trolleybus overhead installation,this following the former streetcar routing exactly ;ie from the upper level loading platform of St,Clair Subwqay Station(which it shares with the St. Clair route carline)to Eglinton Ave.

The official opening date for the trolleybus service on the Mt. Pleasant 74 route was Sunday November 20 1977 but one or two test runs were made over the route during the morning of Wednesday November 2 1977 using Flyer Trolley No. 9338.



Construction is to begin early in the new year on the 1.5 mile extension of the subway from Warden Station to a new terminal at Kennedy and Eglinton.

The $90 million extension will run mainly in tunnel except for a short section of open cut east of warden Station.

The Light Rail line from Scarborough Town Center was to have been built concurrently,but due to financial restraints,construction will not begin on this for a couple of years. 1980 should see the subway extension open while 1982 is the tentative date for the completion of the Scarborough LRV line.

Entire TTC snow fighting fleet at the Exhibition Grounds March 23,1939.(TTC)

TTC DISPOSES OF SURFACE WORK CARS.

With the exception of two unit PCC Rail Grinder W30-W31,the Commission decided that it no longer needed streetcar work equipment.This meant the withdrawl of snow plows TP10 and TP 11 (built 1945) ,W5 (dating from the early 1900's,rebuilt in 1942) and Flat Motors W1 and W3 (of similar ancestry as W5)

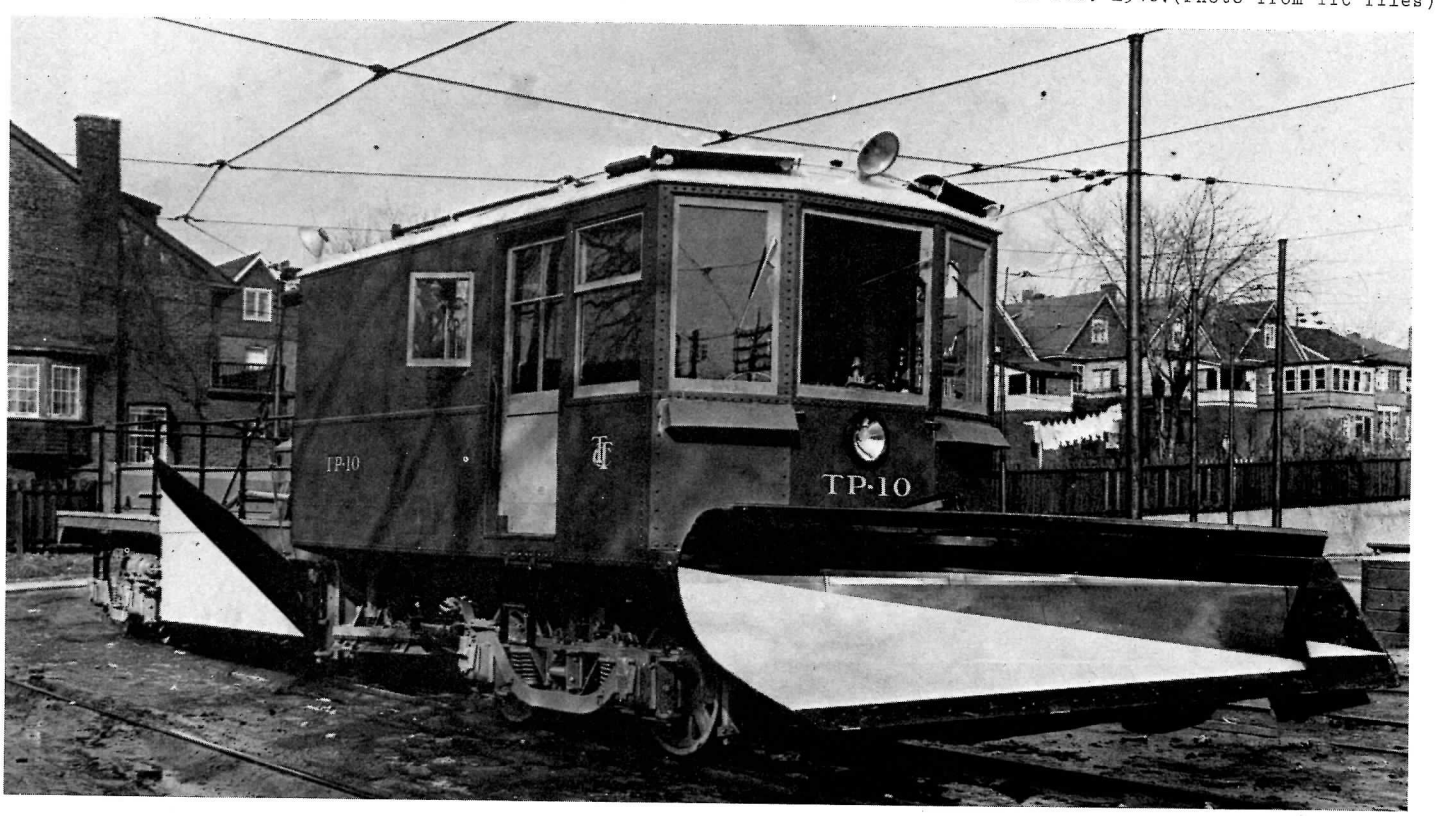
The snow plows have not been used for several years as snow clearance is now handled by municipal crews.

The Flat Motors were used quite recently by the TTC Plant Department to convey rail to the various trackwork projects around the city,but the purchase of a rubber tyred tractor trailer unit to do the job has rendered the flat cars redundant.They are also reportedly in poor condition.

As of late December,the three plows, TP10,TP11 and W5 were stored on a storage track at ST. Clair carhouse,while the two motors were at Hillcrest Shop.

SEPTA, Philadelphia is apparently interested in the plows,TP10 and TP 11, while the Ontario Electric Railway Historical Society has expressed an interest in the other equipment.

BELOW: TP10 at Roncesvalles Division 12 Feb. 1946.(Photo from TTC files)



Urban Transportation Developement Corporation developed and Swiss built prototype of the Canadian Light Rail Vehicle under test on the Orbe-Chavonray Railway in Switzerland.(UTDC Photo.)