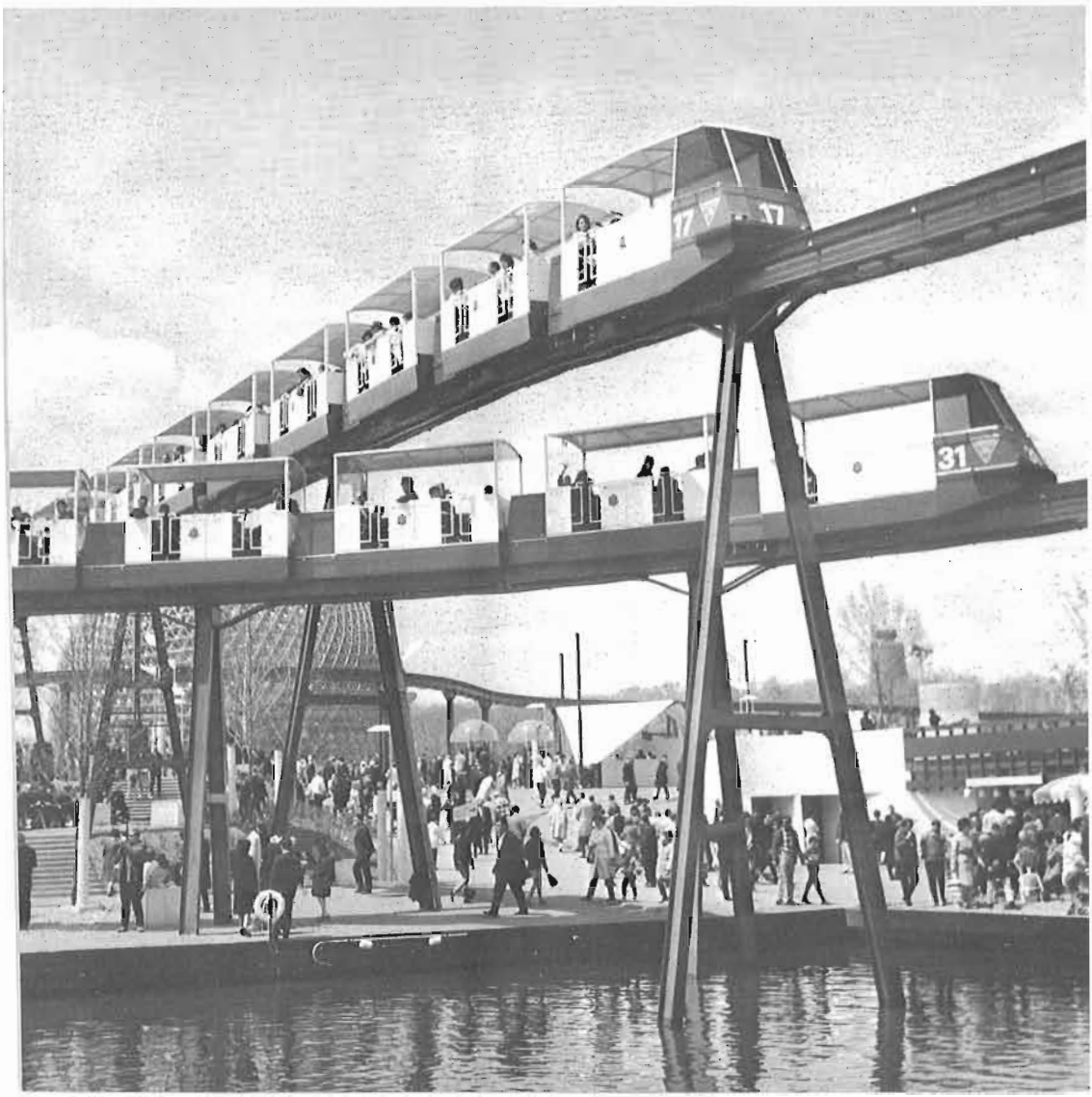
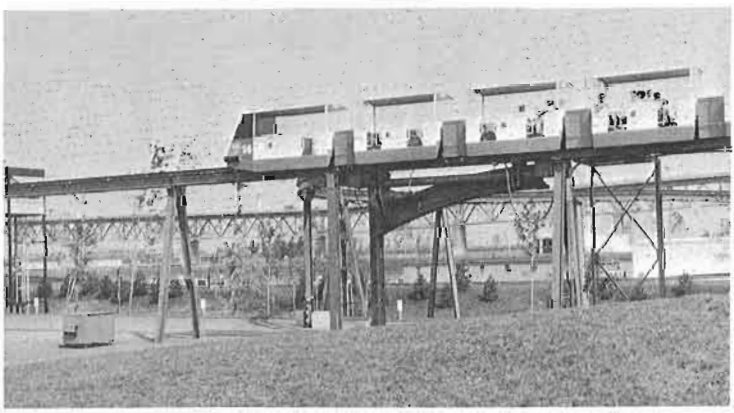
Canadian Rail

THE CANADIAN RAILROAD HISTORICAL ASSOCIATION, INC. ESTABLISHED 1932

No. 192 October 1967



capturing the hearts of its riders.....



Train 14 passing over one of the novel rotary switches.

The switch and shop lead as seen from a passing train.

MINIRAIL

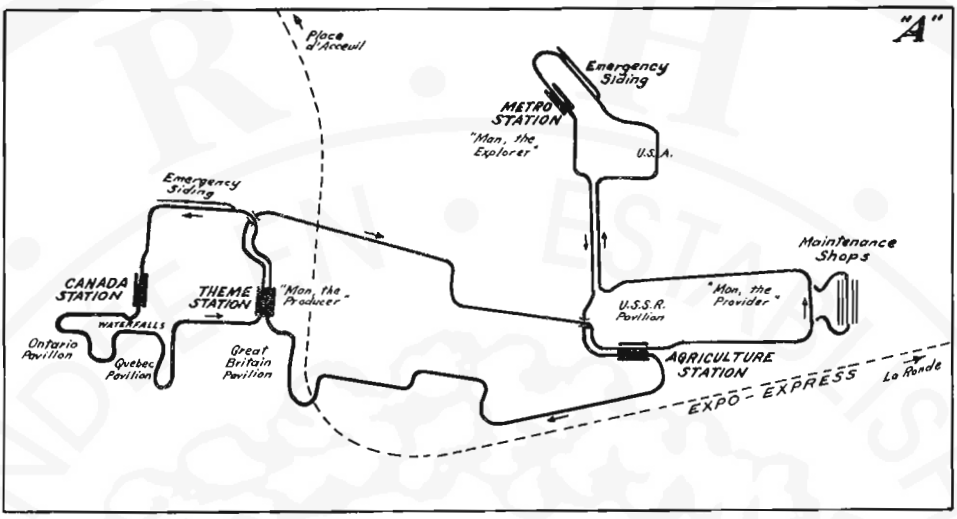
by A. Clegg, from information courtesy of Mr. T. Zsenaty & Mr. D. Munro.

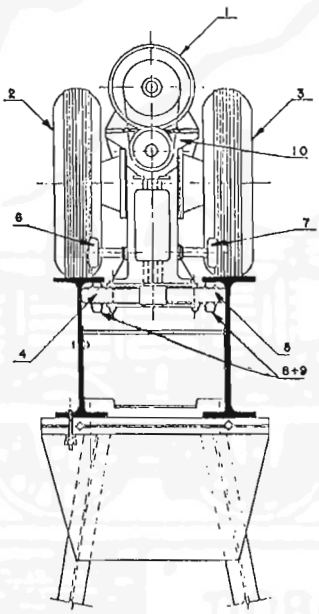
EXPO '67 is, by almost all standards, an unqualified success. Judged solely by the published attendance figures, this in unquestionably so, and the "Montreal World's Fair", the first Class "A" Exposition held under the auspices of the International Bureau of Expositions in the Western Hemisphere, is attracting 34% more visitors than was originally estimated. This tremendous acceptance of Expo by Montrealers and visitors alike is nonetheless the cause of one of the chief complaints - the long line-ups to gain admittance to the various pavilions and attractions. And nowhere has the waiting been longer and the queues more extensive than the line-ups to ride the MINIRAIL the open-air scenic rides around and above the Exposition Grounds.

MINIRAIL has captured the hearts of practically all its riders to an extent not even vaguely foreseen by the Expo planners. It was designed originally not as an amusement ride, but as a means of transit -- not Rapid Transit, but a secondary local transportation service to accommodate Expo visitors. The main route, coloquially known as "The Blue Minirail" from the colour of its cars, was laid out to pass close to practically all the important points on the central part of Ile Ste. Helene and Ile Notre Dame. (See Exhibit "A"). The western part of Ile Ste. Helene and the La Ronde Amusement Park are served by similar but somewhat smaller MINIRAIL trains operating over independent loops and generally referred to as "The Yellow Minirails" due to the yellow canopies fitted over the diminutive open cars.

THE BLUE MINIRAIL

On the major MINIRAIL circuit, there are six passenger stops strategically located close to the larger pavilions. The little trains pass beside the giant USSR pavilion, in front of the British and French structures, and thread their way amongst the large rock slabs at the Ontario exhibit. They pass directly through the centre of the pavilion of the United States of America, which is shaped like a huge crystal ball, although Minirail trains do not halt at this point and the closest passenger stop is some 1500 feet distant. At one point, between the exhibit of the Province of Ontario and that of the Province of Quebec, Minirail passengers pass under a series of scenic water falls, which cascade down from the main pavilion level to Regatta Lake and the St. Lawrence River below. At two points the line passes over itself, while at two other locations, the system ducks under the standard-gauge elevated rapid transit system "EXPO EXPRESS". Those responsible for laying out the MINIRAIL lines can take full marks for the picturesque way in which the diminutive trains wend their way around the scenic wonders of the exhibition park.





1 – 7 1/2 H.P. D.C. MOTOR

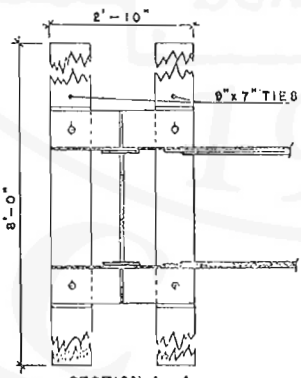
2+3 – 27"Ø TRACTION WHEELS

4+5 – 9 1/2"Ø GUIDE WHEELS

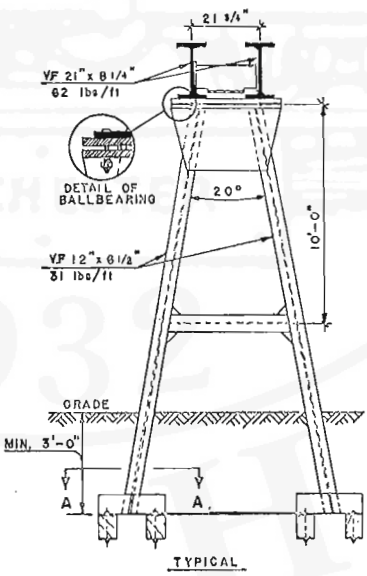
6+7 – EMERGENCY ROLLERS

6+9 – SUPPLEMENTARY GUIDE WHEELS

10 – DIFFERENTIAL GEAR DRIVE



SECTION A—A



TYPICAL

Operating over the 4.2 miles of track on this major MINIRAIL line, there are 32 trains of nine cars apiece. Each train is 125 feet in length and has a maximum capacity of 102 passengers. Generally speaking, the track is elevated above the crowded streets and walk-ways, but, as mentioned above, dips down occasionally almost to the level of the St.Lawrence. All the trains are crewless and operate somewhat on the idea of an extended horizontal elevator. They are painted blue and white and remind one of the attractive tramcars in Lucerne, Berne, or Basel. Indeed they should, for they were designed by the Swiss firm of Maschinenfabrik Habeggar in Thun, Switzerland, which company also supplied the running gear and the automatic control equipment. Carbodies and superstructure were fabricated in Canada by the Truscon Division of Hawker Siddeley, in Montreal.

Trackage was constructed on the Expo site by Dominion Bridge Company to Habeggar specifications, with Herter Todd and Myer as local consultants. It consists of double "I" beams, 21¾" apart, supported on steel A-frames at 50 foot centres on straight sections and at 34 foot centres on curved sections. Track height ranges from ground level to a maximum of 40 feet above the surroundings. The ruling grade is 10%, and minimum track radius is fifty feet.

Bogies between the passenger cars ride on two 27" pneumatic-tyred traction wheels and are guided by four horizontal stabilizing wheels of 9½" diameter. Other supplementary guide wheels and emergency rollers are provided as shown in Exhibit "B". A differential gear drive transmits power to the traction wheels from a 7½ H.P. D.C. electric motor, giving an average operating speed of about 7½ miles per hour. Maximum speed is in the vicinity of ten miles per hour.

Although the traction motors operate on D.C., current supply in the rails is at 440 volts A.C., 60 cycle, 3 phase. This is converted to Direct Current by a motor-generator set in the leading unit of each train. Leading units also contain the automatic train control mechanism,which governs all the trains' operations except station starting. The only manual controls on the system are the attendant-controlled buttons which permit trains to depart from the stations.

The four stations on the circuit are named after the nearest major pavilion or well-known landmark for which a bi-lingual designation can be employed: i.e., Metro; Agriculture; Theme; Canada. The fact that the trains stop at Agriculture and Theme both on the Metro to Canada leg of their run and also on their return trip makes six stops for a full circuit.

THE YELLOW MINIRAIL

Basically similar to the "Blue Minirail" system described in the preceding paragraphs, the "Yellow Minirail" is divided into two loops -- one of 1.1 miles length serving the western end of Ile Ste.Helene - the other 1.3 miles long circling the Amusement

↑automatic controls pilot minirail trains around the grounds of Expo '67.

Mr. T. Zsenaty, in charge of the Minirail, beside the Transfer Table which distributes trains onto the shop and storage tracks.

Park area of La Ronde. There are twelve trains on each of these two lines, with a consist of sixteen cars per train. In spite of the greater number of passenger-carrying units per train, the total length of the "Yellow" trains is only 105 feet, compared to the 125 ft.-long trains on the "Blue" system. Comparative passenger capacities are 60 for the "Yellow" trains and 102 for the "Blue".

Track structure is slightly different in detail, but basically similar on all lines. Mojan Ltee were the Montreal contractors for erection of the small minirail's trackage.

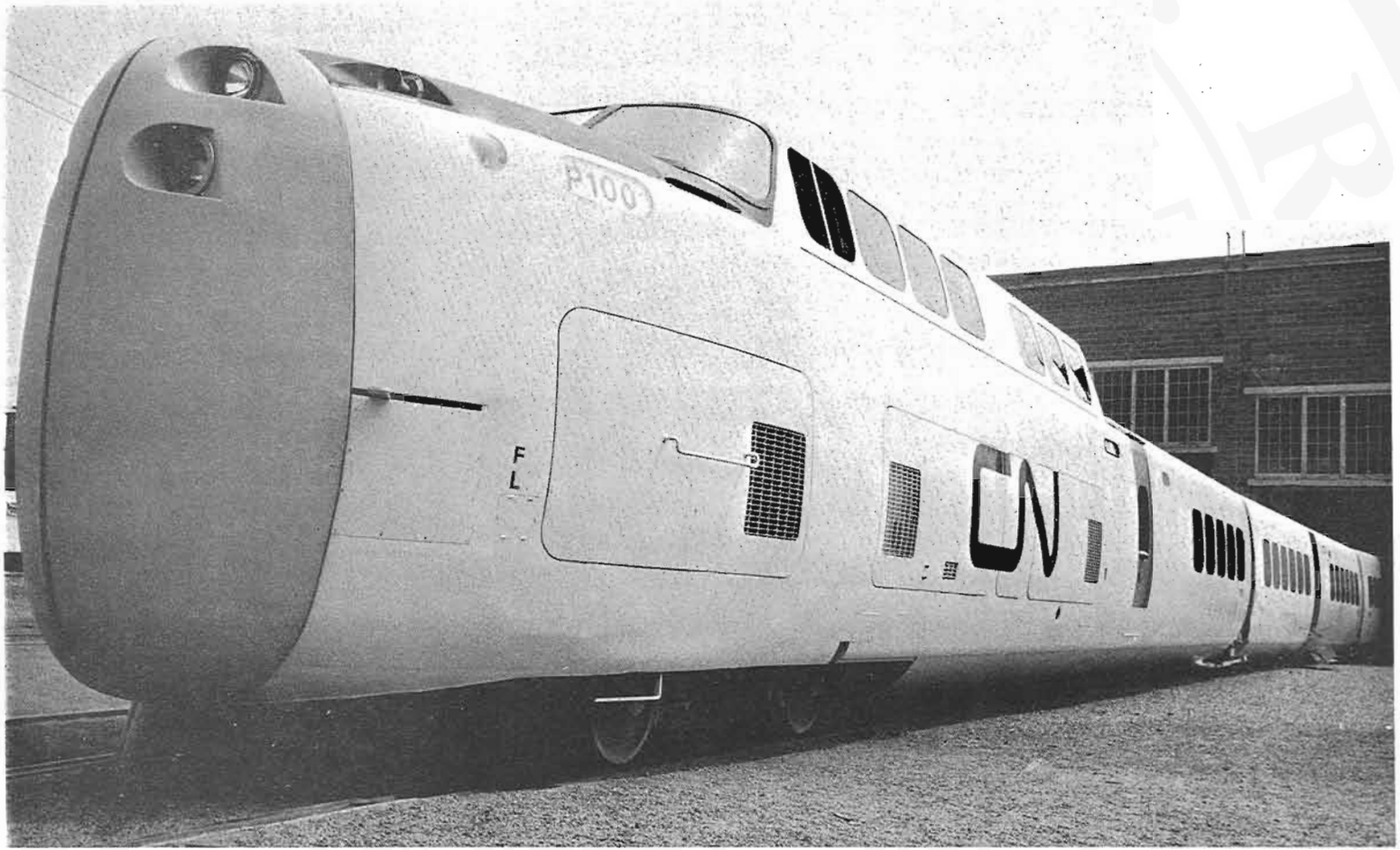
Historically, the European-built "Yellow" trains have a more chequered career than their Montreal-built "Blue" cousins. They were constructed in Switzerland by the Habegger firm at Thun in 1964 for the Swiss National Exhibition held that year at Lauzanne. At that time they were manually controlled but were converted to automatic operation for service at Expo '67. Since 1964 they have been held in storage, pending just such a use as they are now receiving in Canada.

FARE STRUCTURE

Rides on the Ile Ste.Helene and La Ronde minirail loops are forty cents per passenger, each line. Tariffs on the Ile Notre Dame system -- the more extensive "Blue" line -- have been revised, and now it costs fifty cents per half-circuit. After operating for a number of weeks on a basis of "50 cents admission -- ride where you wish" IF you could get on, the authorities inaugurated a policy of forcing everyone off at the Metro and the Canada stations, making riding the MINIRAIL considerably more expensive and somewhat less popular. Now, however, the queues to gain admittance to this popular attraction are of reasonable proportions and the stations are not so completely overwhelmed by intending passengers. (Personally, I feel, however, that it would have been preferable to allow a complete round trip for the advance payment of one dollar.)

The complete MINIRAIL system is owned outright by the Canadian Corporation for the 1967 World Exhibition. First intentions were to assign this secondary transportation facility to a concessionaire, but this plan was later changed and the MINIRAIL is operated as part of the Expo'67 services. Its popularity seems to have justified this change of programme, and it was reported at the end of July that over seven million passengers had travelled on the Minirail lines during the first three months of operation.

Pride in its accomplishments and its popularity is only clouded by the realization that it is so temporary. With the closing of EXPO '67 in October, the Minirail System will no doubt be dismantled and its rolling stock stored for use at some future exhibition. It is a pity!!!! Indeed, it would be so nice to be able to ride the attractive little cars in future years ---- maybe around the enlarged Ile Ste. Helene Park, or possibly up the slopes of Mount Royal to the summit of the Mountain which overlooks the Montreal metropolis.


P100
F
L
CN

C N Tests Turbo Train

CANADIAN NATIONAL RAILWAYS' long-awaited Turbo Trains are now ready to undergo their first operational tests.

During the early part of November, the revolutionary trainsets are to be operated both in the Montreal Locomotive Works yards and on the C.N.R.'s Joliette Subdivision near Montreal. After completion of these runs, they will then be sent to the United Aircraft Company's plant near Providence, Rhode Island, for further experiments, and will be back in Canada during the winter for a series of cold-weather trials. While no date has been set for the inauguration of passenger services, the Canadian National's aim is to have the Turbos operational by next spring.

Difficulties in procuring essential parts forced the railway to postpone the starting date for the new Turbo service thrice in 1967, first from April to June, then until the end of October, and finally until 1968. With the peak traffic season now over for 1967, the C.N. prefers to use the off-season for more extensive testing of the new equipment, rather than attempt to rush the Turbos into service during the winter. The five trainsets should be thoroughly tested and ready to receive passengers by the change-of-time next April.

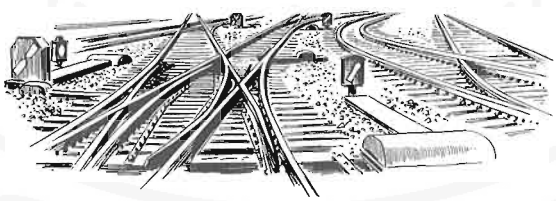
The adjacent illustration, courtesy Canadian National Railways, shows the first trainset, headed by power car P 100, standing outside the eastern Montreal plant of the Montreal Locomotive Works. In a forthcoming issue of 'Canadian Rail', we hope to include photographs showing the units being tested "on line".

Road designation of the Turbos on the CN is to be as follows:

Parlour-Domes	P 100	to	P 104
Coach-Domes	P 200	to	P 204
Parlour-Coaches	T 100	to	T 104
Coaches	T 200	to	T 214
Coaches with meal service.	T 300	to	T 304

(For details of the principle of the U.A.C. Turbo Trains, see 'Canadian Rail' for April 1966 -- pages 74 to 81.)

(Photographs of the units under construction were reproduced in 'Canadian Rail' -- pages 86 to 89 (April) 1967.)



If you keep your copy of 'Canadian Rail' please change the date in the last paragraph on Page 184 (Sept. issue.) The end of electric car service along St.Catherine Street occurred on September 3, 1956 --NOT Aug.31,1955 as shown. This was an editorial error and did not occur in Mr.Binns' original manuscript.

A New Home for Samson

Info. from Mr. Hugh MacPherson

A notable centennial project is that of the Pictou County Historical Society which recently received a $20,000 grant from the Nova Scotia and Canadian governments to relocate "Samson" in a new home. The new building on New Glasgow's Archimedes Street, is 64 feet long, 14 feet high, and 14 feet wide. The building has an all-glass front and is lighted at night.

The following account of Samson is copied from "The Free Lance", New Glasgow, Nova Scotia:

The history of the Samson has been written many times, but here are a few facts and figures for those unfamiliar with it. The Samson is the oldest original locomotive in Canada by a margin of 35 years and the third oldest on the continent. It is the second oldest surviving Hackworth engine in the world (the oldest, the Sans Pareil, is on permanent display in a London, England, Railway Station.

The Samson claims many firsts, too many to enumerate here, and it was the largest and most powerful locomotive in North America for many years. It was the first in North America to operate on Whatts, now called standard gauge.

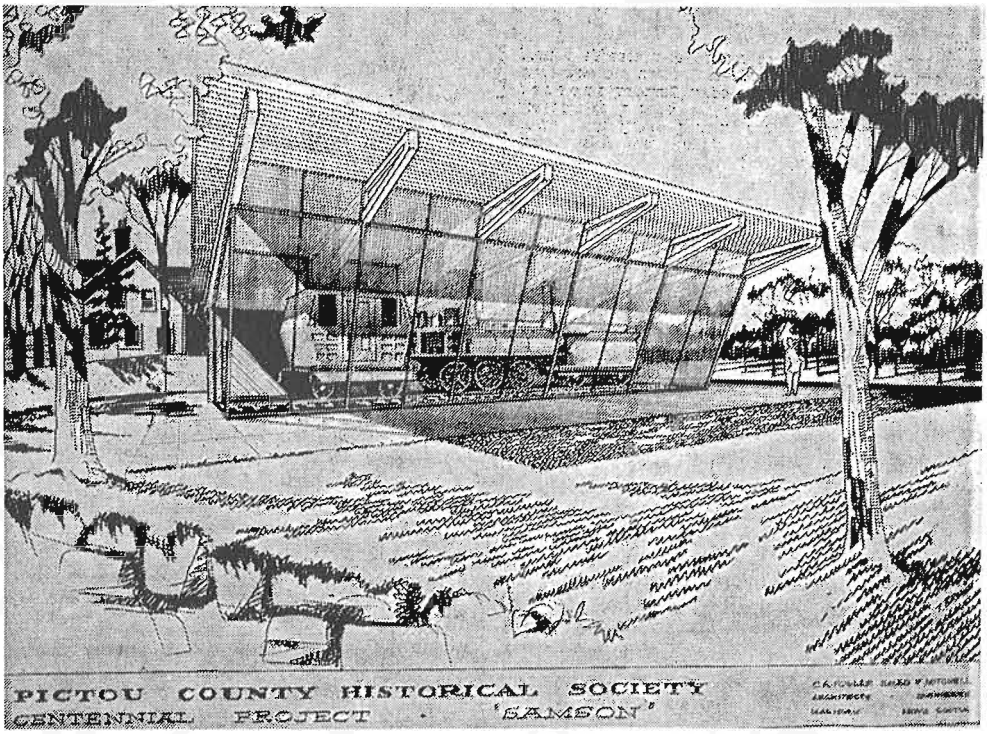
It, along with two similar locomotives, the Hercules and the John Buddle, was brought to Pictou in crates on the brig, Ythan, on May 27, 1839. It was assembled and was the first of three to run on the new Albion line, where for thirty years it hauled coal the six miles from the pithead to the loading piers at Dunbar Point. Then in 1867, Confederation Year, it semi-retired to headquarters at the Old Foord Pit which had been sunk the previous year by the General Mining Association. There it worked until 1883 when it went to Chicago for the National Exhibition of Railway Appliances.

The Samson then returned to the Old Foord Pit where, in 1884, it went on the scrap track. It sat there for nine years until the Baltimore and Ohio Railway sent their press agent to borrow it for the Chicago World Fair in 1893. This was the beginning of 35 years exile from Nova Scotia.

Through the efforts of a few determined men, both the Samson and the 18 year younger Albion were returned to Halifax where the two engines sat neglected for three years in a vacant lot behind the Nova Scotian Hotel but finally were put under cover in a train shed.

In 1950, Michael Dwyer, then Mayor of New Glasgow, borrowed them for the town's 75th Incorporation Anniversary. It was then agreed that the loan be continued indefinitely and Mayor Dwyer, after being successful in getting preferable sites, persuaded the town council to house the Samson in its present location near the CNR station here in New Glasgow.

The Samson is unique in the literal sense of the word, there is no other like it.



PROPOSED NEW HOME FOR THE SAMSON is shown in the above architectural drawing. It is a Centennial project by the Pictou County Historical Society in co-operation with the Town of New Glasgow and the provincial and federal governments.

Harry C. Allin, Etobicoke, checks the steam pressure as he fires up his personal Centennial project. The 7¼" gauge "Centennial #4" is a precision model of a locomotive that hauled trains from Aurora to Toronto at the time of Confederation. Mr. Allin built the coal-fired model in 1500 working hours and gave it its Centennial run May 13 at a garden ceremony for the Toronto Society of Model Engineers.

POWER

..with Murray W. DEAN

It is regretted that the compilation of the material for the CPR "POWER-2" columns is proceeding at a slower rate than expected. Consequently, Canadian Rail shall continue with the CN locomotive types in the order indicated, and CP types shall appear as soon as possible.

CANADIAN NATIONAL RAILWAYS

Deliveries: up to 11 September 1967.

2000 and 2001, serials M-3479-01 and M-3479-02, were outshopped on 18/08/67 and 29/08/67 respectively. 2001 is somewhat of an experimental unit, being equipped with the following "extras": Vapour Alerter, Large Fuel Tank, Acrylic Paint, Slipped Pinion Detection, Collision Posts, and Dalmo Victor Harness.

Retirements: up to 09 September 1967.

ROAD NUMBER	SERIAL	BUILDER	BUILT	RETIRED
1602	2655	CLC	03/12/51	07/08/67
2203	2865	CLC	30/03/55	10/08/67
3023		MLW	02/09/54	07/08/67
3031	81026	MLW	30/09/54	07/08/67
3063	81180	MLW	10/08/55	07/08/67
3809	81214	MLW	31/10/55	07/08/67
9446	79148	MLW	17/03/53	07/08/67
9448	79149	MLW	17/03/67	07/08/67

Units 1607, 1632, 3012, 3086, 3805, 9419 have been filed for retirement approval. On 02 August 1967, Train #3 with locomotives 6522:6538:4118 met head-on with Manifest #402 with units 3694:3221:3204, (locomotives in these orders), at Dunrankin, Ontario, on the Oba Subdivision. As a consequence, units 6522, 3694, and 3221 will be retired. The other three will be repaired.

Locomotive Transfers: up to 09 September 1967.

ROAD NUMBERS	TRANSFERRED FROM	TRANSFERRED TO	DATE
3850	St. Lawrence Rgn.	Great Lakes Rgn.	01/07/67
3883	St. Lawrence Rgn.	Great Lakes Rgn.	18/07/67
8192	Prairie Rgn.	Great Lakes Rgn.	25/08/67
8193	Prairie Rgn.	Great Lakes Rgn.	25/08/67
D500	St. Lawrence Rgn.	Atlantic Rgn.	10/08/67
BLE LEASED UNITS	Prairie Rgn.	Great Lakes Rgn.	24/08/67

Rentals: up to 09 September 1967.

N&W 3658, 3671, 3726 were returned to their owner on 17 August 1967, while Precision Engineering leased GP-9's 5960 and 5962 to CN on 03 July for use on the Great Lakes Region.

CANADIAN PACIFIC RAILWAY

Rentals: up to 07 September 1967.

The five BLE units leased by CP have been recalled to St. Luc where they are to be stored serviceable until further notice.

Rebuilds: up to 09 September 1967.

The CLC parts which CP purchased from CN are to be used to repair CP unit 4054. (Information courtesy Clayton F. Jones).

NORTHERN ALBERTA RAILWAYS

Mr. Clayton F. Jones sends the following information about NAR's passenger operations. "At the timetable change in October 1966, CP 9023 was used on all passenger runs (Trains 1, 2, 7, 8). This was excellent utilization of the unit as it was in operation nearly every day of the week. With the time-card change this Spring, 9023 is used only on Trains 1 and 2, while 7 and 8 have reverted to Mixed 77 and 78, operating three times a week. This latter service had been only twice weekly since 1960 or before."

* ERRATUM

1) #180 mentioned the remaining CN 1700 series C-C units being dispatched to the Atlantic Provinces. This should, of course, have read "the remaining A1A-A1A units".

2) #189 and #191 stated that DMI units 155 and 158 arrived at CN on 29 April of this year, while #190 cleverly contradicts this with a date of 28 April. #190 is wrong.

3) #188 reported units 912 and 920 damaged when they collided with a switcher in Cornerbrook yard while heading Train 203. Mr. C. S. Steeves reports that, in actuality, #190 was performing the switching duties and #912 was the lead unit on Train 203.

CANADIAN NATIONAL RAILWAYS
FPA-2's and FPA-4's

By : Murray W. Dean
William G. Blevins

The American Locomotive Company's first foray into the passenger diesel-electric locomotive field was the slant-nosed DL-109 model , first delivered in 1940 to the Chicago , Rock Island and Pacific . The locomotive contained two 6 cylinder , 1000 horsepower McIntosh & Seymour (an ALCO subsidiary) 539 turbocharged prime movers and had an A1A-A1A wheel arrangement . Three 1500 hp ALCO 241 engined B-B units , similar in styling to the DL-109 , were briefly demonstrated in freight service before being scrapped in 1946 . Meanwhile ALCO developed the 244 prime mover with 9" x 10½" cylinders and it was applied in a 12 cylinder version to a newly styled flat-nosed 1500 hp freight B-B unit designated model FA-1 , specification DL-208 , the first of which were delivered to the Gulf , Mobile and Ohio at the end of 1945 . By 1950 an upgraded FA-1 , with specification DL-208C , was in service , sporting an improved 244 engine which gave a locomotive rating of 1600 hp . The FA-2 model was introduced in 1950 and was similar in all major respects to the FA-1 except that it was lengthened by about 2 feet. A dual service unit designated FPA-2 was offered by ALCO and Montreal Locomotive Works , being in fact a standard FA-2 equipped with a steam generator . From 1958 to 1959 both ALCO and MLW catalogued the DL-218 , model FPA-4 , containing a 12 cylinder ALCO 251B prime mover generating 1950 hp of which 1800 hp was available for traction . There were no purchasers of this model in the United States . Conversely the A1A-A1A ALCO passenger units offered in the flat-nosed styling between 1946 and 1953 found no buyers in Canada . These locomotives contained one ALCO 244 prime mover with 16 cylinders and were offered in three models : PA-1 , PA-2 and PA-3 . A demonstrator team was tried out in Canada with seemingly indifferent results . High horsepower passenger power did not find great favour with Canadian railways .

The Canadian National Railways received its first ALCO-type A-units from the Montreal Locomotive Works on 25 April , 1950 . Numbers 9400 and 9401 (the first two locomotives of an eight unit order) were model FA-1 and were the first A-units produced by a Canadian locomotive manufacturer . Subsequently CN ordered 1600 hp FA-2 models also for freight service . In 1955 CN bought 6 FPA-2 models , specification DL-212A , from MLW for passenger duties . They were assigned numbers 6706-6711 class MPA-16a , and later were renumbered 6750-6755 . These locomotives were joined in late 1958 and early 1959 by 34 FPA-4 models , specification DL-218 , numbered 6760-6793 , classes MPA-18a to MPA-18b and containing the ALCO model 251B turbocharged prime mover . The MPA-16a class , numbers 6750-6755 cost $218,583 each including tax while class MPA-18b , numbers 6767-6793 cost $243,776 each .

Classes MPA-16a and MPA-18c are equipped with cast frame trucks and Timken roller bearing axle journals while class MPA-18a and class MPA-18b use swing bolster trucks with SKF roller bearing axle journals . Each truck has 40" diameter steel wheels and a 9'-4" wheelbase. The General Electric 752 traction motor is standard equipment as is the GE GT-581 main generator . The maximum speeds of these units have received various adjustments and the present rating of 92 miles per hour with a gear ratio of 62:21 was applied during 1963 . Multiple Unit control connections were installed on both the front and rear of 6760-6793 when they were built . However , the connections for 6750-6755 had to be added to the nose end in order for them to be MU'd within any locomotive consist . This feature was applied at Montreal between December 1956 and December 1957 at a cost of $886 each . None of the FPA-2's or FPA-4's are equipped with dynamic braking . As is standard on all CN road units there are facilities in the cab for holding a portable 2-way

short-wave radio . The pilots of the MPA-16a class were modified during 1956 and 1957 to reduce the pilot width by 4 inches to clear the station platform of the Canadian Pacific Railway's Windsor Station in Montreal . Beginning in 1959 classes MPA-16a , MPA-18a and MPA-18c received an automatic transition feature which obviated the need for steps 2 , 3 and 4 of the selector controller . From 1962 all the FPA-2's and FPA-4's received modifications to the radiator shutter assemblies so that hot engine problems caused by the shutters blowing closed at high speeds could be eliminated .

In 1958 numbers 6751 and 6755 were withdrawn from service and sent to the Montreal Locomotive Works where the ALCO 244 prime mover was replaced with an ALCO 251B engine which increased the locomotive rating to 1800 hp . At this time other minor changes were effected but most major components such as the frame , body shell and trucks were modified only insomuch as was required to install the 251B engine . The rebuilt locomotives were designated class MPA-18c and were renumbered as follows : 6751 to 6759 and 6755 to 6758 . Prior to the rebuilding the estimated cost was $30,000 each . The MLW model for 6758 and 6759 is FPA-4 but they are distinguished from the standard FPA-4 by the lack of the extra radiator grating below the main radiator shutters . The prime mover removed from 6751 and 6755 and the corresponding B-units 6851 and 6855 had their 1760 horsepower rating lowered and were used to power the four RSC-24 model , 1400 hp , A1A-A1A road switcher locomotives built for CNR by MLW in 1959 and assigned road numbers 1800-1803 , class MR-14a .

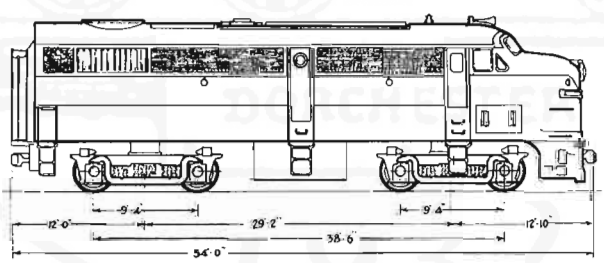
As of 31 July , 1967 , number 6750 has run 1,879,397 miles , 6760 has run 1,434,894 miles , while the last A-unit built for a Canadian railway , number 6793 has run only 892,768 miles . At this moment all Canadian National's FPA-2's and FPA-4's are assigned to the St . Lawrence Region and none have been retired , excepting, of course, 6751 and 6755 . A diagram is shown for class MPA-18a and the weights shown on it apply only to 6760 and are correct for Autumn 1960 .

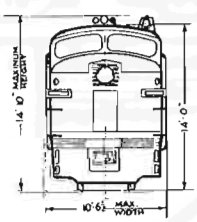
DIESEL UNIT DATA BOOK — MPA-16a (CLASS) — 6750, 6752 TO 6754 (NUMBERS)

DIESEL ENGINE : 1600 H.P.
ALCO D.E.W. V-type
12 cylinder, 9" bore, 10½" stroke
1000 R.P.M. Full speed
350 R.P.M. Idling "

WEIGHT DISTRIBUTION	FR. MIN	REAR MIN.	TOTAL	FR. MAX.	REAR MAX	TOTAL
LIGHT						
LOADED			257,570			259,400

BUILDER	M.L.W.
ORDER Nº	30.4407
MODEL Nº	FPA-2
DATE BUILT	1956





CAPACITIES		
ENG. COOLING WATER	208	IMP. GAL.
LUBRICATING OIL	167	IMP. GAL.
FUEL OIL	1000	IMP. GAL.
SAND STORAGE	22	CU. FT.
STEAM GEN. WATER	1550	IMP. GAL.

OPERATING FEATURES	
MAX. SPEED	92 M.P.H.
GEAR RATIO	62 : 21
T.E. STARTING	
T.E. CONTINUOUS	38,000 lbs.
OPER. CURVE ALONE:	COUPLED: 21°

WHEELS : TYPE & CLASS
A-40 "C"

JOURNALS: TYPE & SIZE
Timken 6½" x 12"

TRUCKS
Cast Frame
Model MT-50662

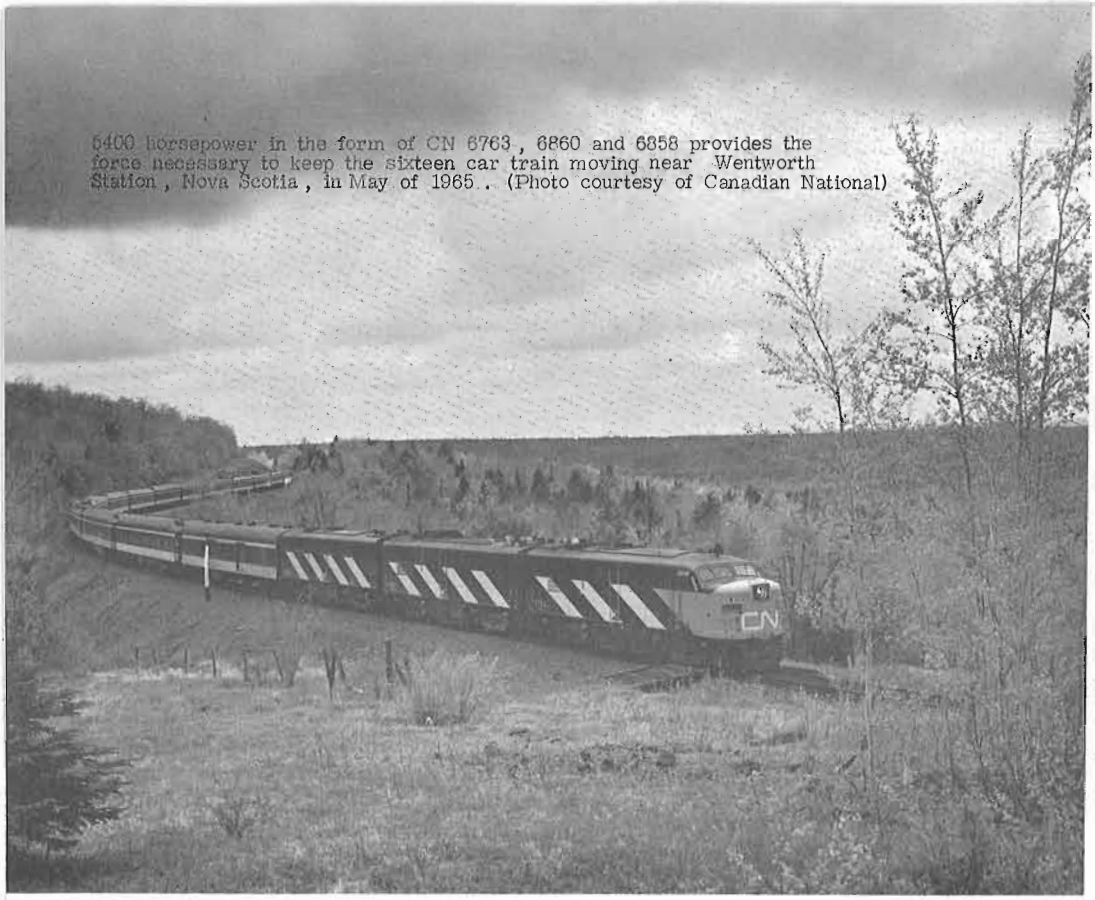
STEAM GENERATOR
One
Vapor OK-4625

AIR COMPRESSOR
Westinghouse 3CDC

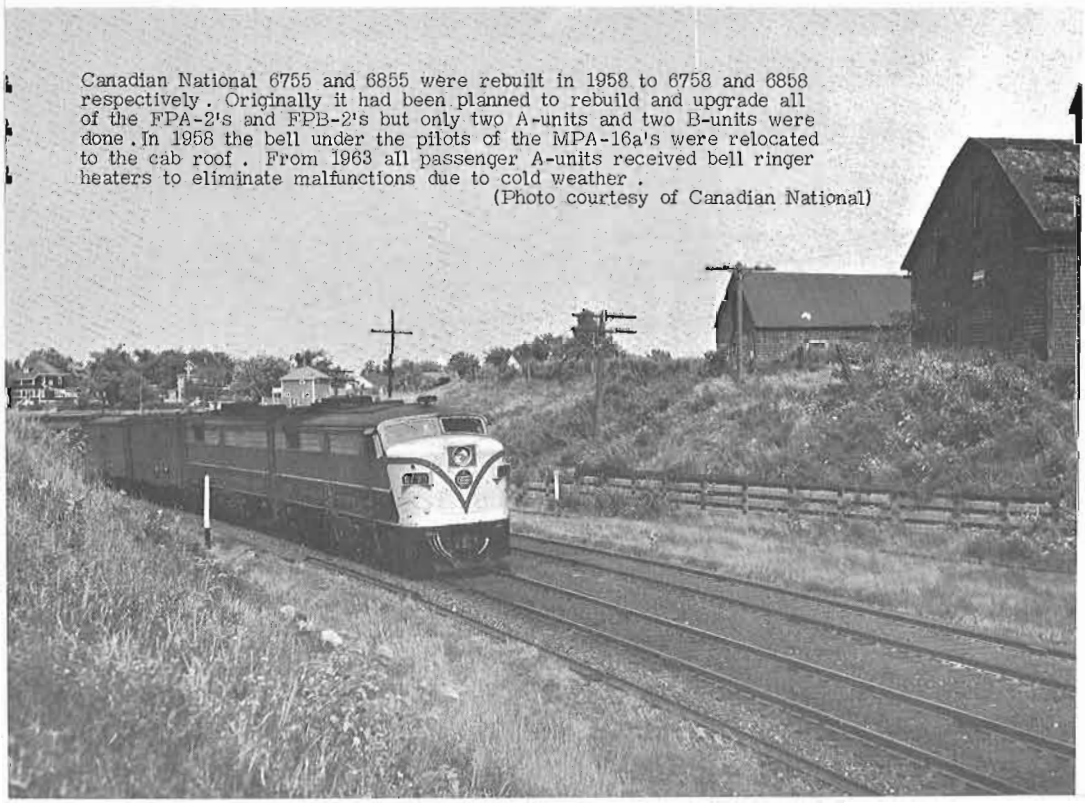
COOLING FANS
One Mechanical Drive

AIR BRAKE
Westinghouse 24 RL

ELECTRICAL EQUIPMENT	
TRACTION MOTORS Four GE. 752	AUXILIARY GEN: TYPE & Nº GE. GT-27
	ALTERNATOR : TYPE & Nº
T.M. BLOWER MOTORS Two G.E. GT-29	M.U. CONTROL Yes
MAIN GENERATOR G.E. GT-581	DYNAMIC BRAKE No



6400 horsepower in the form of CN 6763 , 6860 and 6858 provides the force necessary to keep the sixteen car train moving near Wentworth Station , Nova Scotia , in May of 1965 . (Photo courtesy of Canadian National)



Canadian National 6755 and 6855 were rebuilt in 1958 to 6758 and 6858 respectively . Originally it had been planned to rebuild and upgrade all of the FPA-2's and FPB-2's but only two A-units and two B-units were done . In 1958 the bell under the pilots of the MPA-16a's were relocated to the cab roof . From 1963 all passenger A-units received bell ringer heaters to eliminate malfunctions due to cold weather .
(Photo courtesy of Canadian National)

DIESEL UNIT DATA BOOK

MPA-18a (CLASS) — 6758 ■, 6759 (NUMBERS)

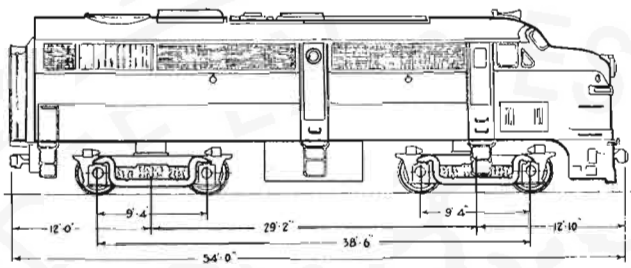
DIESEL ENGINE: 1800 H.P.
Alco 251 V-type
12 Cylinder, 9" bore, 10½" stroke
1000 R.P.M. Full speed
400 R.P.M. Idle

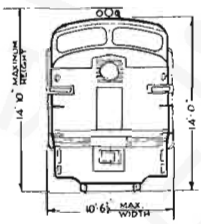
WEIGHT DISTRIBUTION	FR. MAX.	REAR MAX	TOTAL
UNIT 6758	130,950	130,575	261,525
UNIT 6759	130,325	129,775	260,100

BUILDER	M.L.W.
ORDER Nº	4407
MODEL Nº	PPA-4
DATE BUILT	x 1955

■ Formerly 6755 & 6751

x Re-engined 1958





CAPACITIES		
ENG. COOLING WATER	208	IMP. GAL.
LUBRICATING OIL	167	IMP. GAL.
FUEL OIL	1000	IMP. GAL.
SAND STORAGE	22	CU. FT.
STEAM GEN. WATER	1550	IMP. GAL.

OPERATING FEATURES		
MAX. SPEED	92	M.P.H
GEAR RATIO	62 : 21	
T.E. STARTING		
T.E. CONTINUOUS	38,000 lbs.	
OPER. CURVE ALONE	21	COUPLED:

WHEELS: TYPE & CLASS
A-40 "C"

JOURNALS: TYPE & SIZE
Timken 6½" x 12"

TRUCKS
Cast Frame
Model MT-50662

STEAM GENERATOR
One Vapor OK-4625

AIR COMPRESSOR
Westinghouse 3 CDC

COOLING FANS
One Mechanical Drive

AIR BRAKE
Westinghouse 24 RL

ELECTRICAL EQUIPMENT

TRACTION MOTORS
FOUR G.E. 752

T.M. BLOWER MOTORS
G.E. GT-29

MAIN GENERATOR
G.E. GT-581

AUXILIARY GEN: TYPE & Nº
G.E. GY-27

ALTERNATOR: TYPE & Nº

M.U. CONTROL
Yes

DYNAMIC BRAKE
No

DIAGRAM

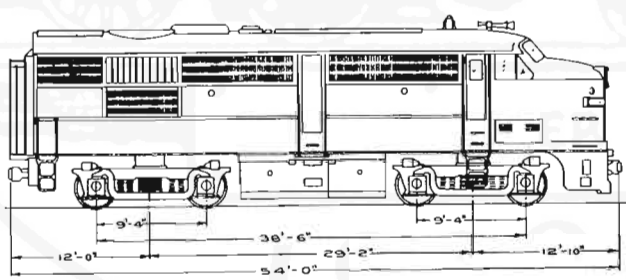
DIESEL UNIT DATA BOOK

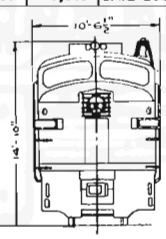
MPA-18a (CLASS) — 6760 To 6766 (NUMBERS)

DIESEL ENGINE: 1800 H.P.
Alco 251 V-type
12 cylinder, 9" bore, 10½" stroke
1000 R.P.M. Full speed
400 R.P.M. Idling "

WEIGHT DISTRIBUTION	FR. MIN	REAR MIN.	TOTAL	FR. MAX.	REAR MAX	TOTAL
LIGHT	115,830	112,235	228,440	115,970	114,060	230,000
LOADED	129,980	127,760	257,740	130,120	129,200	259,300

BUILDER	M.L.W.
ORDER Nº	SO.4408
MODEL Nº	PPA-4
DATE BUILT	1958





CAPACITIES		
ENG. COOLING WATER	183	IMP. GAL.
LUBRICATING OIL	166	IMP. GAL.
FUEL OIL	1000	IMP. GAL.
SAND STORAGE	22	CU. FT.
STEAM GEN. WATER	1550	IMP. GAL.

OPERATING FEATURES		
MAX. SPEED	92	M.P.H
GEAR RATIO	62 : 21	
T.E. STARTING		
T.E. CONTINUOUS	38,000 lbs.	
OPER. CURVE ALONE: 21	COUPLED: 21	

WHEELS: TYPE & CLASS
A-40 "C"

JOURNALS: TYPE & SIZE
S.K.F. 6½" x 12"

TRUCKS
Swing Bolster
Model MT-5088

STEAM GENERATOR
One Vapor OK-4625

AIR COMPRESSOR
Westinghouse 3CDC

COOLING FANS
One Koppers
Right angle drive

AIR BRAKE
Westinghouse 21-RL

ELECTRICAL EQUIPMENT

TRACTION MOTORS
Four
G.E. 752

T.M. BLOWER
Two
Sturtevant
Mechanical Drive

MAIN GENERATOR
C.G.E. GT-581

AUXILIARY GEN: TYPE & Nº
C.G.E. GY-27

ALTERNATOR: TYPE & Nº
GTA 6 PAI

M.U. CONTROL
Yes

DYNAMIC BRAKE
No

CANADIAN NATIONAL RAILWAYS

FPA-2's and FPA-4's

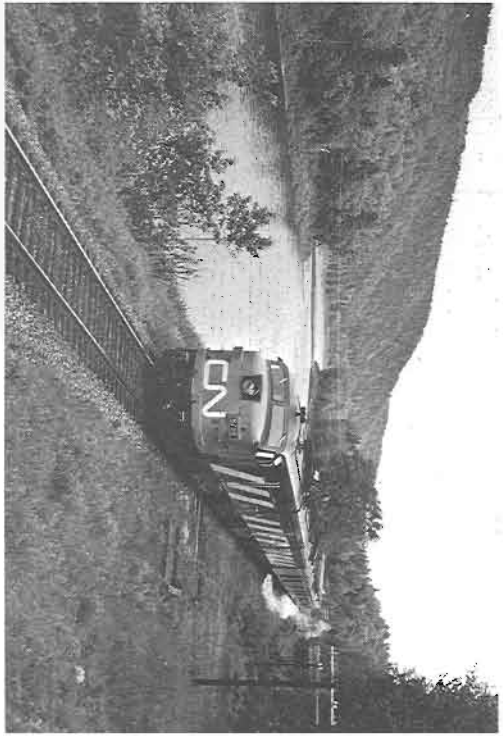
MONTREAL LOCOMOTIVE WORKS LIMITED , MONTREAL , QUEBEC

Present Road No.	Date Applied	First Road No.	Date Built	Class	Serial	Builder's Order No.	Weight	Notes
6750	05/10/56	6706	23/03/55	MPA-16a	79197	4407	259,400	
6751	26/11/56	6707	28/03/55	"	79198	"	-	1
6752	04/12/56	6708	06/04/55	"	79199	"	258,750	
6753	29/08/56	6709	13/04/55	"	79200	"	257,570	
6754	13/12/56	6710	21/04/55	"	79201	"	257,570	
6755	13/09/56	6711	29/04/55	"	79202	"	-	2
6758	27/11/58	-	29/04/55	MPA-18c	79202	-	261,525	2
6759	28/10/58	-	28/03/55	"	79198	-	266,100	1
6760	-	-	24/10/58	MPA-18a	82269	4408	259,300	
6761	-	-	31/10/58	"	82270	"	258,700	
6762	-	-	13/11/58	"	82271	"	258,670	
6763	-	-	24/11/58	"	82272	"	258,480	
6764	-	-	02/12/58	"	82273	"	257,740	
6765	-	-	12/12/58	"	82274	"	258,130	
6766	-	-	19/12/58	"	82275	"	258,630	
6767	-	-	05/01/59	MPA-18b	83145	4409	258,385	
6768	-	-	19/01/59	"	83146	"	258,530	
6769	-	-	23/01/59	"	83147	"	258,110	
6770	-	-	23/01/59	"	83148	"	258,010	
6771	-	-	30/01/59	"	83149	"	258,135	
6772	-	-	30/01/59	"	83150	"	258,180	
6773	-	-	06/02/59	"	83151	"	258,180	
6774	-	-	19/02/59	"	83152	"	258,225	
6775	-	-	19/02/59	"	83153	"	258,285	
6776	-	-	27/02/59	"	83154	"	258,235	
6777	-	-	09/03/59	"	83155	"	257,670	
6778	-	-	13/03/59	"	83156	"	257,605	
6779	-	-	13/03/59	"	83157	"	258,235	
6780	-	-	23/03/59	"	83158	"	258,165	
6781	-	-	23/03/59	"	83159	"	257,915	
6782	-	-	31/03/59	"	83160	"	258,155	
6783	-	-	31/03/59	"	83161	"	258,125	
6784	-	-	08/04/59	"	83162	"	258,075	
6785	-	-	08/04/59	"	83163	"	257,685	
6786	-	-	20/04/59	"	83164	"	258,075	
6787	-	-	20/04/59	"	83165	"	258,215	
6788	-	-	24/04/59	"	83166	"	258,365	
6789	-	-	24/04/59	"	83167	"	258,955	
6790	-	-	30/04/59	"	83168	"	258,820	
6791	-	-	30/04/59	"	83169	"	258,790	
6792	-	-	13/05/59	"	83170	"	258,365	
6793	-	-	13/05/59	"	83171	"	258,315	

NOTES :

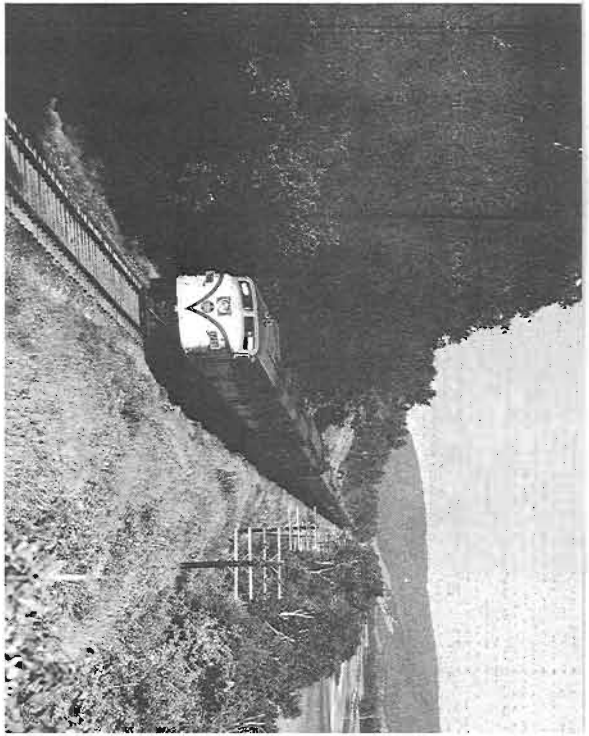
1. 6751 rebuilt as 6759 at MLW , outshopped 28 October , 1958 .
2. 6755 rebuilt as 6758 at MLW , outshopped 27 November , 1958 .

The new corporate symbol of the Canadian National Railways is prominent on the nose of 6766 . MU'd to an FPB-4 and a General Motors PB , Starting November 1964 all diesel-electric locomotives , steam generator units and Railiners not already so equipped , received Houston Automatic Fueling Equipment .
(Photo courtesy of Canadian National)



CN 6764 leads the Ocean Limited at Wentworth Station , Nova Scotia , in May 1965 . Beginning in 1959 , additional ladder brackets were applied near to the top of the nose to act as a safe rest for a ladder when the windshields were being washed . In November 1962 CN initiated the placing of handholds on the left and right hand sides of the nose door on all the FPA-2's and FPA-4's .
(Photo courtesy of Canadian National)

CNR 6706 is an FPA-2 and was later renumbered to 6750 . A twin sealed beam headlight replaced the original single lamp in classes MPA-16a and MPA-18c . This was done during the period 1956 to 1965 .
(Photo courtesy of Canadian National)



LAST REMNANT OF THE WASHINGTONIAN DISAPPEARS

CN recently removed the vestigial portion of its once proud Montreal-New York-Washington service. Shown at Cantic Station is the Montreal-Cantic RDC Car (Trains 633, 634), shortly before the run was cancelled last August. Train orders for the final run are reproduced below. Photo opposite, below, from Geoff Southwood.

Train orders courtesy Mr.P.Stebens,
Conductor on the last trip.

CN CANADIAN NATIONAL RAILWAYS
CLEARANCE

STATION Cantic August 16 1967
TRAIN No 633
ORDERS FOR YOUR TRAIN ARE 396 - 751
THE NEXT TRAIN AHEAD FROM THIS STATION LEFT AT
OK AT 1758 SIGNATURES M.R. Dessureault OPERATOR

CN CANADIAN NATIONAL RAILWAYS
FORM 19x

TRAIN ORDER NO. 751
Montreal August 16 1967

TO	AT
Northward Trains	Cantic

Siding At Cantic
Blocked With Cars.

S.B

SIGNATURES

REPEATED AT 0643
MADE Tom TIME 0643 OPR. Dessureault

CN CANADIAN NATIONAL RAILWAYS
FORM 19T

TRAIN ORDER NO. 396
Montreal August 16 1967

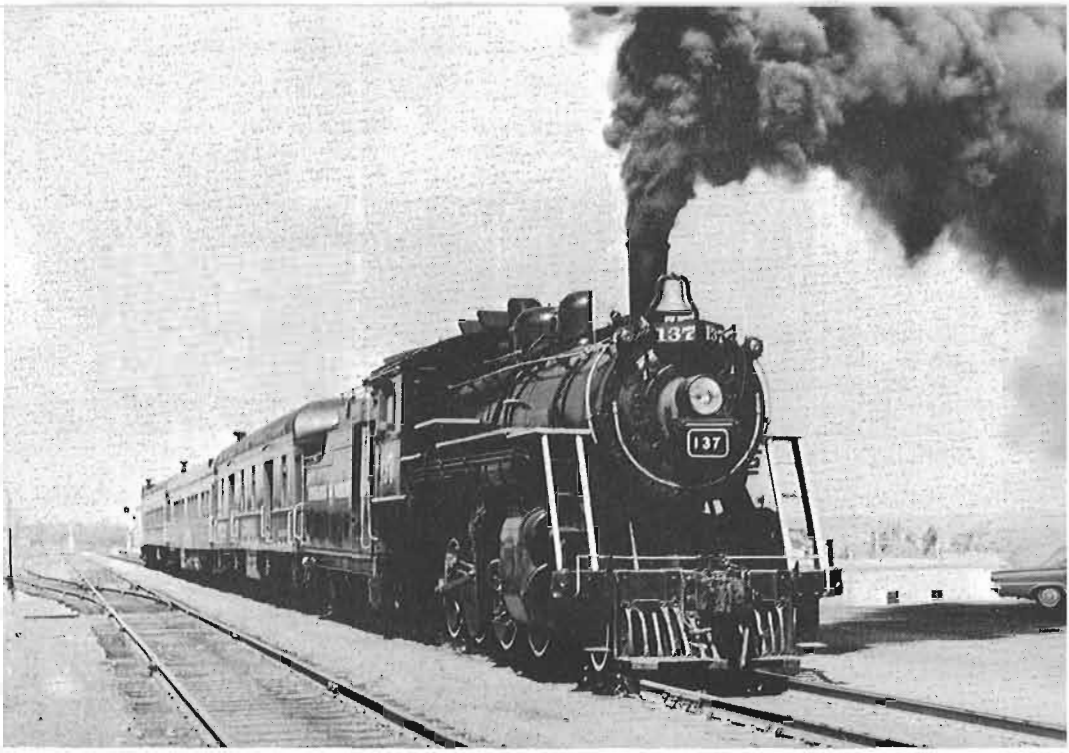
TO	AT
Northward Trains And NO 633	Cantic

Northward Trains
Except NO 633 Eng D355
Wait At Cantic
Until NO 633 Eng D355
Arrives At Brossard.

JGM

SIGNATURES

REPEATED AT 1757
MADE Tom TIME 1757 OPR. Dessureault



Temiskaming and Northern Ontario Railway #137 is shown under steam at Haileybury, Ontario, on an ONR Centennial Excursion. The train is starting south after backing from Cobalt, Ontario. (Photo courtesy W.R. Linley).

Photo by Geoffrey D. Southwood

OBSERVATIONS

by Derek Booth

* GO Transit passenger traffic has exceeded predictions by 14 per cent. During the first month of operation 123,817 commuters used the transit system between Hamilton and Pickering. This popularity has led to parking problems at at least three stations -- Pickering, Eglinton and Oakville -- where estimates of required parking space have fallen far short of the demand.

* Railway stations have recently been getting face liftings of one sort or another. On July 11, Mayor Sarto Desnoyers of Dorval officially opened the new CN station at Dorval. The new structure of concrete and brick boasts a 100 seat waiting room and a ticket sales installation which is integrated into the CN electronic reservation system. On a slightly different note, two CP stations have also undergone renovations of another kind. CP decided to profit from the unused waiting room in its North Hatley, P.Q., station and it now houses an automatic laundry service. In a similar, although infinitely more ignominious issue, in the eyes of rail fans, CP has rented the waiting room of its St. Jerome station to the Provincial Transport Bus Company for a period of two years. No such reprieve seems in store for the CP station at Eastray, P.Q., which has been closed and appears to be awaiting the wreckers' hammer.

* CN reports that passenger traffic as a whole this year is between 30 and 35 per cent higher than last year with the heaviest increase -- over 80 per cent -- between Montreal and Toronto.

* CP has introduced Canada's first unit train to haul sulphuric acid from the Canadian Industries Ltd. plant at Copper Cliff to the company's ammonia and fertilizer complex near Sarnia. The train will run the 490 miles between the two points twice a week. The train consists of 37 cars and this will eventually be increased to 56 cars in keeping with the new transportation laws which enable the railways to base rates on trainload shipments of either 37 or 56 car lots rather than only on single carloads.

* The city of New York is reported to be interested in purchasing 48 air-conditioned rapid transit cars now in use at Expo 67 on the Expo Express. The price would total $3,840,000. The cars would operate on the Staten Island rapid transit line between Tottenville and the St. George ferry terminal. The B&O operates the line under a subsidy from the city.

* CN has announced a further delay in the introduction of the Turbo Train as a result of "continuing procurement problems and production delays experienced throughout the aircraft industry in North America." The previously announced date for the introduction of the Turbos was the end of October but no new target date has been set. Expected date is the Spring 1968 timetable change.

* Another change from plans as announced by Canadian National Railways concerns the local passenger trains operating between Montreal and Montreal North. As mentioned in 'Canadian Rail' last month, the railway had planned on discontinuing the service effective September 1st, last, but at the last minute the abandonment order was rescinded. The service will continue until further notice.

SORT

- by Walter Bedbrook -

Piggybacking is a word that recalls youthful times upon the back of an affectionate and condescending father. To the more railroad minded it is a term referred to in the carrying of road trailers between cities on specially adapted flat cars. The sophisticated railroader abandons the term "Piggybacking" completely and simply calls them TOFC i.e. trailer on flat car.

It was therefore somewhat of a pleasant switch to the accustomed sight of a TOFC when a SORT was sighted at the C.P.R. station at Finch, Ont., in June 1966. This particular SORT belonged to Canadian Pacific Telecommunications Ltd., presumably having running rights over the C.P. Railway.

In case you are wondering, a SORT is speeder on road trailer.

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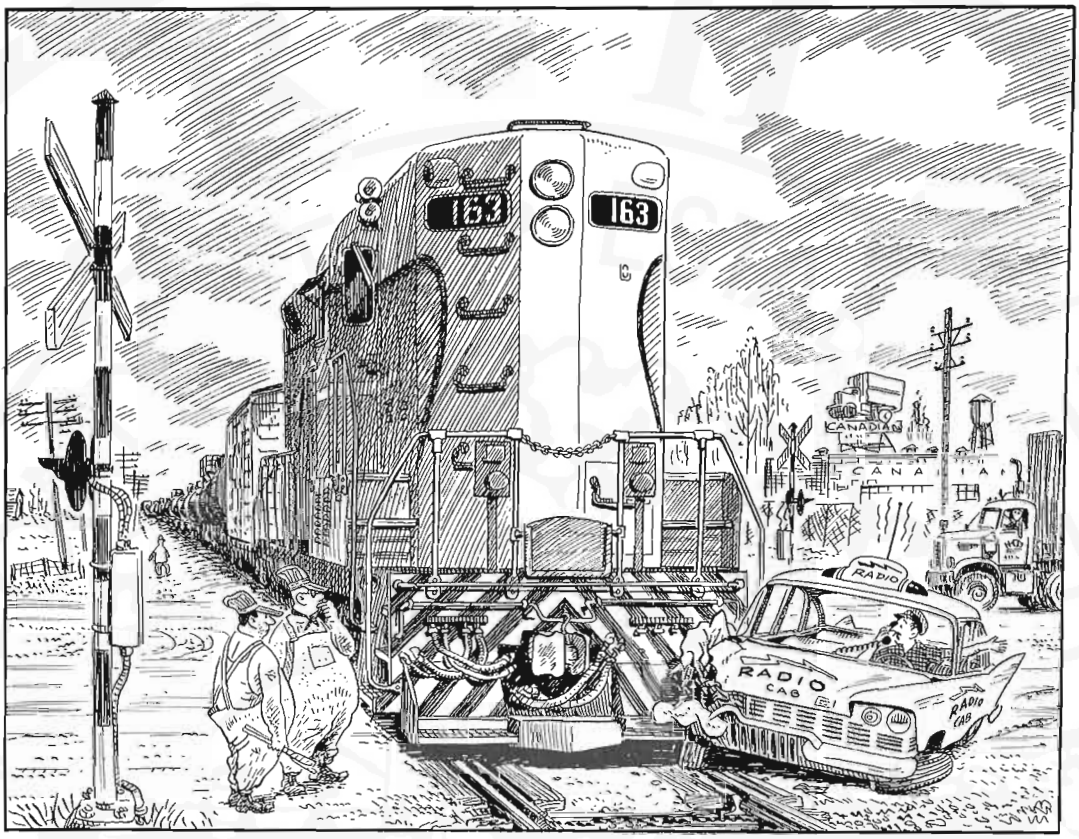
* The Cumberland Railway, owned by Dominion Steel and Coal Corp., has been authorized to abandon its 12 mile branch line from Broughton Jct. to Louisburg, N.S., after May 1, 1968.

* A Washington company has been commissioned to do a feasibility study of a proposed 500 mile extension of the Alaska Railroad to Bornite, north of the Arctic Circle. There the Kennecott Copper Co. has done development work on what appears to be extensive high grade copper deposits; the railway would provide the company with an outlet to the sea if and when the mine goes into production.

OUT OF TOUCH

Doug Wright -- Montreal Star



"They've got a diesel here that weighs 125 tons and costs a quarter of a million dollars – but they have to send someone down the line to a phone!".

CANADIAN RAIL: Published monthly (except July/August combined) by the Publications Committee, Canadian Railroad Historical Association, P.O. Box 22, Station B, Montreal 2, Canada.

Associate Membership -- including 11 issues of "Canadian Rail": (1967 issues) $ 4.00

PUBLICATIONS COMMITTEE: D.R. Henderson, Chairman
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1867 1967

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Printed in Canada on Canadian paper