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Cover: CN 6759 and train at signal bridge announcing fare changes. 0195-001.jpg

MORE ON THE K. P. & C.

Photo: Early photo of a K. P. &	& C. sweeper.	0195-002.jpg
Photo: Early photo of a K. P. &	& C. car.	0195-003.jpg

U.C.R.S. member William J. Maddock, of Lyons, New York, found he had more than a passing interest in *Bulletin 54* on the Kingston, Portsmouth and Cataraqui Electric Railway. His grandfather, Joseph Maddock, who was born in Manchester, England and immigrated to Canada during the 1890's, worked as a conductor and motor man on that line. In 1920, he and his family moved to Syracuse, New York, where he found work on the Rochester, Syracuse and Eastern until the line was abandoned.

During his stay on the K.P. & C., Joseph Maddock was photographed several times aboard the cars on which he worked and it is these photographs which have been handed down to his grandson who, in turn, has very generously loaned them to the Society for reproduction. The photo of the closed car, No. 15, shows Jos. Maddock standing on the rear platform while his sister-in-law, Mrs. J. M. Cunningham, is seen at the front window of the car. Considering the background in the photo, it would appear that it was taken somewhere on the line to the Grand Trunk station. The other photo shows Mr. Maddock on the front platform (on the right) of a single truck, apparently unnumbered sweeper at the car-house.

THE ECONOMIC RESULTS OF DIESEL ELECTRIC MOTIVE POWER ON THE RAILWAYS OF THE UNITED STATES OF AMERICA

By H. F. BROWN, Ph.B., Fellow A.I.E.E.,

Consulting Engineer, Gibbs & Hill, Incorporated, New York, NY.

Chart: Traffic All classes I and II railways. 0195	5-004.pcx
	5-005.pcx
Chart: Figure 5.	5-006.pcx
Chart: Figure 7	5-007.pcx
<u>Chart:</u> Figures 8 & 9	5-008.pcx
<u>Chart:</u> Figures 10 & 11	5-009.pcx
Chart: Figure 12	5-010.pcx
<u>Chart:</u> Figure 14	5-011.pcx
<u>Chart:</u> Figure 15	5-012.pcx
<u>Chart:</u> Figure 16	5-013.pcx

This interesting paper, presented by the author at a meeting of the Institution of Mechanical Engineers in London, England in November, 1960, was prepared from statistics made available by the Interstate Commerce Commission, in the United States. No doubt, data on Canadian railway operations would produce similar conclusions for this country. While the author is not advocating the adoption of any particular type of motive power, the points that he makes are, in some cases,

rather startling.

TRAFFIC

In order to see the complete picture of the effects of dieselization on American railroads, one must also consider the many other changes that were made during the period from 1920 to 1955. These include not only desirable effects, but many undesirable ones as well, mostly the result of uncontrollable external circumstances. After 1920, the rapid development of the country's highway network proceeded rapidly, and much of the railways' short haul traffic was syphoned off by highway carriers. Then too, the country-wide economic depression during the 1930's reduced traffic to below 1910 levels. The years of World War II brought unprecedented traffic back to the rails, but the boom was short-lived, as both passenger and freight traffic returned to their declining state after 1945. These trends are clearly shown in Figure 1a, and will be shown to be the most influential factor in railway motive power, regardless of type.

MOTIVE POWER REDUCTION

Coincident with this overall decline in the volume of traffic came a corresponding decrease in the number of motive power units available on American railroads. However, as train lengths were increased, so did the average tractive effort of the available locomotives, as shown in Figure 2. Similarly, advances in motive power technology produced a rapid increase in the horsepower per unit of motive power making possible the haulage of heavier trains at higher speeds than were previously possible. During the depression years, few new engines were bought but obsolete units were disposed of at a fairly uniform rate, leaving those remaining to increase in average age as the years passed. The overall trends in the number of road locomotives in service and their average age are shown in Figure 5. At the end of the war, in 1945, over 45% of the serviceable motive power consisted of locomotive units built prior to 1915, or over 31 years old. This equipment was small in capacity, completely worn out, and hence, long overdue for replacement. Never before had so such motive power become so old and so inadequate. As fate would have it, it was by this time that General Motors had come up with an apparently satisfactory diesel-electric locomotive, and on the basis of unrealistic economies realised from the operation of a few of these units under ideal conditions in the years 1935 to 1945, proceeded with an intensive sales campaign against railway managements desperately searching for a way out of the motive power dilemma.

OPERATIONS

Considering railroad operations, Figure 7 shows the changes in train miles produced while Figure 8 illustrates the variation in the average length, weight and number of locomotives per train. It is easy to see how the longer trains demanded larger motive power, while the train-miles generally decreased over the years. However, in spite of the change in motive power, the operating expenses and, more important, the operating ratio (the ratio of costs to total earned revenue) have continued to increase, as shown on Figures 9 and 10. When the total operating costs of the motive power are considered, it is noted that they follow the generally decreasing tendency of the number of locomotives, as shown in Figure 11. If these costs are broken up between the running expenses and the depreciation of the first cost of the unit, they may be best compared by considering the "ratio costs", that is, the various expenses as proportionate parts of the total operating expense. Doing this cancels out any effects of inflation as both the numerator and the denominator of the ratios are equally inflated over the years. These costs are shown in Figure 12. The depreciation charges, which represent the money invested in the locomotives, are considered in Figure 14. While it has been customary to depreciate the cost of a steam or

electric locomotive over a period of 30 years, the diesel was originally depreciated over a 20 year period. However, While many steam and electric units did exceed this serviceable life, the diesel rarely exceeds a life span of 12 to 14 years. The balance of the unit's cost not depreciated at the end of this time must be charged as a loss against reserves or profits and often turns an otherwise profitable operation into a debt-ridden one with little warning, as illustrated by the present plight of the New Haven in the U.S.

INVESTMENT IN MOTIVE POWER

Figures 15 and 16 illustrate the great increase in investment in motive power and servicing facilities coincident with the change to the diesel prime mover. Of interest are the dotted lines on Figure 15 which illustrate the hypothetical case had <u>modern</u> steam power been purchased rather than diesel power. This case will be discussed further in the next section of this article. (to be concluded next month)

ERRATA

- ➤ CN engines 9068 and 9051 were written off the roster in December 1961, not September 18^{th.} as reported last month.
- It appears that it was D-10 953 that was scrapped during 1961, not 963 as stated.
- The CN line from Matane, Quebec to Ste. Anne des Monts on the Gaspe peninsula is under consideration only, and construction has not started, as stated last month.

ROSTER OF RDC'S ON THE CANADIAN PACIFIC RAILWAY											
ROAD NO. BUILT	MODEL	BUILD	ER'SLOT	PSGR.	WT. ON		TOTAL	NOTES			
			NUMBER	NO.	CAPY.	DRIVERS	WEIGHT				
9020	1953	RDC-3(M) 5909		59	48	61,700		121,000	A		
9021	1955	RDC-3(M) 6018		60	48	61,700		121,000	A		
9022	1955	RDC-3(M) 6019		60	48	61,700		121,000	A		
9023	1955	RDC-3(M) 6021		60	48	61,700		121,000	A		
9024	1956	RDC-3(M) 6305		63	49	61,700		121,000	A		
9049	1955	RDC-1	6220		62	89	61,200		120,000		F
9050	1953	RDC-1	5816		58	89	61,200		120,000		
9051	1953	RDC-1	5817		58	89	61,200		120,000		
9052	1953	RDC-1	5913		59	89	61,200		120,000		
9053	1954	RDC-1	5918		59	89	61,200		120,000		
9054	1954	RDC-1	5916		59	89	61,200		120,000		
9055	1954	RDC-1	5924		59	89	61,200		120,000		
9056	1955	RDC-1	6221		62	89	61,200		120,000		
9057	1955	RDC-1	6223		62	89	61,200		120,000		
9058	1956	RDC-1	6317		63	90	61,200		120,000		
9059	1956	RDC-1	6318		63	90	61,200		120,000		
9060	1956	RDC-1	6322		63	90	61,200		120,000		
9061	1957	RDC-1	6611		66	90	61,200		120,000		
9062	1957	RDC-1	6612		66	90	61,200		120,000		
9063	1957	RDC-1	6617		66	90	61,200		120,000		
9064	1957	RDC-1	6619		66	90	61,200		120,000		
9065	1957	RDC-1	6706		67	90	61,200		120,000		
9066	1957	RDC-1	6707		67	90	61,200		120,000		
9067	1957	RDC-1	6708		67	90	61,200		120,000		
9068	1957	RDC-1	6709		67	90	61,200		120,000		
9069	1957	RDC-1	6809		68	90	61,200		120,000		
9070	1958	RDC-1	6903		69	90	61,200		120,000		
9071	1958	RDC-1	6904		69	90	61,200		120,000		
9072	1958	RDC-1	6905		69	90	61,200		120,000		
9100	1955	RDC-2	6014		60	70	61,500		120,500		В
9101	1955	RDC-2	6016		60	70	61,500		120,500	В,	, G
9102	1955	RDC-2	6229		62	70	61,500		120,500		В

9103	1956	RDC-2	6308		63	71	61,500		120,500	В	3
9104	1956	RDC-2	6309		63	71	61,500		120,500	В	3
9105	1956	RDC-2	6310		63	71	61,500		120,500	В	3
9106	1956	RDC-2	6311		63	71	61,500		120,500	В	3
9107	1956	RDC-2	6312		63	71	61,500		120,500	В	3
9108	1956	RDC-2	6313		63	71	61,500		120,500	В	3
9109	1956	RDC-2	6314		63	71	61,500		120,500	В	3
9110	1956	RDC-2	6503		65	71	61,500		120,500	В	3
9111	1956	RDC-2	6504		65	71	61,500		120,500	В	3
9112	1957	RDC-2	6607		66	71	61,500		120,500	В	3
9113	1957	RDC-2	6608		66	71	61,500		120,500	В	3
9114	1957	RDC-2	6609		66	71	61,500		120,500	В	3
9115	1958	RDC-2	6913		69	71	61,500		120,500	В	}
9116	1951	RDC-2	5416		54	70	61,500		120,500	B, H	[
9194	1958	RDC-2	6906		69	68	63,000		122,800	C, J	
9195	1958	RDC-2	6907		69	68	61,500		120,500	В	}
9196	1958	RDC-2	6908		69	68	61,500		120,500	В	3
9197	1958	RDC-2	6909		69	68	61,500		120,500	В	}
9198	1958	RDC-2	6910		69	68	61,500		120,500	В	3
9199	1958	RDC-2	6911		69	68	61,500		120,500	В	}
9200	1955	RDC-4	6231		62	Nil	58,700		115,000	D)
9250	1956	RDC-4(M) 6306		63	Nil	59,000		115,600	Е		
9251	1956	RDC-4(M) 6307		63	Nil	59,000		115,600	Е		

All weights are ready to run, less crew.

Total units purchased - 55

Total units active 1962 - 54 (one car scrapped)

NOTES

(M) indicates modified model.

- A 30 ft. baggage section with 5 ton load limit.
- B 17 ft. baggage section with $3^{1}/2$ ton load limit.
- C 17 ft. baggage section with 4 ton load limit.
- D 30 ft. baggage section with 10 ton load limit and 30 ft. mail section with 5 ton load limit.
- E 60 ft. baggage section with 18 ton load limit.
- F from Duluth, South Shore and Atlantic Railway No. 500, 1958.
- G scrapped after wreck on October 24, 1959.
- H from Lehigh Valley Railroad No. 41, 1958.
- J has 2 Rolls Royce 311 H.P. engines.

EQUIPMENT

Diesel engines: All cars except 9194 have GM model 6-110 rated at 275 or 280 H.P.

Wheel size: All cars have 34" diameter wheels.

Air brake equipment: Type HSC with M-38 brake valve standard on all cars.

Fuel capacity: 250 gallons on all cars.

Maximum speed: 90 M.P.H. on all cars except 9194 which is 85 M.P.H.

A SHAY IN 1962!

By Peter Cox

Photo: Railway Appliance Research No. 115. Peter Cox.

0195-014.jpg

Much to the surprise of Vancouver railway enthusiasts, an operating Shay geared locomotive has appeared on their very door-steps. The Vancouver Wharves operation in North Vancouver has been using an oil-burning three truck Shay, lettered as Railway Appliance Research No. 115, to

switch cars of ore and sulphur on its bulk cargo docks. These switching operations were formerly handled by various diesel-mechanical locomotives, including one built by Ruston and Hornsby of England.

Number 115, leased to the Wharves company, is owned by RARL, a company headed by Robert Swanson, who is also Chief Inspector of the British Columbia Department of Railways and inventor of the Swanson air horn that is used on the PGE and BCE's diesel locomotives. Mr. Swanson is very much an enthusiast himself and the engine appears to be in good hands. Since the engine sees use only during the relatively infrequent intervals that a ship is loading at the wharf, the owner is overhauling the engine during these slack periods in order to guarantee its continued trouble-free operation.

Like most engines on industrial and logging railways, RARL 115 has had its share of renumberings and major repairs, as well as passing through the hands of three different owners. It was built by the Lima Locomotive Works in October, 1929 for the Merrill Ring Wilson Logging as their number 5. It was later sold to the Hillcrest Lumber Company and was numbered 11 while on their property. About 1947 it was sold to Canadian Forest Products, retaining the number 11 at first. During its stay here, its boiler was replaced by one from another Shay that had been built by Lima in April 1936, and had come to CFP (their No. 115) through the Merrill Ring Wilson (No. 4) and Salmon River Logging (their No. 1) ownerships. RARL 115 was built as Lima No. 3344. However, the replacement boiler carries the builder's plate from Lima 3350, a fact which had BC locomotive experts confused for a while.

Now that the mystery first surrounding the engine has been dispelled, Vancouver rail fans are looking forward to watching its operation for many years.

T.T.C. HAPPENINGS Small Wins near their end on the T.T.C.

The remaining small Witt cars of the T.T.C. are slowly being reduced in numbers as the result of accidents. Four cars, including 2748, 2794, 2798 and 2864, are presently stored at Russell Division with their traction motors removed and placed inside the body of the car. Other parts, such as doors, windows, seats and air gauges have also been removed. Car 2800, its interior badly damaged by a fire that started in the heater blower opposite the centre doors, is awaiting the same treatment as the other four cars. Cars 2746 and 2772 are also stored out-of-service at Russell yard. A tag attached to the latter car indicated that number 2 motor was unserviceable and hence, the car might see further use if conditions warrant its repair.

The 84 remaining serviceable cars are distributed between Russell and St. Clair Divisions as follows:

At Russell:

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2734, 2738, 2744, 2750, 2752, 2758, 2760, 2762, 2764, 2770, 2774, 2778, 2784, 2786, 2788, 2790, 2796, 2814, 2818, 2820, 2826, 2830, 2836, 2842, 2846, 2850, 2856, 2858, 2872, 2878.

At St.Clair:

2700, 2706, 2710, 2712, 2724, 2728, 2736, 2742, 2756, 2766, 2776, 2780, 2782, 2802, 2804, 2806, 2808, 2810, 2812, 2822, 2824, 2828, 2832, 2834, 2838, 2840, 2844, 2848, 2852, 2860, 2862, 2868, 2870, 2874, 2876, 2880, 2882, 2884, 2886, 2888, 2890, 2892, 2894, 2898.
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2702, 2704, 2708, 2714, 2716, 2720, 2722, 2726, 2730, 2732,

The Russell cars are used only during rush hours on Kingston Road runs along King Street (rather than Queen Street) to Dufferin Street (Exhibition west loop), or on the short turn route

involving Church, Wellington and York Streets. The occasional car is used on the Queen route. About 10 to 15 cars are used each morning and evening in this service. Similarly, the cars from the St. Clair Division see most use on the Bathurst route, terminating at both the east Exhibition Loop and Church Street, running eastbound along Adelaide and west on King Street between Bathurst and Church Streets. One or two small Witts are sometimes used on Dupont runs. About 20 cars are used each rush hour from this division.

- Car 2750 has been outfitted as an ice cutter for winter service to replace large Witt 2314 which was scrapped last year.
- Although transit tokens have been in use on the T.T.C. system since 1954, when coincident with the opening of the Yonge Subway, ten million tokens were ordered from Southam Press, the use of this form of fare payment has never been so overly popular in Toronto. The basic reason for resistance to the use of tokens as against tickets, of course, stems from the fact that tickets stay together in a unit a book or strip until the last one is used. Tokens, on the other hand, have until recently been dispensed loose and their small size and general similarity to coins has made them more difficult to locate for transit passengers.

A professional packager has, however, sold the T.T.C. on a cardboard strip token holder which makes tokens as instantly retrievable as tickets in a book. Each holder contains seven tokens and sells for one dollar, the basic ticket - token rate. The purpose in adopting the token holder is to speed up fare transactions at the subway turnstiles, with tokens being used to effect passage through the automatic gates. With the opening of the University line less than a year away and the prospect of heavier usage of at least King and Queen Stations, increased use of token turnstiles looms as a necessity.

The Commission will presumably proceed next to study the sale of tokens-in-holders on surface vehicles. If undertaken this step would also do much to increase the general use of tokens in fare payment to the particular benefit of subway service.

The Commission has adopted a \$1 million deficit budget for 1962, the excess of expenditures over revenues to be made up by dipping into reserves of approximately \$3 million. Commissioner Secord dissented in the adoption of this budget, believing that the system should operate at a profit with the necessary fare increase.

Adoption of this budget indicates that the majority of the Commissioners desire to hold fares at the present level so that riders will not be driven away from the system. However, it is felt that a fare increase in 1963 will be unavoidable if a grant from Metro is not forthcoming.

- Subway contract D-1 Has been awarded to the Foundation Company of Canada Limited, to cover the basic construction of the Bloor line from Avenue Road to Yonge Street. Preliminary work already completed involved the relocation of sewers on Cumberland Street. The installation of wooden decking on Yonge Street where the Bloor line crosses got underway on March 26th.
- An example of what might happen with the much dreaded increased political interference in T.T.C. affairs is a recommendation made or March 4th by the City of Toronto Works Committee that all street cars be equipped with self-cancelling turn signals, and route and destination signs on the rear end. The latter is a revival of an old idea, as the Toronto Railway Company, before being ordered to install roller curtain signs on its cars, mounted wooden route name signs at each end of the deck roof, the rear sign facing backwards.
- It was recently reported in a Toronto newspaper that, with the opening of the University subway line, the Dupont car line would be replaced by bus and trolley-coach service. The Annette trolley coach would be extended to St. George Station and a bus would run from Davenport to the Docks along Bay Street. The tracks on Bay would presumably be kept open to permit the working of Dundas cars to the Docks during the evenings and weekends of the summer months. However, these plans have not yet been officially approved by the T.T.C. Commissioners.

PCC car 4018 has had its experimental solid cast steel wheels removed and has been outfitted with resilient wheel assemblies.

TRANSIT TOPICS

The Private Bills Committee of the Quebec Legislative Assembly has given the City of Montreal power to construct a subway system within the limits of the city, and with certain reservations, to extend to the municipalities of Westmount, Outremont, Mount Royal and St. Laurent. The city was also authorized to delegate its powers to operate such a system to the Montreal Transportation Commission, although the city would retain control over the fares to be charged on the subway. A request of the M.T.C. for the right to participate in the planning of the subway was rejected, although the city will use the services of the M.T.C.'s chief engineer Jules Archambault. A notable step forward (in contrast to the Toronto situations is that the subway would be exempted from property and school taxes.

- For Tenders for the construction of the first leg of the underground system (about 12% of the length of the total) were due to be called on April 2nd, this section being under Berri Street from Cremazie Boulevard to Jean Talon Street.
- DeLeuw Cather and Company, has embarked on a two-year study of transportation facilities in the Ottawa-Hull region, which will include the railway facilities of the two cities. Whatever the study might conclude with regard to utilization of the railways for transit purposes, it would appear right from the outset that the misguided removal of railway lines from the centre of Ottawa has forever ended the possibility of effective use of these lines for commuter purposes.
- On the morning of Wednesday, February 28th, 2400 volt traction power became short-circuited into the 10 volt signal circuits at Portal Heights on the CN's electrified Mount Royal Subdivision between Central Station and Val Royal in the Montreal area. The resulting fire and heat damage completely destroyed most of the signal circuitry from Mount Royal, through the tunnel to Central Station. In some signal cabinets, relays were reported to be fused into a solid block of copper.

It is anticipated that repairs to the system will take six weeks. Meanwhile, a manual block system is being used to control trains through the area, causing delays of from 15 to 30 minutes to all trains. In addition, trains 352 (from St. Eustache) and 82 (from Grenville) were rerouted at EJ Tower (Vertu or Gohier) to run to Central station via Turcot and thus avoid the tunnel entirely. To keep its 20,000 daily commuters informed of the cause of the delay, a mimeographed letter was distributed to all passengers using the suburban trains.

THE BATTLE OF CAVAN HILL

<u>Sketch:</u> A cannon. <u>0195-015.pcx</u>

The following humorous anecdote was related by Edward H. Live say in "The Engineer" for July 25th, 1941. Mr. Livesay, a British locomotive driver, had visited Canada in the late Thirties and wrote of his experiences in travelling across the country, often in locomotive cabs, for that journal.

"West from Cavan, on the Peterborough Subdivision of the C.P.R., lies the ruling grade of the subdivision, extending nearly to Pontypool with an incline in the neighbourhood of 1%. The tale of the Battle of Cavan Hill, as the grade is called, is one of the division's classics.

"It concerns Mary Anne, an old dame who lived in a cabin near the track, and her cow, and tells how they fought an engagement with the C.P.R., ending in victory for Mary Anne but defeat for the cow. It seems that one unlucky day, Bossy, with bovine vacuity, disputed a train's right-of-way and was duly gathered to her fathers. The C.P.R. ungallantly disclaimed liability, and flatly refused compensation. It was adding insult to injury - not content with getting Mary's

cow, now they had got her goat as well, and battle was joined. An epidemic set in, of engines stalling on the bank, coming to rest with madly spinning drivers. Investigation brought to light a mysterious substance on the rails. It looked like soap - by heck, it was soap! "Elementary my dear Watson". But in spite of close watch and many sudden raids Mary Anne could never be actually caught at her slippery tricks; trains went on stalling; Mary went on soaping. Finally, admitting both defeat and liability, the company offered compensation; the epidemic ceased, the engines found foothold, and peace once more descended on Cavan Hill. Thereafter soap was used only by Mary Anne on dirty linen, never on the rails. She had triumphed, and Bossy was Avenged."

CANADIAN NATIONAL NOTES

Also affecting London is the C.N.R.'s plan to build a \$3 million redevelopment project in the downtown area including a new 3-storey station, office building and a 106-room motel. The new building will be situated on the south side of York Street between Richmond and Clarence Streets including the present station site. Owners of the buildings will be Yonge-Colborne Developments Limited of Toronto and the C.N.R. will lease back only the required station and divisional office space. The express facilities are to be relocated to the freight yard between Wellington and Waterloo Streets.

- The C.N.R. has called for tenders for the clearing and grading for an extension of the Chisel Lake Subdivision from Chisel Lake to Stall Lake, Manitoba, a distance of 7.8 miles. This line, to cost just over \$1 million, will serve zinc and copper mines of the Hudson Bay Mining and Smelting Company at Stall Lake.
- Also to be extended by the C.N.R. is the Sangudo Subdivision, from Whitecourt, Alberta to the Windfall Gas Field, situated about 100 miles north-west of Edmonton. The extension will serve specifically a sulphur plant to be located in the gas field.

This line is expected to cost some \$2,300,000 and will include a 650 foot long bridge over the McLeod River. Construction is scheduled to commence during the present spring season.

The Canadian National has ordered 200 cylindrical-shaped aluminum hopper cars for delivery during May and June of this year. These lightweight, 70 ton capacity cars were developed especially for the CN by Marine Industries of Sorel, Quebec, and they will build 165 of the total order while Montreal Locomotive Works will build the rest.

The order for these cars follows two years of testing of several prototypes under both road and static conditions. The unusual shape of the car provides greater capacity, higher strength, and a less complex structure than the standard covered hopper design.

- Citizens of Windsor, Ontario have a scheme under way to purchase C.N.R. 5588 for display in a park in that city. The Pacific type, now stored at London, is to be named "The Spirit of Windsor" when on display. The guiding force behind this project is the Historic Vehicle Club of Windsor who are selling \$1.00 shares in the "Windsor, Ouelette Avenue and Border Cities Steam Railways Company" to raise the several thousand dollars necessary for the purchase of the engine. You can support this worthy project by purchasing shares from the above "Company" at Box 5588, Windsor, Ontario. Your contribution will be acknowledged by a genuine stock certificate and, should the project not be successful, your money will be refunded.
- Because of a Quebec Hydro development on the Ottawa River, the C.N.R. has closed the bridge that linked Grenville, Quebec and Hawkesbury, Ontario. Trains 81, 82 and 85, which formerly ran from Hawkesbury to Montreal, have been cutback to Grenville as of the end of January. However, a load of outsized wooden roof trusses, destined for a new church in St. Eustache, were routed over the bridge a week after the last regular passenger train had operated across it. The bridge will be dismantled soon.
- The first of six satellite IBM type 1401 computers has been installed in the Prairie Region

offices of the C.N.R. at Winnipeg. Five more of these small computers will be installed at Regional headquarters across Canada. These computers will feed partially processed data to the larger central 7070 type computer located in the CN headquarters in Montreal. These Regional machines receive their information on punched cards from their local yard and freight offices.

MOTIVE POWER NOTES

Our sharp-eyed readers continue to spot CN diesels as they are painted in the new colour scheme. MLW cab units 6705, 6763 and 6863, GMD cabs 6520, 6527 and 6610 as well as road-switchers 1245 and 4466 have been seen around Toronto. Yard switchers 8166 at Hamilton and 7001 at Niagara Falls also sport new colours.

- While many diesel units are being repainted in the new scheme, no passenger rolling stock, other than the three cars 5345, 5515 and 9059 first redecorated, has been seen in this area in new colours. It now seems that the CN has had second thoughts about the particular shades of blue and grey first chosen for their new passenger colours.
- On Monday, March 26^{th.}, the Ocean Limited became the first train to use a complete rake of repainted stock. Behind the now-familiar red, black and white diesel trailed a train of black and off-white cars, these being the final colours chosen for the system-wide redesign of passenger rolling stock. The black band will run the full length of the side of the car and its width and placement, measured from rail level, is such that it will appear as a uniform and continuous line along the full length of the train, regardless of the type or age of the equipment in the train. Design consultants on this project said "for years trains have been condemned to wear dark, drab colours because of the smoke from steam engines", but what "dazzling new" (in their words) shade did they choose? Black!!
- Class GR-12d (Nos. 1204 to 1221) road-switchers, used by the CN on the West Coast, have been replaced by class GR-12k (Nos. 1271 to 1288) engines. Nos. 1206, 1210 and 1211 were among the last seen on the coast but they have been replaced by 1272 and 1276 painted in the red and black colour scheme.
- The C.N.R. has been using two class GRG-12n 1200 HP road-switchers on the commuter runs between Toronto and Hamilton and between Toronto and Markham. No. 1913 has been running on train 94 with three coaches, while No. 1914 has been running to and from Hamilton on trains 74 and 81 hauling a steam generator car and about three cars. While 1914 does have steam generating equipment, it is unserviceable at present and cannot be repaired locally. Rather than remove the engine from service entirely, it is being used with the steam generating car until the locomotive is sent to Montreal for a thorough shopping.
- With the change from Standard to Daylight Saving time on April 29th, the Canadian National will again make extensive changes in its scheduling of passenger trains in this area. There is no doubt that the C.N. is trying hard to promote and provide a good passenger service where the patronage, or even potential patronage, exists, for most of the changes will be to add trains or to improve existing schedules. The biggest saving in time on the Toronto to London route will be made by having trains 5, 17, 6, 10, 14, 16 and 18 bypass the time-consuming stop at Hamilton. Passengers from or to Hamilton and Niagara Peninsula points will make their connections with the through trains at Dundas; one or more RDC's providing the service between there and James Street station in Hamilton.

Two new trains, Nos. 57 and 58, will provide a mid-day 65 minute service to Hamilton with No. 57 leaving here at 10:15 am,, stopping only at Oakville (10:45 am.) and Burlington (10:58 am.), and arriving at Hamilton by 11:20 am. No. 58 returns immediately, leaving Hamilton at 11:30 am., Burlington at 11:44 am., Oakville at 11:58 am., and arriving at Toronto Union at 12:30 pm. Neither train stops at Sunnyside.

MISCELLANY

- Premier W. A. C. Bennett of British Columbia has announced that consideration is being given to the extension of the Pacific Great Eastern Railway easterly from Fort St. John, BC to meet end-on a westerly extension of the Northern Alberta railways from Hines Creek, Alberta at the B.C. Alberta boundary. This link would give the P.G.E. a direct connection with the proposed Great Slave Lake Railway. (See map in Newsletter #150, Page 3).
- In contrast to a trend often seen elsewhere, the 47-year old combined road-rail bridge between New Westminster, BC and Lulu Island, known as the Queensborough Bridge, is being sold to the British Columbia Electric Company to be rebuilt for the exclusive use of rail traffic. The existing roadway will be removed later this year, the tracks relocated in the centre and the approaches renewed.
- The C.N.R. has placed in service a soil testing laboratory to speed up soil analysis in track and structural problems. The aluminum-clad laboratory, although designed to be hauled by a truck, is easily transportable by railway flat car. The lab has already proved its value in testing soil conditions along the Great Slave Lake Railway and for bridges in New Brunswick, enabling quick testing at the site rather than at a fixed laboratory far removed from the site.
- The Board of Transport Commissioners sat in Oshawa, Ontario on April 3rd to hear the application of the City of Oshawa to force removal of the spur line of the Oshawa Railway which runs along the centre of "downtown" (if Oshawa has such an area) King Street to serve three industries. Most of the carloads hauled over this spur consist of coal.
- More than four miles of track have now been laid on the C.N.R.'s new York Subdivision and yard entrance line. A wye junction has been installed with the Newmarket Subdivision.
- Now that all the Railiner runs carry 600-series numbers, the commuter trains will be assigned 900-series numbers, so that the present No. 94 becomes No. 900, No. 10 becomes No. 910, No. 11 becomes No. 911, No. 74 becomes No. 920, No. 79 becomes No. 921, No. 76 becomes No. 922 and No. 81 becomes No. 923. The former Nos. 10 and 11 which ran from Toronto to London will be terminated at Guelph while a new No. 10 will run from London to Toronto via Dundas, arriving here by 10:20 pm.
- The Penvidic Construction Company of Burlington, Ontario, specialists in railway construction, have dismantled the Niagara-on-the-Lake branch of the New York Central Railroad. Using a mechanical spike puller and tie loader, the company removed eleven miles of track in only ten days, including the grading and repaying of 15 grade crossings.
- Iron ore shipments loom large in the traffic picture of the future for the Ontario Northland Railway with the establishment of an open-pit mine in Boston Townships six miles south-east of Kirkland Lake, by the Jones and Laughlin Steel Company. The ONR will construct a new branch line from Kirkland Lake to the mine site, which is expected to produce one million tons of iron ore pellets annually. The ONR is also embarking on a \$7 million program to improve communications in the area served by the railway.
- The schedule of No. 6 will be speeded up from Sarnia to Toronto so that it takes only 3³/₄ hours rather than the former 5¹/₂ hours. This will allow departure from Toronto by 3:30 pm. and a 9:45 pm. Montreal arrival. No. 18 will leave Toronto after No. 16, at 11:30 pm. rather than the present 9:50 pm., while No. 16 will leave 15 minutes earlier than at present. Further developments in the Southern Ontario passenger situation will be reported next month.
- On the Lake Erie and Northern Grand River Railways, the line crew has been removing the overhead wire and has so far dismantled it from Oak Park (south of Paris) to West Side Junction in Galt, from Preston to Hespeler, from Preston to Centreville, and in parts of Brantford yard. The job is expected to last until at least December, 1962. Other changes include the removal

of the wheel lathe from Preston shop and the demolishing of the former passenger station located at the shop property in Preston.

- Procedular CPR Diesel unit 6708 has had a reported \$4000 in repair work done on it since arriving on the electric lines but will soon be sent to Montreal for re-wheeling and other heavy repairs.
- The Federated Railways of Brazil will put the London, Ontario plant of General Motors Diesel Limited back into locomotive production with an order for 56 units. Credit arrangements for the order have been approved by the Dominion Government.
- Plans for the expansion of "Santa's Village", a tourist attraction near Bracebridge, Ontario, include what is described as an 80-foot long 48-passenger "Candy Cane Express" train on a miniature railway. Included in the railway would be a lengthy covered bridge which would be an attraction in itself and which would serve as a storage "barn" for the train during the off-season.
- The longest steel girder ever built in Ontario was shipped from Hamilton to Toronto on February $23^{\rm rd}$, on a C.N.R. 12-wheel depressed-centre flat car with two idler flats at each end. This girder, used in the construction of the Logan Avenue underpass on the C.N.R. Oshawa Subdivision, is $116' 2^1/2''$ long, 15' 0'' high and weighs 110 tons. Two other large girders, 80 tons each, are also being used in the project, one of which came with the 110-ton monster, while the other was shipped a few days later.

During the installation of the large girder on February 26th, the Oshawa Subdivision was closed to traffic from approximately 9:30 am to 4:20 pm.

MEMBERS' ADVERTISEMENTS

For sale or trade: Canadian and U.S. public and employees timetables and other railroadiana. Send for informal list. Want to buy or trade for old Canadian only public and employees timetables pre-1930's. Have P.G.E. public and employees timetables from 1950 to date showing the various changes in line construction. Will trade these very generously for old timetables mentioned above. Write to John Cooshek, 455 West 26th. Avenue, Vancouver 10, BC.

RED, WHITE & BLUE —

Shades of Things to Come

Map: Map of CN Passenger Routes in the Maritimes

0195-016.pcx

In what must surely be one of the boldest and most revolutionary approaches of all time to the pricing of railway passenger transportation, the Canadian National Railways will place in effect, on May 1, 1962, for a trial period of one year, what has already come to be known as the "Maritime Fare Experiment". The new tariff is based essentially on the principal of differentiation of fares by the day of the week and the time of the year - a concept to date untried so far as the CN is aware on any other railway on this continent. In addition to the introduction of three new categories of fares, "BARGAIN", "ECONOMY" and "STANDARD", replacing "COACH" and "FIRST CLASS" in the experimental area, there will be a very significant across-the-board lowering of rail fares to an extent that will surely cause alarm to the operators of competitive transportation services.

The following table will provide an indication of the import of the new system:

A. Present one way fares by various transportation services, Montreal - Halifax.

Rail (Coach)	Air		Bus
Regular	All-Inclusive*	Present	New	

\$29.45	\$26.00	Economy 28.00		33.00	24.00
		First Class	39.00	45.00	
		Mid-Week	21.00	25.00	

^{* (90%} of travel between these cities by rail)

B. New C.N.R. one way fares, Montreal - Halifax, after May 1, 1962.

Bargain		Economy	Standard
(Red)		(White)	(Blue)
Coach Lower Berth Roomette Single Bedroom37.00	13.00 24.00 28.00	17.00 28.00 32.00 41.00	21.00 32.00 36.00 45.00

The territory in which the Maritime Fare Experiment is to be carried out is indicated by the adjoining map.

The days on which the various categories of fare will be in effect is shown in the following tabulation. In each case the governing date is that on which a trip begins, regardless of whether or not it may run through a day which has a higher category in effect.

Fare Type	Ticket Colour	Days in Effect
Bargain	Red	May 1 - May 31/62, October 1 - April 30/63: Daily except on Fridays and Sundays and Holiday periods (see Standard Fare).
Economy	White	May 1 - May 31/62, October 1 - April 30/63: Fridays and Sundays only, except Holiday periods (see Standard Fare); June 1 - September 30/62: Daily except Fridays and Sundays and Holiday periods (see Standard Fare).
Standard	Blue	June 1 - September 30/62: Fridays and Sundays; also during following Holiday periods: December 21/62 - January 2/63 (inclusive). Easter Weekend - Thursday, Friday, Sunday, Monday, Victoria Day and Friday and Sunday prior thereto. Dominion Day Labour Day Thanksgiving Day and Friday and Sunday prior thereto.

It will be noted that the red (economy) fares do not apply in the heavy travel months from June to September, and that white fares do not apply on any day between Christmas and New Year's - a week of peak travel. All ticket agents will be supplied with a 1962-63 calendar on which the days are indicated in red, white and blue for instant reference as to which category

of fare applies on a given date.

Tickets for the experimental area are being redesigned and will be red, white or blue in colour, as applicable. These tickets will be honoured on trains 1, 2, 3, 4, 59 and 60 only between Montreal and Charny, Quebec, while they are good on all trains east of Charny. All tickets are for one way transportation, and return tickets will no longer apply in this area.

Concession fares (for clergymen, the blind, etc.) will still be in effect in the experimental area, and will be based on one half of the blue fare. Stopovers will be possible on blue tickets only.

RESERVED ACCOMMODATION AND MEALS

For reserved accommodation, that portion of the fare which purchases the reserved space will not vary - the red, white and blue fares are to apply to the basic rail transportation charge only. Henceforth, complimentary meals will be served to passengers in reserved accommodation, and this privilege, heretofore associated only with airlines and the Pacific Great Eastern Railway, may be extended to coach passengers also if certain technical difficulties can be worked out. Unlike the airline meal service, which gives no choice, there will continue to be choices of dining car meals with the CN's complimentary system, although the number of choices will be reduced in order to cut down on inventory. Dining car orders will now be verbal, but the other physical "frills" which do so much to make a railway dining car meal a truly pleasurable experience will be maintained insofar as possible. Coloured sitting cards will be issued to passengers in order to spread the peak load on the dining car (this is a system which has been used successfully on rail fan excursions).

TARIFF #62

A new 26-page tariff to cover the Maritime Fare Experiment has been issued to all CN and Ontario Northland ticket agents. This tariff is completely redesigned and greatly simplified from previous issues, one feature of such simplification lying in the fact that only actual stops of trains are now included in the tariff. If a special stop is made, the fare to the first regular stop beyond is charged.

The C.P.R. agreed to the adoption of the experiment, insofar as the pool service east of Montreal is concerned, on the Montreal – Levis portion only. The CPR will not accept the Maritime tickets on their trains between Montreal and Quebec City, and the experiment is therefore officially not in effect between these centres. Actually, however, a 15 cent ferry ride from Levis to Quebec will allow a Montreal – Quebec City passenger to reap the savings involved in the experiment by travelling between Montreal and Levis.

The fare experiment was officially announced by President Donald Gordon on April 5th. By this time all ticket agents had been sufficiently familiarized with the system as to answer all public inquiries.

The Society, of course, wishes the C.N.R. every success with this courageous new experiment to attract substantial volumes of passenger traffic back to the rails with true 20^{th} . Century merchandising methods. Every other railway on the continent with any interest in its passenger business will doubtless watch the results very closely.

U.C.R.S. ANNOUNCEMENTS

The entertainment at the April indoor meeting, to be held on April 20th in Room 486, Union Station, will be an illustrated talk by Mr. Basil Headford and Mr. John Knowles on the railways of Southern Mexico and Guatemala. Whether you are interested in steam or electric traction, standard or narrow gauge, this talk will have much of interest to you.

- The first Friday meeting for May will be held on the 4th of that month at the C.N.R. Danforth Station.
- The first railway enthusiasts' excursion to be sponsored by the Society this summer will be held on Sunday, June 10th, and the destination will be Parry Sound, 160 miles north of Toronto. The Bala Subdivision, from Washago to Parry Sound has never been seen by a fan-trip, even though some of the most ruggedly beautiful scenery in Ontario is to be seen along it. Many good run-past sites are available on this part of the line and our timetable has been drawn up to make best possible use of these. The fare will be \$8.00 for members and \$9.00 for others. Don't forget June 10th!
- As a special bonus for male members only, (because of safety regulations, no children under 16 please), we will repeat last year's popular Oshawa Railway trip, except that we will travel to and from Oshawa by regular train. A motor and several freight cars will be ours for the day on the O.R. and several run-pasts will be arranged. The date Saturday, June 9th.

Full details on these two excursions will be mailed to you in the very near future.

- In conjunction with the special double-headed steam excursion organised by the Canadian National in Montreal for the week-end of June 23-24, it is expected that the Society will sponsor the operation of a sleeping car especially for the use of members travelling overnight from Toronto to Montreal. In addition, we hope to arrange an inspection tour of Montreal Locomotive Works to see the T.T.C.'s rapid transit cars under construction. Complete details on this and the CN excursion will be included in next month's Newsletter.
- The April meeting of the Hamilton Chapter will be held on April 27^{th.} at the home of Ray Deschenes, Apartment 10, 1024 King St. East, Hamilton, commencing at 8:00 p.m. Members' 8 mm movies will be shown following the business meeting.
- A First Anniversary dinner has been arranged by the Chapter, to be held at the Estaminet Restaurant, 2084 Lakeshore Road, Burlington, on May 12th, commencing at 7:00 pm. The menu will feature fried chicken. Following the dinner, 16 mm movies of steam trains, taken in the 1930's in the Windsor Detroit area, will be shown. The dinner and entertainment are open to all Society members, their wives and friends, and Toronto members are especially welcome. Tickets for the dinner are \$3.00 per plate and may be obtained from George Thompson, 152 London Street, Hamilton, before May 5th.