The cover photo shows the jointly-operated Pool train, the "International Limited", headed by C.N. 6200, leaving C.P.'s Montreal West Station on May 13th, 1951.

A recent notice issued by President Donald Gordon of the C.N.R. and President R.A. Emerson of the C.P. has announced the cessation of the Pool Services, effective October 31st, 1965.

The Pool agreement, originally effective April 2, 1933, called for joint operation of rail passenger services on the Montreal-Toronto, Toronto-Ottawa, and Montreal-Quebec City runs. "An economy of well over $500,000 will result from these initial developments in pooling arrangements . . . . . . ." [see Canadian Rail - January, 1963, Pp.1,2,3,4]

In the recent announcement, Messrs. Gordon and Emerson said that each railway will be "free to pursue its objectives and interpret the needs of the travelling public in its own way."

Details of the services to be offered, as announced in the press, are summarized as follows:

**CP Montreal-Toronto:**
- one train daily, leaving Montreal and Toronto at 5:00 pm, arriving at 10:45 pm, with stops at Mtl.West, Dorval, Smiths Falls, and Leaside. Consist expected to be 3 coaches, 1 dome coach, 1 diner, 2 parlor cars and a "Park" dome. The westward train will be known as the "Royal York", the eastward as the "Chateau Champlain". (A source of confusion with CN's "Champlain" to Quebec? Ed.) Will replace the existing overnight train.

**Montreal-Quebec:**
- no changes at present.

**Ottawa - Toronto:**
- one train daily, leaving each city at 9 am, operating via Peterborough.
- one train daily, Ottawa-Smith Falls, connecting with fast day train between Montreal and Toronto.

**CN Montreal-Toronto:**
- four trains daily, with a fifth daily except Saturday. Morning, evening and overnight runs in both directions. One train, to be known as the "Rapido" will make the trip in an unprecedented four hours, 59 minutes. Other CN trains in the Montreal-Toronto service will be known as the "Lakeshore" (day) "Bonaventure" (evening) and "Cavalier" (overnight). In addition there will be a daily local, and during peak travel periods, another fast day run, the "Premier".

**Montreal-Quebec:**
- (no official announcements, but it is presumed the "Champlain" will continue to provide the through Quebec-Montreal service with a duplic-
Canadian Pacific Railway's 3101, recently purchased by Interprovincial Steel and Pipe Corporation, has been placed on display on that company's property near Regina Sask. The locomotive, class K-1-a, outshopped from CPR Angus Shops in October, 1928, was one of only two engines of this type on the C.P. It had been stored in Winnipeg until it arrived in the Queen City in the latter part of August. Its original passenger train livery has been restored.

The move to the steel plant, two miles north of the City, was made over the CPR Bulyea Branch and a temporary extension added to the steel company's scrap yard track. A tight curve on this section posed quite a problem because of 3101's long rigid wheel base, but after several attempts, the move was completed on August 31st.

This is the second locomotive to be displayed at Regina. CN 5093 was placed on display at the Exhibition Grounds in October, 1963.

-- Colin K. Hatcher, Regina.

(Continued from Page 158.)

We hope to have a complete resume of the new schedules and passenger services on all Canadian railways in the next issue of 'Canadian Rail'.
THE RECENT RETIREMENT of British Railways locomotive No. 46100 and its preservation at one of Butlin's holiday camps in Great Britain brings to mind the triumphal tour which this engine, then London Midland & Scottish Railway No. 6100 "Royal Scot", made through the United States and Canada in 1933, in connection with the exposition at Chicago. Pulling an eight-car representative consist of British first- and third-class rolling stock, the locomotive travelled 11,194 miles in six Canadian provinces and twenty-three of the United States of America, between May 1st and November 12th, 1933. The train was exhibited at eighty localities, the L.M.S. later claiming that 3,021,601 persons visited it officially; of these 2,074,348 passed through it during its five month stay at the Century of Progress Exposition in Chicago.

The project of conveying a whole train from the old world to the new was entirely without precedent and necessitated the transatlantic shipment of ten separate units of railway equipment aggregating five hundred tons. The trip was planned and carried out as a promotional venture by the L.M.S., aided by a score of North American major railways who provided pilots, security staffs, fuel, servicing and display facilities at the various stops.

Left: A characteristic damp morning in the Fraser Canyon, October 26th, 1933. Low-hanging clouds canopy the "Royal Scot" as it twists its way eastward from Vancouver a few miles below North Bend, B.C., on Canadian Pacific rails.
In planning the venture, the L.M.S. had no precedent by which to be guided. It is true that many locomotives manufactured in Great Britain had made the one-way trip across the Atlantic for use in Canada and in the United States. As recently as 1927, the Great Western Railway of England had sent its famous 4-6-0 "King George V" to the Fair of the Iron Horse at Baltimore, Maryland, and it had returned to England at the close of the display. No one had ever shipped a complete train over such a distance, with the expectation of operating the train for many thousands of miles, estranged by distance from the persons and facilities familiar with it and therefore best equipped to keep it in running condition. With this in mind, a great deal of care went into the selection of the locomotive, and, as the intent was to show a typical train, it was not felt that the unit selected should necessarily be the largest or the newest. Accordingly, it was decided to choose a locomotive of the "Royal Scot" class, a three-cylinder, simple 4-6-0, designed under the direction of Sir Henry Fowler.

Fifty of these locomotives, L.M.S. Railway Nos. 6100 to 6149 had been built at the Company's Crewe Works in 1927, followed by twenty more, Nos. 6150 to 6169, in 1930. Equipped with 81" driving wheels and carrying 250 pounds pressure, the "Royal Scot" class were capable of an impressive turn of speed in the 400-mile run from London to Glasgow and Edinburgh, despite two major climbs at Shap and Beattock. In fact, the summer schedule averaged 55 miles per hour for the London-Glasgow journey, including one stop to change engines at Carlisle and another to separate the Edinburgh and Glasgow portions of the train at Symington. While it was desirable, for publicity purposes, that the class' namesake locomotive, No. 6100 "Royal Scot", should accompany the train, it was determined that the best mechanical record was held by one of the 1930 engines, No. 6152 "King's Dragoon Guardsman". Accordingly, 6100 and 6152 were taken to Crewe, exchanging numbers and names: 6152 became 6100; 6100 became 6152. The exchange was permanent, and locomotive 46100 which was recently preserved is the locomotive which was built in 1930 as 6152, but which came to America as 6100.

This done, eight passenger cars were selected to form the train:

- First Class Corridor Vestibule
- First Class Sleeping Car
- Third Class Vestibule
- Third Class Corridor Brake
- First Class Lounge Car
- First Class Corridor Brake
- Third Class Sleeping Car
- Electric Kitchen Car

L.M.S. personnel selected to accompany the "Royal Scot" train in North America were headed by Claude O.D. Anderson, works superintendent; the other two senior officers were Messrs. Thomas D. Slattery, assistant to the vice-president and T.C. Byrom, research assistant to the Chief Commercial Manager, who acted as liaison and publicity officer for the tour. The operating staff comprised William Gilbertson, driver; Clifford Wood, mechanic and fitter; John Jackson and Thomas Blackett, firemen.

A Montreal Harbour crane unloads one of the "Scot's" eight passenger cars from the C.P.S.S. "Beaverdale".
Arrangements were made to ship the train on board the Canadian Pacific Steamships freighter "Beaverdale" from Tilbury Docks, London. While the passenger cars comprised deck cargo, four vehicles forward and four aft, the locomotive and tender were loaded into the ship's hold. Owing to restricted openings in the hatches and the necessity to tilt the locomotive at a 45° angle in order to clear, it was decided to separate the engine into two major parts for shipment, one half comprising the frame, wheels, cylinders, etc., and the other, the boiler and firebox. The ship's decks were equipped with tracks to take the passenger cars. Interestingly enough, the rails used for this purpose were of the inverted "U" pattern.

Early in April 1933, the loading was effected at London and the ship set sail. En route across the Atlantic, three days of storms were encountered and, taking no chances, the ship's master headed his vessel into the wind. These precautions taken, the voyage proved otherwise uneventful, the "Beaverdale" sailing into the Gulf of Saint Lawrence and up the Saint Lawrence River, dropping anchor in Montreal harbour on April 21st, 1933.

Unloading at Montreal was effected immediately and the engine (in sections) and cars were whisked away to Canadian Pacific Railway's Angus Shops for assembly and tests. The running trials ensued and included a round trip to Farnham, Que., during which the train, with Driver Gilbertson at the throttle and a CPR pilot with him on the footplate, attained a speed of 75 miles per hour.

The "Royal Scot" train was officially unveiled to the North American public at Windsor Station, Montreal, on May 1st, 1933, where 18,500 people went through it. Those acquainted with British locomotive practice would have noted two very prominent departures necessitated by the North American tour. The locomotive was equipped with a standard Canadian Pacific locomotive bell mounted on its pilot, and an electric headlight mounted on top in front of the smokebox. A wooden pilot would later be fitted for the run through the Rockies to Calgary.

THE PRE-EXPOSITION TOUR

The little English train left Montreal the following day, May 2nd, at 6:00 AM, proceeding to Ottawa over Canadian Pacific rails; a speed of 73 m.p.h. was attained on this stretch, and augured well for the tour as a whole. The arrival in the capital of Canada was greeted by a crowd of 70,000, headed by the Governor-General and Lady Bessborough, Prime Minister R.B. Bennett and members of his Cabinet. The route lay thence by CP through Peterborough to Toronto. After display in the Ontario capital and at Hamilton, the "Royal Scot" crossed into the United States at midnight, May 4th, at Niagara Falls, with 10,000 people waiting in the pouring rain to see it pass.

From Buffalo, the train turned eastward along the New York Central main line through the Mohawk Valley, stopping at Rochester, Syracuse and Utica en route to Albany. The Boston & Albany was then followed to Boston, with stops at Springfield and Worcester on the way. New Haven rails were used from Boston to New York, with stops at Providence and New Haven. New York city provided 82,770 visitors who passed through the train to the accompaniment of bagpipes. It then left for a reception by 24,000 persons at Philadelphia, by way of Newark and Atlantic City. Its course then lay via Wilmington and Baltimore to the U.S. capital, Washington, where 32,000 more people filed through the eight-car train. The "Royal Scot" turned back into Pennsylvania, visiting York and Harrisburg,
Above: The cargo vessel "Beaverdale" approaching Montreal Harbour, photographed from the Jacques Cartier Bridge on April 21st, 1933. Note the passenger coaches carried as deck cargo.

Below: Part of a crowd of nearly 20,000 British Columbians who visited the British train as it stood on display at the C.P.R. station in Vancouver.
where it posed on the Susquehanna Bridge with the "Broadway Limited" hauled by Pennsylvania Railroad 4-6-2 No. 5436. The course then lay along the PRR main line to Pittsburgh; those accompanying the train experienced some elation at the unaided negotiation of the famed "Horseshoe Curve" west of Altoona. Four visits in Ohio, Youngstown, Akron, Columbus and Dayton, culminated at Cincinnati where 30,000 viewed it. At this point, the scheduled tour was curtailed, on May 24th, to allow the train to proceed to Chicago, due to an advance in the Exposition opening date.

The L.M.S. later recorded proudly that the train arrived at the Exposition grounds at 5:56 AM on May 25th—four minutes ahead of schedule, having visited thirty cities in eastern Canada and the United States; covering 2,329 miles in the process; and being inspected by 531,330 visitors. It was estimated that for every counted visitor going through the train, ten persons saw it, either stopped or on its way. Its schedule was widely publicized in advance of its passing, and spectators crowded small stations, crossings and bridges to see the British visitor pass through. In many localities, school children were given holidays and half-holidays, and the whistles of lineside factories and other trains sped the "Royal Scot" on its way.

THE EXPOSITION

Chicago's "Century of Progress" Exposition opened on May 25th, 1933. The British train found a place at the Chicago, Burlington & Quincy Railroad exhibit, alongside a modern Burlington train headed by 4-6-4 locomotive No. 3000, and a typical Nineteenth Century train with a woodburning locomotive. On the first day, no less than 17,227 persons passed through the exhibit; this pace was sustained and the train welcomed its millionth visitor since arrival in North America on August 3rd, when Miss Caroline M. Pierce of Massachusetts was feted by the presentation of an oil painting to her, depicting the "Royal Scot" and the Burlington trains side by side. The painting was autographed by the Chairman of the London Midland and Scottish Railway, Sir Josiah Stamp, and by the President of the C.B. & Q.R.R., Mr. Ralph Budd. Mr. Budd personally made the presentation.

It had been intended that the "Royal Scot" train should return direct from Chicago to Montreal at the close of the Exposition, with a few stopovers en route; the visit of the British train created so much sensation and interest, however, that repeated requests were made to the L.M.S. to have it make a tour of the West, before returning to England. In order that this tour might take place in reasonable weather, before the advent of winter, the Chicago Exposition authorities graciously consented to let the train leave before the close of the Fair, and on October 11th, it left the midwest metropolis on a tour that would take it 8,562 miles to the Pacific Coast and return, visiting 41 cities and towns. A total of 2,074,348 people had passed through the train during its five months' stay at the Century of Progress Exposition.

THE POST-EXPOSITION TOUR

The train left for its western tour from Chicago's Union Station at 8:30 AM on October 11th. The London "Times" observed that this event "will be a lifelong memory to those who travelled in the train, or in the Burlington train which escorted her on an adjoining track, side by side, to Aurora. A broadcast farewell, a Scots piper, a send-off by Mr. Rufus Dawes, president of the Century of Progress Exposition, scores of railway executives and chief officers, much waving and craning of necks on the part of arriving "commuters" (season-ticket holders
Prior to Exposition—
Montréal to Chicago, via Boston and New York.

After Exposition—
Chicago to Montréal, via Los Angeles, Vancouver and Chicago.

North American Tour
of the
ROYAL SCOT
1933
Farnham, Que. All Farnham turned out to see the "Royal Scot" after a 75mph test run from Montreal, April, 1933. Note the old station in the background, burned in 1949, which was originally built as headquarters for the South Eastern Railway.
we should call them), and she slipped gently from under the roof of the great
station over which tower many-storeyed office buildings. All the school children
had been given a holiday, and for mile after mile Chicago, old and young, lined
the track, cheering, waving, and shouting. Locomotives and factories whistled
and hooted salutes almost continuously to Aurora, 40 miles away. Few Royalties
have received such spontaneous welcomes or farewells."

At Mendota, it is recorded that children placed copper coins along the track
for a distance of half a mile, to be flattened by No. 6100 and its train, and later
treasured in memory of the spectacular visit. Upon arrival at Bloomington, the
first exhibit stop, police reported that the handling of the crowd presented more
difficulties than any other public demonstration, including strikes, that they had
ever experienced. The train then turned east to visit Terre Haute, Indianapolis
and Louisville, omitted in the curtailment of the pre-Fair tour. Visitors started
forming at Terre Haute by sunrise and the lineup was 1,000 feet long by 8 AM.
Indianapolis station proved itself incapable of accommodating all who wished to
visit and in Louisville, special streetcars had to be put on to accommodate the de-
mand, resulting in a traffic jam at the railway station.

From Louisville, the train turned west in earnest, heading for Denver and
the Rocky Mountains with stops at St. Louis, Kansas City, Topeka, and Wichita.
Its course then lay via the Missouri Pacific where the only trouble on the whole
trip was encountered. At Hoisington, Col., the locomotive was supplied in error
with soft, slack coal instead of the anthracite for which it was designed. Steaming
trouble ensued, culminating in a road failure near Eads, Colo. The train was
taken in charge by a Missouri Pacific locomotive and crew and hauled to Pueblo,
where refuelling provided proper coal, enabling the train to proceed indepen-
dently once again. The Denver & Rio Grande Western RR took no chances, and
provided a locomotive to follow the British train from Pueblo to Denver.

After visiting Denver, the train returned to Pueblo then headed west over the
main line of the D.& R.G.W. through the Royal Gorge and over Tennessee Pass
to Salt Lake City, whence the Los Angeles & Salt Lake was used to Los Angeles
with an intermediate stop at Las Vegas. In the film capital, screen celebrities
held a breakfast party on board the train, and child star Jackie Cooper had his
picture taken on the footplate. The coast route was followed up to San Francisco;
north of that city, on October 23rd, an automobile cavalcade followed the train on
a parallel highway. Stops were made at Dunsmuir, Portland and Seattle, before
the train headed back to Vancouver and "Empire territory" by way of the Great
Northern to New Westminster. The weather abided by the precedent set when
leaving Canada at Niagara Falls -- as the "Royal Scot" re-entered the Dominion,
the rain was falling in torrents. At New Westminster, the Canadian Pacific was
followed to Coquitlam, then into the C.P.R. station at Vancouver arriving there
at 1:05 AM Friday, October 27th.

BACK TO THE EAST -- AND ENGLAND

Now 6,000 miles from its home works at Crewe, the "Royal Scot" was exhib-
ited to 19,885 British Columbians from 9 AM to 9:30 PM on October 27th. Those
visiting in the morning noted the absence of the locomotive, which had moved to
the Drake Street shops to be equipped with a wooden pilot for the trip across the
Rockies by the C.P.R. main line. The engine returned to Track 4 at the station,
and its train, in the afternoon. Canadian Pacific officials had been watching the
train's progress through the mountains in the United States with considerable
interest, and Messrs. W.G. Stenason, Master Car Builder, and A.H. Cuthbert, General Air Brake Inspector, had accompanied the "Royal Scot" from Kansas City to Salt Lake City. Possibly the incident at Eads, Colo., had created some misgivings about the ability of the train to make schedule speed through the "Canadian Pacific Rockies", as the railway announced that the "Royal Scot" would be assisted by CP locomotives through the mountains. The LMS staff in attendance were not in favour of such an arrangement and Driver Gilbertson would have none of it. In deference, the railway arranged to have standby locomotives placed at division points, but the "Royal Scot" was allowed to proceed on its own.

While in Vancouver, the engine crew and mechanical staff were tended a dinner in the Oval Room of the Hotel Vancouver, by the Engineers, Enginemen and Firemen, Trainmen and Railway Clerks' brotherhoods. At the same time, Mr. Byrom, representing the L.M.S., addressed a luncheon of the Transportation Division of the Vancouver Board of Trade. While this was going on, the crowds visiting the train extended in a line out of the station, then along Cordova and Water streets. The visit of the train elicited more than the usual quota of nostalgia from the many British Columbians of British extraction.

By the following morning, the "Royal Scot" was threading the canyon of the Fraser River above Yale under low-hanging clouds, its shrill whistle flinging an audacious challenge to Hell Gate and the White Canyon of the Thompson. On Sunday, it reached Revelstoke, where church services were retarded in order not to interfere with the train's brief stop there, and on to the east it proceeded, up the valley of the Illecillewaet and through the Connaught Tunnel. The sharp reverse curves on this section necessitated loosening the screw couplings and giving the train some unaccustomed slack, but this was the only concession to the rigours of operation of an eight-car passenger train by a small 4-6-0 locomotive weighing only 100 tons light, and having 81" driving wheels! A short visit was made at Field, then the train climbed the Kicking Horse, over the Continental Divide, and made a swift run into Calgary where its pilot was removed.

Stopping at Moose Jaw and Regina, the "Royal Scot" remained on Canadian Pacific rails as far as Winnipeg, whence it detoured back through the United States once more, passing through Minneapolis, St. Paul, Madison and Milwaukee. Chicago was passed again, and Battle Creek, Lansing, Detroit and Flint concluded the train's stops in the United States. It came back into Canada through the St. Clair Tunnel and remained on Canadian National trackage for the remainder of the way back to Montreal. The return trip was punctuated by showings at London, Stratford, Guelph, Toronto, Oshawa and Belleville. It being now November 11th, the crew participated in a wreath-laying ceremony at the Cenotaph in Kingston where, incidentally, the 3,000,000th visitor passed through the train. A brief stop at Brockville was the only interruption in the trip back to Montreal; the train crossed from CN to CP tracks at Dorval and arrived at Windsor Station characteristically, two minutes ahead of schedule. The first act of Driver Gilbertson as he stepped from the cab, was to place a second Remembrance Day wreath on the Canadian Pacific war memorial in Windsor Station concourse.

The arrival at Montreal was made with a foot of snow on the ground, the temperature being the coldest experienced by the train and its crew in its visit to North America -- eight degrees above zero. It had experienced the warmest temperature, 110° degrees, at Las Vegas, Nevada.
Building The Royal Scot 6100.

Some views of the "Royal Scot" and train, from the Canadian National Railways Magazine August - 1933.

Cafeteria car on The Royal Scot.

Looking out the window of The Royal Scot.
On the following day, the train was displayed on CN rails west of Bonaventure Station, near the Mountain Street bridge. The author waited in the cold with his father to visit it, among the last of more than three million visitors in what the parent London, Midland & Scottish Railway Company aptly called, the "Triumph of the Royal Scot". Shortly afterward, the train was returned to Angus Shops for the reverse process of preparing it for shipment back to England. It sailed, with its crew, on the "Beaverdale" on November 24th, after having run 11,743 miles in North America. The elaborate precautions taken against mechanical failure were vindicated, and several tons of spare parts which accompanied the "Royal Scot" were shipped back to England untouched. In retrospect, the efforts of police and security officers and, in Canada, the Boy Scouts, who assisted in watching the interior of the train while visitors filed through, were most commendable. No noticeable damage was done to it, though the L.M.S. was relieved of no less than 500 electric light bulbs surreptitiously unscrewed as souvenirs -- this worked out at about one light bulb for every 6,000 visitors. One wonders whether any of these "souvenirs" have survived to this time!

The freighter tied up at Tilbury Docks, London, on December 5th, and the LMS contingent said goodbye to Captain Murray. The sequel to the impressive achievement came a few months later when, preparatory to taking the "Royal Scot" out of Euston Station, London, on its regular journey, Driver William Gilbertson was awarded the Medal of the Order of the British Empire by command of His Late Majesty King George V.

William Gilbertson passed to his reward a number of years ago, and now the locomotive with which he made international railway history thirty-two years ago, has been relieved of its duties. It is to be regretted that a subsequent rebuilding undergone by all of the members of the "Royal Scot" class has left the former No. 6100 with a different appearance than it had during the 1933 visit; but it is encouraging to know that its unique record has not gone unnoticed in Britain resulting in its preservation at Skegness by Mr. William Butlin. Visitors from Canada or the United States might most appropriately pay a visit of respect to the "Royal Scot" in what we hope will prove a perpetual retirement!

ACKNOWLEDGMENT: The author desires to express his particular thanks to Mr. Edward H. Livesay of Victoria, BC, long a contributor to British railway engineering periodicals, for lending his file of newspaper clippings on the subject of the "Royal Scot" visit. I desire also to thank Mr. H.T. Coleman and my other friends in the Public Relations Department of the Canadian Pacific Railway, for ferreting out old photographs to supplement Mr. Livesay's notes.

O.S.A.L,

Notice of meeting:

The November meeting of the Canadian Railroad Historical Association will be held Wednesday, Nov. 10th at 8:15 pm at the McConnell Engineering Building, McGill University, Montreal. Feature: "Auction of Railroddenia".

The December meeting, Dec. 8th at 8:15 pm at the same location, will be a "Pot-pourri of Colour Slides," more details next month.
Canadian National Railways recently announced a $27 million project to improve rail access to the northern side of Vancouver Harbour. Instead of the present circuitous, backtracking, and grade-crossing route through the City, the projected route is direct and only a third of the length of the existing trackage. It achieves this by boring direct through a hillside for two miles. The north end of the tunnel will emerge at tide-water close to the existing Second Narrows railway bridge, and will be taken across the Narrows on a new bridge. The whole project is scheduled for completion by 1970.

Talk of bridging Vancouver Harbour started in the 1910's, and it centred at a spot called Second Narrows, where Burrard Inlet is only about 450 yards wide. In 1922, a Burrard Inlet Tunnel and Bridge Company was formed to convert the wish into reality. Two million dollars were raised to build a 350 yard steel bridge, plus trestle and fill approaches, with a 150-foot bascule opening span for shipping.

Work commenced in 1924, and by the end of that year, the piers and approach works were completed. In the following year the structural steel was erected, and the bridge was officially opened on November 7th, 1925. The deck within the overhead trusses held the rail trackage and on each outer side was something that looked like an overgrown sidewalk. These extensions were, in fact, motor roads for north and south bound automobile traffic. The bascule was not placed in the bridge centre but toward the south bank, presumably where the greatest depth of water was found.

The Vancouver Harbour Commissioners with their Harbour Terminal Railway were responsible for moving all rail traffic across the Bridge, but were tardy in making use of the connection, and did not link it with North Vancouver by 3 miles of track until December, 1927. Rail was extended to the Pacific Great Eastern Railway's terminus in April, 1929.

extensions were, in fact, motor roads.
The north end of the tunnel will emerge at tide-water .......... about the centre of this view.

The bridge undoubtedly stimulated the development of North Vancouver, but for mariners it was a headache. The tides are very strong at this point and to complicate matters, there is a river estuary at the north-east corner of the Bridge. Present day charts read "Currents run 6 to 7 knots at Springs -- when Seymour River is in freshet it causes a cross current towards the S. Shore".

The result for ships was difficulty in navigating the bascule opening, and in 1928, a 7000 ton freighter collided with the bridge, damaging both itself and the structure. This incident was repeated in 1930, destroying the centre span and putting the bridge completely out of action. The Harbour Terminal Railway put their rail car-ferry back into operation, and thereafter, until the bridge was repaired, ferried about 10,000 cars per annum to the North Shore and back, the North Shore at that time being a railway cul-de-sac.
The Burrard Inlet Tunnel and Bridge Company was unable to finance the repairs, and on July 12, 1933, the title to the Bridge passed to the Vancouver Harbour Commissioners, who spent about one million dollars in putting the bridge back into operation. This was achieved by taking out the three-hundred-foot damaged fixed span, and replacing it by a lifting span of 286 feet width, with a clearance above high water of 140 feet. The bascule span was left in place, but was permanently anchored to its northern pier and is immovable. The result, from a design point-of-view is a bridge curiosity, and anyone interested in the subject is advised to go and see the bridge before its demolition in the early 1970's.

The demolition of one existing pier, and its replacement by two others, was started in August 1933 and completed by April 1934, - the steel work was finished by early June. The reconstructed bridge was opened to road and sea traffic on June 18th, 1934, and to rail traffic on August 2nd. Since then it has provided more or less uninterrupted service.

On January 1st, 1953, the Canadian National Railways took over the operations of the Harbour Terminal Railway (then owned and operated by the National Harbours Board), and at the same time agreed to operate and maintain the bridge in so far as railway traffic was concerned. The new road bridge was opened alongside in August, 1960, and immediately took the bulk of the road traffic. The railway bridge continued to take toll-paying auto traffic until April, 1963; there after, it has been used solely for rail transportation. This currently consists of one round trip CN and CP freight per day, or about 50,000 cars in either direction annually. No passenger trains have ever been operated across the Second Narrows span. Under the bridge about 30,000 commercial vessels pass each year - of which 5,532 required the lifting span to be raised in 1964 - about a dozen lifts daily.

On January 1st, 1964, the bridge became the outright property of the Canadian National Railways.

There exist less than twenty moving-span rail bridges in B.C.; the Second Narrows Bridge is the only lifting span, there are two bascules and about twelve swing structures.
Montreal's first subway train was delivered to the City's Metro on August 24th by Canadian Vickers Limited. It was a gala day for Montreal transit officials who inspected the first three-car set.

To the applause of hundreds of guests and workmen, cars 81-1502, 80-001 and 51-1501 made their debut. Mrs. Jean Drapeau, wife of Montreal's Mayor, cut a ribbon, a blue curtain was drawn aside, and the first train was moved up and down the shop track at Vickers' plant. The train and the subway in general were blessed by Cardinal Leger, who with Mayor Drapeau, Executive Committee Chairman, Lucien Saulnier, Metro Chairman Lucien L'Allier, and Vickers officials, was present on the inaugural run.

'Canadian Rail' hopes to be able to publish additional details regarding this unique rolling stock at an early date.

A selection of photographs, courtesy of the City of Montreal and the M.T.C., showing progress on the construction of the Metro System, follows:

From St. Helen's Island to Notre-Dame Island, on line no. 4, the subway tunnel was built in open cut between two provisional dams closing the south arm of St. Lawrence river.

A typical section of a station partly built in rock. This is Crémazie Station on line no. 2. Laying of track was under way when this photograph was taken.
The 369 cars of the Montreal Metro, 246 cars and 123 trailers, to circulate on lines nos. 1, 2 and 4, are manufactured by Canadian Vickers, Ltd.
The Canadian Pacific Railway has ordered thirty-two high-speed diesel freight locomotives, at a cost of $11 million. The units -- 3000 horsepower each -- are the most powerful ever purchased by a Canadian railway. The diesels will begin to enter service next July and delivery from General Motors will be spread over six months. The locomotives will boast pressurized engine rooms to keep out dust and dirt, and will have turbochargers. They will have a C-C wheel arrangement. Barring nothing unfortunate in the meantime, delivery of the new units will swell CP's roster to 1098.

There's a rumour afoot that CN will also add to its locomotive fleet soon; at least CN has achieved a major breakthrough with respect to its existing power. Early in 1966, the railway will begin installing electric toilets and air-operated water coolers on its engines. It will take about nine years to completely toiletize the diesel fleet. The toilets use locomotive electric power to incinerate the wastes. (Engine crews may get quite a charge from this latest innovation -- Ed.) Caboosees will also get toilet and water facilities.

The City of London has swapped the London and Port Stanley Railway for the Canadian National car shops and about eight acres of CN land. CN is accepting the L&PS as a going concern. The City of London will try to find an industrial tenant for the car shops and may well find success before CN, should the latter try to find a profit for the L&PS.

CN is hiring 15 to 20 engineers to begin work on the Alberta resources railway. The men will plot the route from Solomon, on the CN mainline west of Hinton, to a mining area 90 miles north. The Province of Alberta is handling the financing of the sixteen-million-dollar railway which is being built by CN to open up the resource-rich northwest Alberta area.

Work crews have begun levelling the right-of-way for CN's new St. Clair River industrial line. The line will extend almost twelve miles south from the Sarnia, Ontario, yard and will offer CN service to an extended potential industrial area in Moore and Sombra townships.

The Board of Transport Commissioners allowed CN to raise its fares five cents per trip on its Mount Royal Tunnel and South Shore commuter lines effective October 1.

Canadian Pacific is adding sixteen new stops to the "CANADIAN" as well as modifying eighteen conditional stops now made. The thirty-four changes will lengthen the transcontinental's schedule by about one hour. The new stops are: Vankleek Hill, Petawawa, Mattawa, Britt, Ramsey, Sultan, Dalton, Franz and Heron Bay, Ont., Carberry, Man., Mocasin, Indian Head, Herbert and Maple Creek, Sask., and Ashcroft, B.C.. Eighteen conditional stops now made to entrain or detrain passengers to or from specified points will be made in future regardless of the passengers' origin or destination.
As Canada's federal election campaign swings into high gear, opposition leader John Diefenbaker is doing most of his travelling by train. Mr. Diefenbaker points out that he is a man of the people and prefers to travel among the people -- not several thousand feet over the top of them.

Mr. N. Kolodiazhny, deputy director of railway research in Russia says that "rocket trains" are planned for express service between Moscow and Leningrad and Moscow and Kiev and Minsk. The trains will travel at 150 miles an hour. Trains already travel at 100 miles an hour on these routes. On the drawing board is also a monorail system to Siberia. Other research includes a magnetic rail brake which could reduce stopping distances by forty percent.

The Aluminum Company of America has developed an aluminum power rail for mass-transit systems. The company announced that it will test the power rail as well as aluminum commuter cars this summer at a Westinghouse Electric Corp. experimental transit system in Pittsburgh's South Park. The system uses cars with dual rubber tires in each corner, riding on a concrete roadway directed by guide wheels running along both sides of an I-shaped central rail. This aluminum conductor rail has a stainless steel running surface.

The railway car used to carry Sir Winston Churchill's coffin after the state funeral in England has reportedly been sold by British Rail to the City of Industry museum, near Los Angeles, U.S.A. A number of Britons are protesting the sale, and British M.P. Richard Marsh is taking the matter up with the Railway Chairman, "it is quite obvious," he declares "that the van has historical interest and Britain should have first claim".

Since publication of CN's original renumbering scheme for RDC-1's purchased from the B&M ('Canadian Rail' July 1965) the railway has revised the order of re-numbering as follows:

<table>
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<tr>
<td>6121</td>
<td>D-117</td>
<td>D-114</td>
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Numbers of RDC-9 units (94 psgr. cars) are as previously reported. Five of these cars have been put into service without shopping -- they will be overhauled during the winter months.

The Budd demonstrator #2960 has been purchased by the CN and will carry the number D-110.

Chesapeake and Ohio 9082 (RDC-3, 48 psgrs.) has also been acquired by the National System and was in Montreal August 26th. It will be re-designated D-356.

As these, and previously-owned RDC's go through the ON shops for overhaul, they will be completely refurbished. Comfortable, reclining seats, new baggage racks and improved lighting will be installed and the cars given a modern decor. A number of units will also be equipped with snack bars.
"As I understand it, the original argument was that they couldn't handle both grain and passengers..."