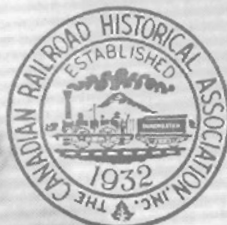


# Canadian Rail

1932 - 1972



40th. anniversary

**NO. 247**

**AUGUST 1972**





# Not Out To Pasture

## Yet !

From information and pictures supplied by Abitibi Paper Company Limited.

She's had many names, this "iron horse", but just as in the case of a married woman, it's the last one that counts!

Number 70 is the name of the Abitibi Paper Company's Shay steam locomotive at the Company's newsprint mill in Iroquois Falls, Ontario.

For those who are interested - and who isn't? - Iroquois Falls is at the end of Highway 67, off the Trans-Canada Highway, some 80 miles north of North Bay, Ontario. Yes, you can drive there, but it is more sporting to take the Ontario Northland Railway!

Once or twice every couple of years, Number 70 is steamed up and taken out of her stall, pressed into service while the diesel-electric unit is in the shop for an overhaul. No doubt if Number 70 could talk, she would have one or two remarks to make about the way they build diesel-electric units today. "They don't make them new-fangled machines like us old-timers!"

"Oldtimers"? Little does Number 70 know that she is probably the last working steam locomotive of this vintage in Canada. Well, almost the last.

Nowadays, Number 70's part-time job consists of shunting cars around the Company's railway yard. Gone are the exciting days on the tricky, uneven right-of-way, opening up new logging areas and hauling carloads of pulpwood to the hungry paper mill. Those were the days, my friends!

Number 70's story began on February 27, 1926, when, as a class "C" Shay - a development of Ephriam's original patent - she was outshopped by the Lima Locomotive Works of Lima, Ohio. Her three 12x15-inch cylinders and 36-inch drivers gave her a pulling power that was hard to beat. Number 70 was ordered by the Tallassee Power Company of Calderwood, Tennessee, U.S.A. Her builder's number was 3298 and Tallassee Power gave her road number 9. Number 70's southern sojourn was terminated when she went to the ALCOA Power Company at Shipshaw, Québec, probably to assist in the construction of the giant power dam. She was still numbered 9. In December, 1930, she was sold

OTTAWA BRANCH PRESIDENT DUNCAN DUFRESNE SUPPLIED THE PICTURE FOR THIS month's cover. In the days of steam, Canadian Pacific Railway's G-3 4-6-2 Number 2455 starts Train 40 from Montreal West, Québec, on an afternoon in February, 1948.

Number 70 of the Abitibi Paper Company, Iroquois Falls, Ontario - on the page opposite - operates only once or twice every couple of years, shunting cars in the Company's yard. But when she's needed, she's really needed.

to the Dominion Construction Company of Cochrane, Ontario, where she was renumbered 3298 (her construction number) and remained for some 11 years.

In April, 1941, Number 70 - alias Number 3298 - was purchased by the Standard Chemical Company of South River, Ontario. Finally, the "C"-class Shay was purchased by the Abitibi Power and Paper Company - later Abitibi Paper Company - for the operation in and around Iroquois Falls, Ontario.

One look at Number 70 will convince you that she is built not for speed, but for power and versatility. Once, she could make 18 miles per hour, if she were hard-pressed. But Number 70's real talent was hauling logging trains over ungraded track, with tight curves, humps and sags. She was also versatile in switching long, heavy trains of newsprint in the Company's yards and spotting empties in short sidings with tight curves.

Her talents were most useful in mill switching after 1955, when the Company terminated railway operation in the woods and began bringing out the wood by truck.

Retirement may not be a happy thought for some. But Number 70 doesn't have to face this situation just yet. Despite the fact that spare parts are almost impossible to obtain - most remaining plans and blueprints, would you believe, are now in the Smithsonian Institution, Washington, D.C., U.S.A. - she is kept in good condition. Her crew and their associates, needless to say, help to keep Number 70 running with lots of tender, loving care. That's why, when any job around the yard need doing, Number 70 is ready and willing to tackle the job.

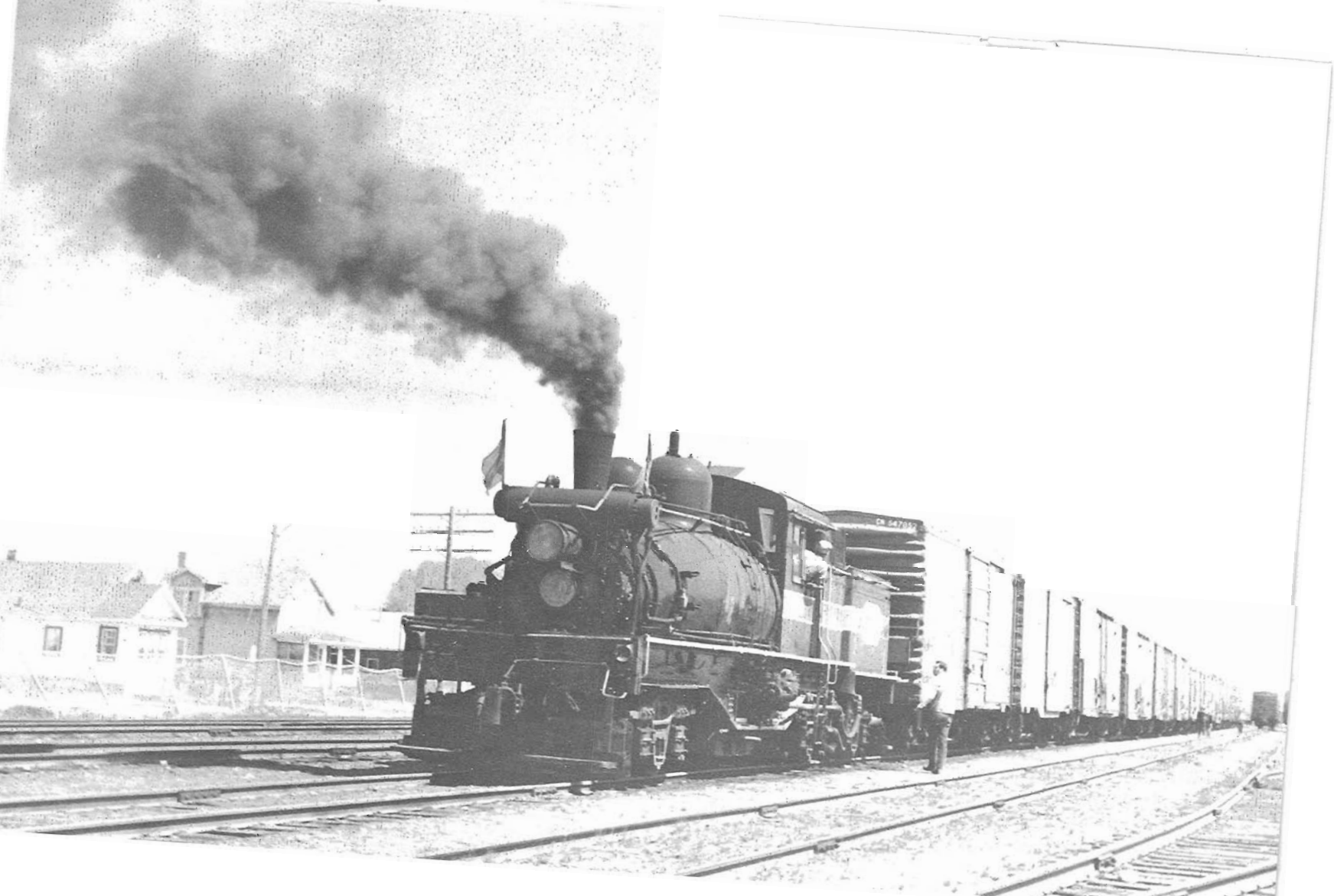
This isn't the end of Number 70's story. It's just another episode in a history of useful service. Well-known today, you may be sure that when the time comes for Number 70 to be turned out to pasture, there will be plenty of people who will remember her valuable contribution and will provide the care and attention which her distinguished career has earned.



GONE, ALAS, ARE THE DAYS OF THE LOGGING train that opened up new lumbering areas and hauled the logs and pulpwood to the hungry mill. Luckily, someone had the foresight to take a picture!



Even today, there are times when Number 70 handles considerable tonnage in making up trains in the Abitibi Paper Company's yard at Iroquois Falls, Ontario.



### Vital Statistics.

Type: Class C Shay                      B/N 3298                      Date built: February 27, 1926  
 70-ton, three-truck  
 Gauge: 4 feet 8½ inches      Cyls.: 3, 12x15"      Drivers: 36"  
 Engine & Tender wheelbase: 40 feet 2 inches  
 Rigid wheelbase: 29 feet 8 inches.      Factor of adhesion: 5.6  
 Weight in working order: 170,000 lbs.      Tractive effort: 30,350 lbs.  
 Boiler: Extended wagon-top      B.P.: 200 psig  
 Tubes: 97 x 2", 11 feet long.  
           15 x 5 3/8" x 11 feet long.      Total heating surface: 888 sq.ft.  
 Total length over drawbars: 53 feet.      Grate area: 22.53 sq. ft.  
 Maximum height: 14 feet 8 inches.      Water: 1300 gals.

Number 70 will operate 3-4 hours on 1300 gallons of water and 10-12 hours on a capacity load of coal, under normal conditions. She can operate on 35-lb. rail and can negotiate a curve of 75' radius.



↑ AT THE TOP OF THE HILL EASTBOUND: CANADIAN NATIONAL RAILWAYS STATION at Port Union, Ontario. This was usually the eastern limit of operation for the "Brutes". The back-track behind the station is visible at the extreme right and left.      Photo courtesy Edward Emery.

# CN's

# "BRUTES"

Edward Emery  
and  
Edward Helmich.

**T**he main line of the Grand Trunk Railway Company of Canada which approaches Toronto Union Station from the east has, since its construction, suffered from one major drawback. This is the gradient eastward from Union Station, out of the Don River valley up to Scarborough and Port Union on the table-land above Lake Ontario.

Because of the comparatively level stretches on this plateau, the main freight classification yard for tonnage arriving from the east was established almost at the beginning at Danforth.

West of Toronto, the Great Western Railway was the original line to London and Windsor or Sarnia. Freight trains from this direction generally terminated at Mimico, 6.7 miles west of Toronto Union Station.

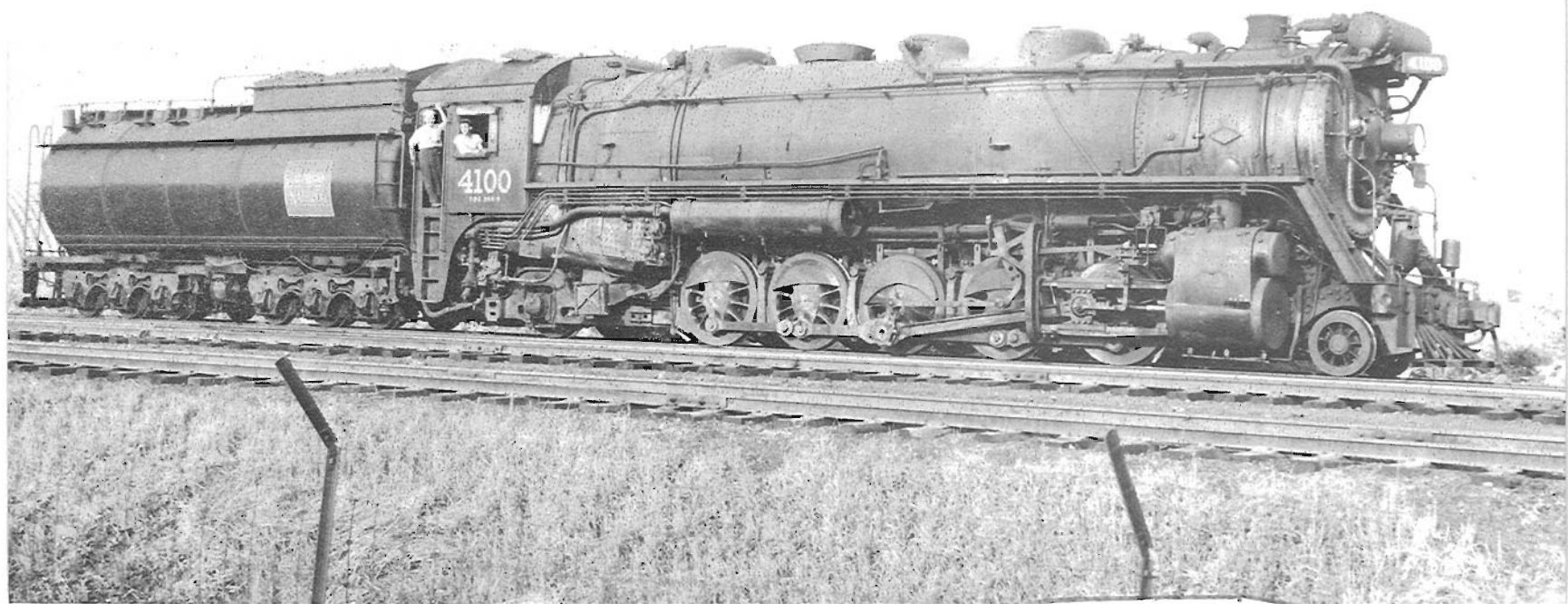
After the amalgamation of the Grand Trunk with several other railway companies to form the Canadian National Railway Company, all freights coming from the east continued to be handled at Danforth Yard, while trains arriving from the west were classified at Mimico Yard. Loads for the city of Toronto, or from one yard to the other, were handled in "transfer" freights, which had either to climb or to descend the hill between Don Station and Danforth.

To provide the motive power required to move these sometime heavy freights, the Canadian Locomotive Company, Kingston, Ontario, received an order from Canadian National in 1924 for the largest and most powerful steam locomotives ever to operate in Canada. Although they were subsequently surpassed in weight by the famous "Selkirks" of the Canadian Pacific, they continued to be the most powerful locomotives in Canada and in the Commonwealth. Having road numbers 4100-4104, these mammoth 2-10-2s were classed by the CN as T-2-a and were rated at 80%-B, the "B" being the booster on the trailing truck.

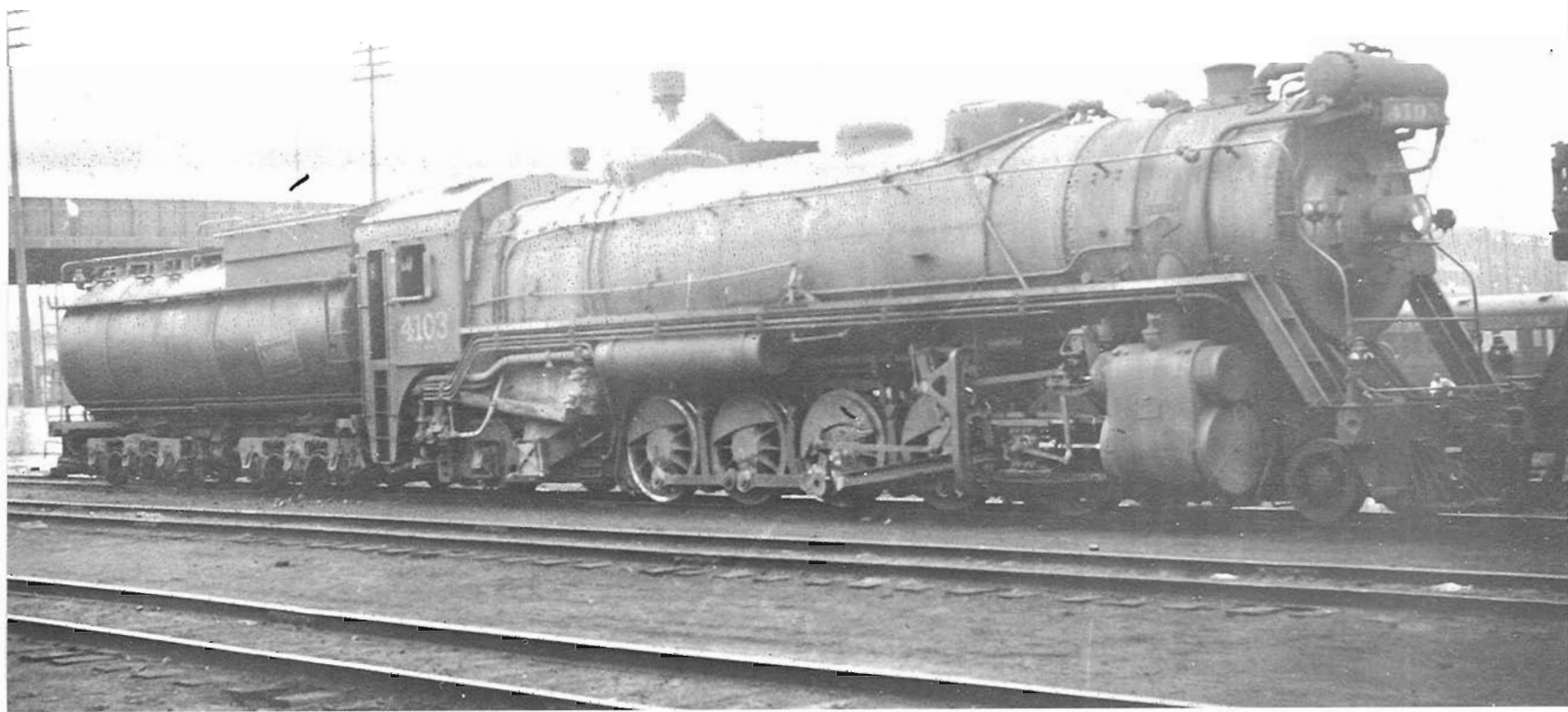
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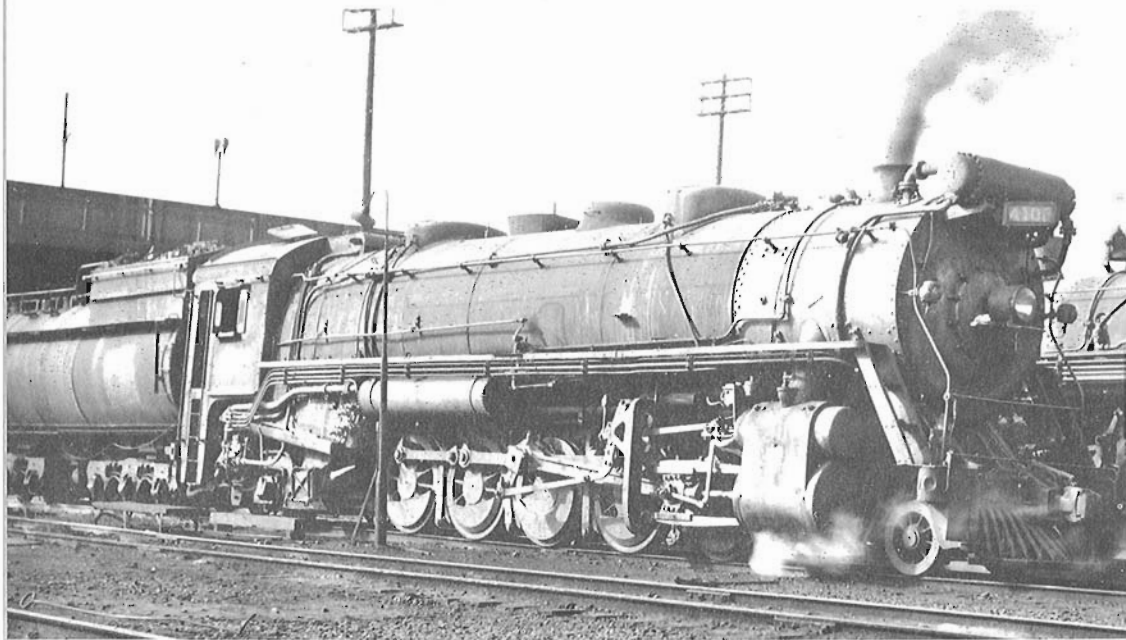
**2** CANADIAN NATIONAL RAILWAYS CLASS T-2-A, NUMBER 4103 - BUILT BY THE Canadian Locomotive Company of Kingston, Ontario - pictured at the Christie Street Roundhouse in July, 1952. Photo courtesy HK Vollrath.

Number 4100 of the same class was photographed by Harold K. Vollrath at Montréal, Québec, in July, 1956. Number 4100 was built by Kingston in 1924.









▲ CNR CLASS T-2-A, NUMBER 4102, BUILT BY CANADIAN LOCOMOTIVE COMPANY IN 1924, photographed by Harold K. Vollrath at Montréal, Québec in July, 1935.

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After about 10 years of service in this transfer work, the need for the "Brutes" disappeared when Danforth Yard was closed, due in part to the financial recession and decreased business of the 1930s. All the Danforth facilities were transferred to Mimico. When Danforth closed, the 4100s were displaced from transfer service. However, the freights eastbound from Mimico still needed assistance up the long grade to Scarborough and Port Union. Obviously, the 4100s were most suitable for assisting or "helper" service and thus the locomotives gained a new lease on life.

The "Brutes" - as they were affectionately called by the engine crews - were also frequently required on CN's Welland and Dunnville Subdivisions, to haul freight trains up the Niagara Escarpment to Welland, Port Colborne and Fort Erie. The regularly assigned power was either CN Number 3457 or 3480, both 2-8-2s. If one of these mikados was out of service for repairs, a 4100-class 2-10-2 was sent from Mimico as a temporary replacement.

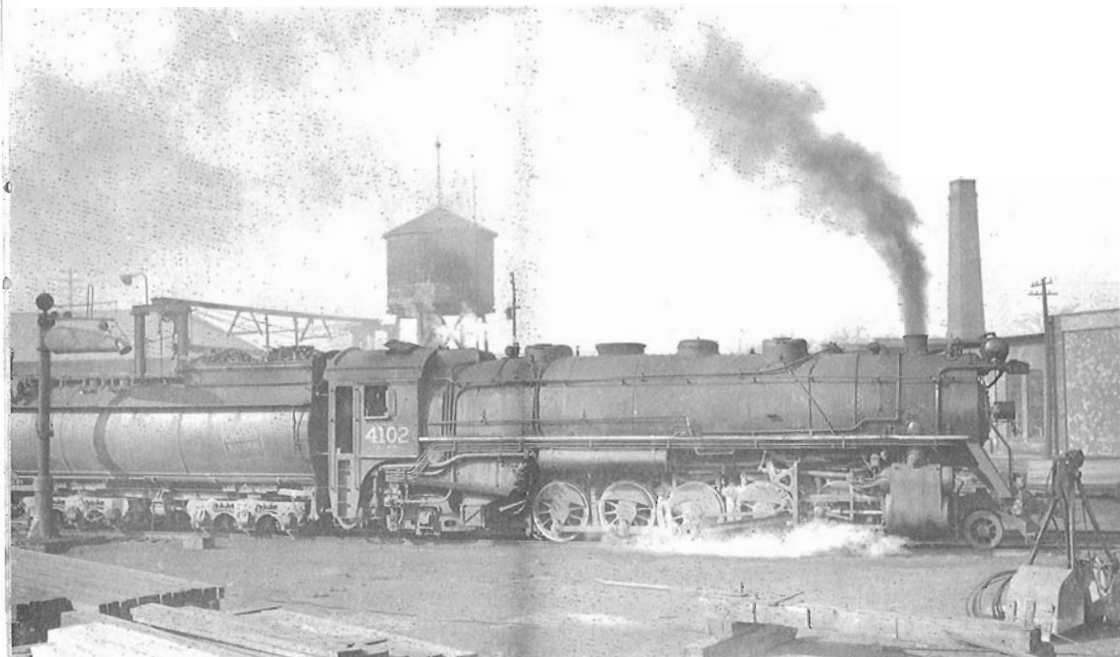
On trips east out of Mimico, the 4100s generally ran pilot forward, in the normal manner, helping freight trains up to Port Union. There, they would uncouple and run through the crossover to the westbound main line, taking water before departing for Mimico, if necessary. If there was considerable traffic on the westbound main, they would take the "hole" - which was a siding that ran behind Port Union station - to wait for a westbound freight to which they would be coupled for the return trip. But, wonder of wonders, they would run in the train for only the 11-mile trip to Don station, where they would uncouple and run light back to Mimico. Many times, they would not wait at Port Union for a westbound freight, but would run light back to Toronto. It all depended on the traffic east and westbound and what was waiting to be helped up the hill.

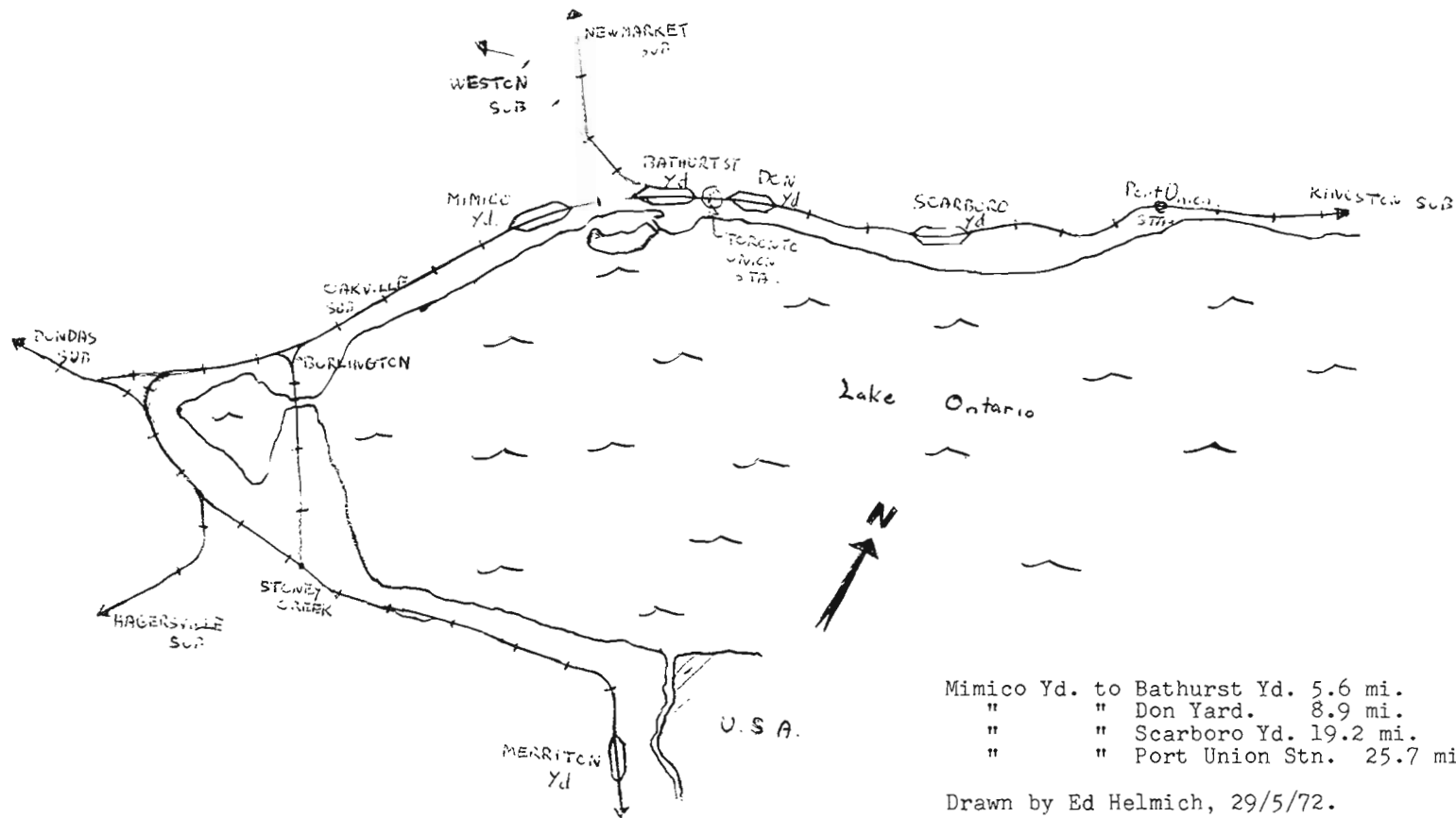
Although they were hard-riding locomotives and required considerable muscle-power to operate and fire, their engine crews were paid the highest wages, since the wage-scale was based on the weight-on-drivers of the locomotive.

During World War II, the "Brutes" were used in freight service on CN's main line between Toronto and Belleville. The engines were able to haul long freights but at rather slow speeds because of the small diameter of their drivers. When the new northern-type 4-8-4s were placed in service, the 4100s were no longer required in regular main-line freight service and were replaced in their former capacity as helper locomotives.

With the advent of the diesel-electric engine to Canadian National Railways, the "Brutes" were soon displaced from the Mimico-Scarborough-Port Union helper service. However, two of the 4100s, Numbers 4103 and 4104 were sent back to the CN shops in Stratford, Ontario, for heavy repairs. Alas, these repairs were never made and the two 2-10-2s were scrapped in November, 1955, followed by No. 4101 in December of the same year. Curiously enough, two of the "Brutes" were to escape the scrapper's torch temporarily. Numbers 4100 and 4102 were sent to Montreal for service on the tank car transfer trains from the east-end oil refineries to Turcot Yard. Number 4102 continued in this service until displaced by diesel-electrics and was finally scrapped in January, 1957. Meanwhile, Number 4100 had been renumbered to 4190 in April, 1957 and when she was retired in September, 1960, she went to the Canadian Railway Museum, St-Constant, Que.

▼ IN MAY, 1950, HAROLD VOLLRATH PHOTOGRAPHED CN NUMBER 4102 IN THE CHRISTIE Street yard at Toronto, Ontario.





Mimico Yd. to Bathurst Yd.	5.6 mi.
" " Don Yard.	8.9 mi.
" " Scarborough Yd.	19.2 mi.
" " Port Union Stn.	25.7 mi.

Drawn by Ed Helmich, 29/5/72.

The T-2-a class of Canadian National were built with Vanderbilt tenders, the first such application on Canadian National Railways.

Thus, in 1972, there is only one of the T-2-a class of Canadian National Railways steam locomotives left. This engine can be examined and photographed at the Canadian Railroad Historical Association's museum. Her original number - 4100 - has been restored and the locomotive had previously been sandblasted and repainted.

Just as the kind of motive power running between Mimico and Port Union has changed, so has the area in general. The station at Port Union is slated for demolition. There is no longer an agent there and the gas-lighting and fuel tanks at the rear of the station have been removed. Only Number 4100 - the last of CN's "Brutes" remains to remind railway historians of the days when the long freights rumbled up the hill from the Don valley to the level stretches towards Port Union.

#### T-2-a Specifications

Builder: Canadian Locomotive Company, Kingston, Ontario.

Order No.: C-557 B/N(boiler): 1759-1763 Year: 1924

Ry. Class: T-2-a Road Nos.: 4100-4104

Cyls.: 29x32" Drivers: 57" B.P.: 200 psig

Tubes: 60 x 5½", 264 x 2¼" Grate area: 80.3 sq.ft.

Heating surface: Tubes - 5,178 sq.ft. Superheater: Schmidt

Firebox - 356 sq.ft. Superheater heating

Total - 5,534 sq.ft. surface: 1,558 sq.ft.

Weight in working order: Leading truck - 25,990 lbs.

Driving wheels - 325,040 lbs.

Trailing truck - 58,210 lbs.

Total weight in working order - engine & tender: 655,040 lbs.

Light weight of engine on driving wheels: 288,000 lbs.

Total engine weight: 360,000 lbs. Factor of adhesion: 4.05

Tractive effort: without booster, 80,265 lbs.

with booster, 91,735 lbs. Haulage rating: 80%-B

Walschaerts valve gear, Sewell flange lubricators, GRISCO main driving boxes, flangeless main drivers.



# **WILLIAM R. CASEY**

## ***The Forgotten Engineer***

John Beswarick Thompson.

**T**ime has dealt kindly with the builders of Canada's early railways. The names of Kefer, Gzowski, Shanly and Fleming did not die after the men but are remembered within the engineering profession and by many ordinary Canadians.

Yet the civil engineer who supervised the construction of Canada's first public railway, acted as a consultant in the planning of our second completed line and was once honored by the Governor of British North America, has been all but forgotten.

His name was William R. Casey. Born in New York in 1808, he began his career in the early 1830s as a sub-assistant engineer in the construction of the Philadelphia, Germantown & Norristown Railroad. He later moved in the same capacity to the Croton Water-works project in New York and then served as assistant engineer on the Long Island Railway. Casey first came to Canada in the spring of 1834, having been appointed assistant engineer supervising the construction of the Chambly Canal near Montreal. (1)

In November 1834 the Champlain and St. Lawrence Rail Road, promoted to link St. Johns on the Richelieu with La Prairie on the St. Lawrence, was formally organized and the fledgling company began casting about for suitable personnel. At about the same time, work on the Chambly Canal ceased for the winter and Casey became free to apply for a position on the railway. Having already worked for two American railroads, his credentials were impeccable. Accordingly, at the age of only twenty-six, he was appointed chief engineer of Canada's first public railway. It was no mean appointment, for, contrary to American practice, the Company did not intend to hire a contractor to build the line but planned to complete it alone using day-labor.

W.R. Casey was thus in full charge of construction. Casey began his work immediately. Within the month, he and a surveyor had produced a map and section of the line. He spent the winter in Montreal "occupied in giving the information and specifications necessary to enable the Committee to contract, without loss of time, for the timber, iron and materials". In May, 1835, the staking-out of the line was started; one month later, the grading of the road was begun. By November, Casey was able to announce "the completion of the fencing, graduation (sic), masonry, bridges, the large wharf at Laprairie and the frames of the station houses". All this had been accomplished, he proudly reported, "in a degree of harmony.....seldom witnessed on public works". (2). The prevailing 'esprit de corps' was due in no

We the undersigned hereby certify  
that this Map corresponds with the Book  
of reference to which it is attached.

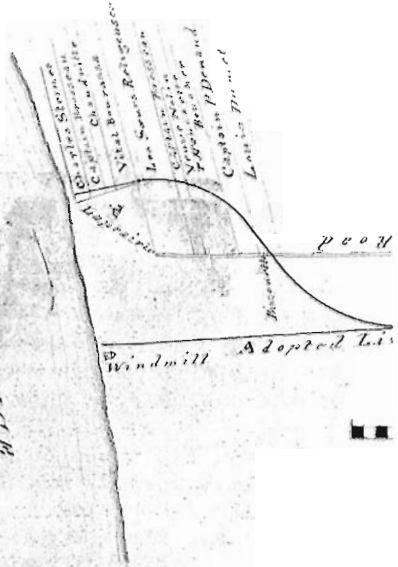
St. Johns November 20. 1834.

William R. Casey

Civil Engineer

Hiram Corey  
Land Surveyor

W. R. Casey  
St. Lawrence RANCH



MAP & SECTION OF THE INTENDED CHAMPLAIN AND ST. LAWRENCE RAIL ROAD AS levelled and surveyed by William R. Casey, Civil Engineer and Hiram Corey, Land Surveyor, November, 1834. The deviation from the straight-line approach is obvious and can be seen in 1972 in La Prairie, where the Canadian National Railway's industrial siding runs down to the river and then turns about 500 feet to the northeast to the landward end of the original pier in the small park where the 1936 monument commemorating the centenary of the railway is located.

Public Archives of Canada.

small way, according to the directors of the company, to Casey's "tact and attention" (3). Certainly, in a period of increasingly bitter French-English relations, Casey's attitude towards his French-speaking workmen was refreshing.

Of them he wrote:

"The Canadians formed by far the greater portion of the laborers and maintained their character for behaving with a degree of order and good nature, when working together in numbers, unequalled by any other people" (4).

In the winter of 1836 Casey returned home to New York, stopping en route at Troy, where he purchased four passenger cars for the company. He undertook a similar assignment the following winter when he travelled to Philadelphia to select a second locomotive for the rail-

way. In both cases his judgement proved sound. The cars were used for many years on the line; the locomotive, the "Jason C. Pierce", endured until the 1880s.

During the spring of 1836, work began on the final stage of construction, the laying of the track and superstructure. Casey used the American method of construction, known as the "cheap principle", which relied on the extensive use of wood and half-inch-thick iron strap rails. Such a line was admittedly less substantial than the British type which was laid with solid iron rail; however, up to 1848, when the last of Casey's original work was replaced, no serious accidents had occurred on the railway due to track failure. At least part of the credit for this record of safety must be given to the competence of the engineer-in-charge.

Finally, on 21 July 1836 the Champlain and St. Lawrence was officially opened by the Governor of British North America. Casey's work elicited praise from the dignitaries who travelled along the line on the first run. One such observer wrote:

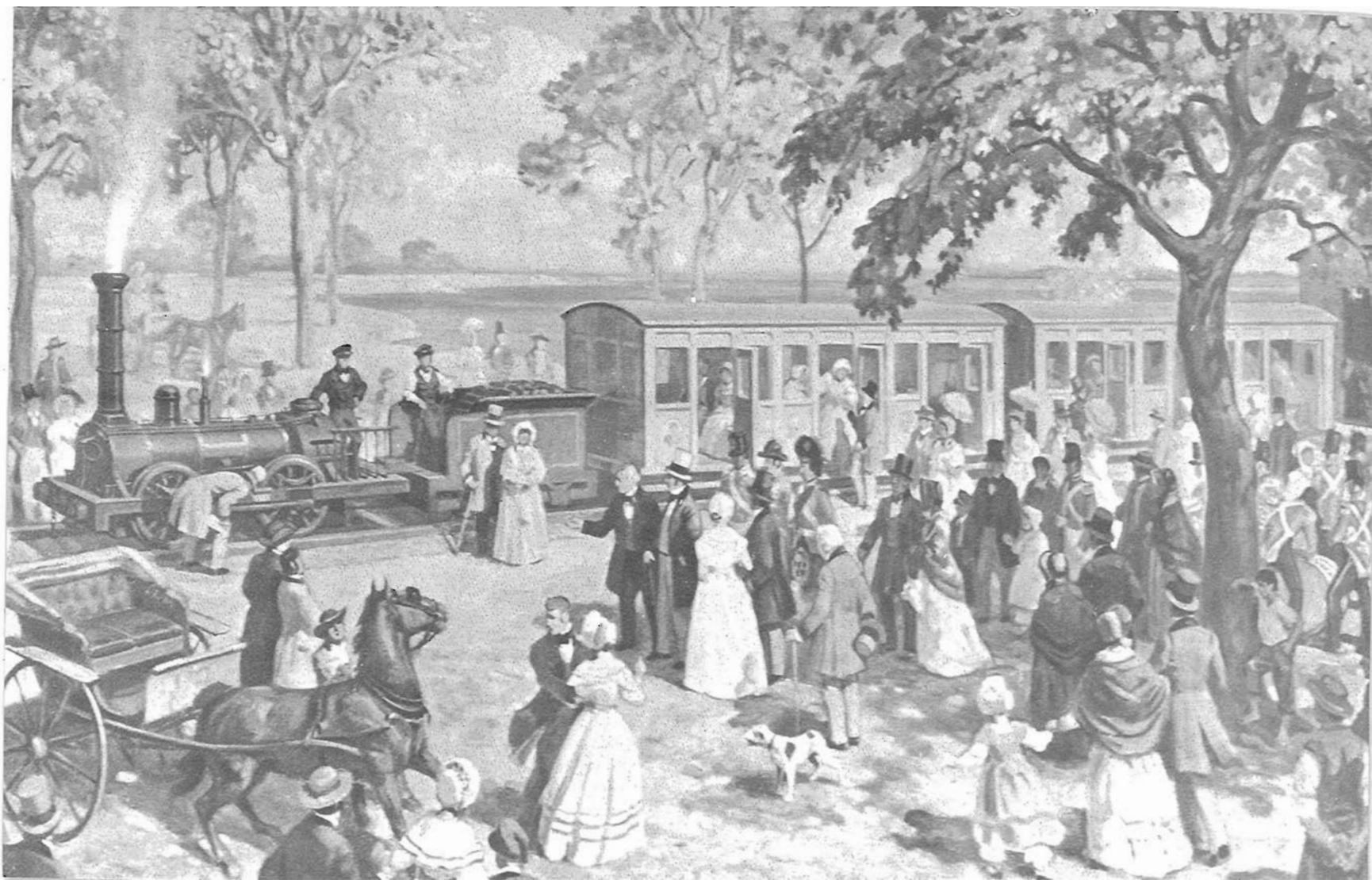
"Certainly too much praise cannot be bestowed upon the conductors for the neat, orderly, and first-rate manner in which the whole has been completed. To be sure, the ground offered every advantage, but we in Canada are so accustomed to see things done ill, that a work well done is a miracle" (5).

To mark the inauguration of service on Canada's first public railway, elaborate ceremonies were held at its eastern terminus of St. Johns. Among those honored was William Casey. The directors praised his work; the men presented him with a gold medal in appreciation of his "gentlemanly conduct towards them". But the greatest of tributes was paid him by the Governor himself. He proposed a toast to Mr. Casey, "whose abilities had been extolled by his employers and whose conduct had been approved of by those under his control" (6).

Because there were no other railways about to be built in the country following the completion of the Champlain and St. Lawrence, Casey returned to New York. He paid occasional visits north during the next few years, making "numerous surveys.....in various parts of Upper and Lower Canada," but it was not until 1846 that he had the opportunity of returning to Canada to work on a railway. In that year, the newly chartered Montreal and Lachine Railway invited Casey, whose reputation had remained high, to plan their line. While at work on the project that summer in Montreal, he fell ill with tuberculosis. Tragically, on the sixth of August he died. He was only thirty-eight (7).

➔ JULY 21, 1836, WAS THE FIRST DAY OF OPERATION ON WILLIAM R. CASEY'S Champlain & St. Lawrence Rail Road. This painting by Adam Sherriff Scott, the property of the Royal Bank of Canada and reproduced here with their permission, portrays the artist's concept of that important day. From a print in the Public Archives of Canada.







Ironically, Casey's death occurred on the eve of the first Canadian railway boom. With his experience, there is little doubt that his services would have been sought after by other railways. With his reputation, there is a great likelihood that he, like other engineers of that era, would still be remembered today. Instead, his remains lie unmarked somewhere on the mountainside of Montreal, and his name has been forgotten.

References:

- (1) Journals of the Legislative Assembly, 1842, Appendix Z.
  - (2) Chief Engineer's Report, 1835, cited in R.R. Brown, "The Champlain and St. Lawrence Rail Road", Railway and Locomotive Historical Society, Bulletin 39, 1936, p. 18.
  - (3) Report of the Committee of Management, cited in Brown, p. 16.
  - (4) Chief Engineer's Report, cited in Brown, p. 20.
  - (5) THE VINDICATOR, (Montreal) 26 July 1836.
  - (6) THE MORNING COURIER (Montreal) 23 July 1836.
  - (7) THE GAZETTE (Montreal) 11 August 1846.
- See also OF MANY THINGS, E.A. Collard, THE GAZETTE (Montreal), 30 May 1970.

The above "General Paper" is reprinted from the ENGINEERING JOURNAL, January/February, 1971 with the kind permission of the Engineering Institute of Canada and the Editor, ENGINEERING JOURNAL, and the Author, Mr. John Beswarick Thompson, Staff Historian, National Historic Sites Service, Ottawa, Canada.



LOOKING STRAIGHT EAST ALONG THE PRESENT-day right-of-way of Mr. Casey's line - the Champlain and St. Lawrence Rail Road - across the fields from the Ruisseau des Barbottes to Côte de la Bataille and the ridge west of the Little River at L'Acadie. S.S. Worthen's photograph was taken 132 years after the opening of the railway in 1836.

A PAINTING BY ADAM SHERRIFF SCOTT, R. C.A., Showing the opening of the Montreal & Lachine Rail Road on November 19, 1847. The station is Montréal's first at St-Bonaventure Street, Chaboillez Square. The engine is a Norris-Philadelphia 4-4-0, at a later date lost in the swamp to the west of Tanneries Village (St-Henri) in 1848. Photo courtesy CNR.

# WAYBILLS

Editorial Staff

CANADIAN RAIL

AUGUST, 1972.

## THE PICTURE OF THE JAMAICAN RAILWAY COMPANY'S

1000 hp. unit pictured on page 24 of the January, 1972 issue of CANADIAN RAIL should have been accompanied by the following information: Six units, road numbers 111-116 were built by MLW Industries in October, 1971 for the JRC. The export model number is DL-532B and the units were painted in a colorful two-tone blue and white, with black underframes. Small by North American standards, they appear to be narrow-gauge because of the smaller loading gauge permitted on the JRC. The DL-532Bs ride on 2-axle trucks, are fitted with knuckle couplers and standard airbrake and multiple-unit control equipment.

The prime mover is a 1200 hp. six-cylinder ALCO-designed engine, which has also been used in recent years to power export units for the Indian State Railways, the East Pakistan Railways and Canada's narrow-gauge giant, the White Pass & Yukon Route. S.S. Worthen.

## MAY IS THE MERRY MONTH OF SPRING FLOWERS

and red-coated R.C.M.P. constables in front of the Peace Tower of the Parliament Buildings at our Nation's Capital - Ottawa. May is also (usually) the merry month of the Association's spring excursion. This year, the trip was even more successful than usual, principally because of the efforts of the staff of Radio Station CJAD - Montréal 800. On May 27, Messrs. Angus, Leach and Company arranged to transport some 550 people in 9 passenger and 1 baggage cars, hauled by two "interesting" Canadian National Railways units. The exciting excursion was honoured by the presence of twenty-eight (28) celebrities from Montréal's CJAD, headed by radio personality Andy Barrie - who is an Honorary Member of the Association. Post-trip comments allow as how it was one of the best ever, and hopefully it will be repeated - with variations - next year! Editorial Staff.

## THE GOOD CITIZENS OF GIMLI, MANITOBA -

a town 60 miles north of Winnipeg on the west shore of Lake Winnipeg - almost lost their cool completely when Canada's Federal Government closed the local Canadian Armed Forces airbase in that town. The 1,000-man base with its \$ 7 million annual payroll was the town's biggest business and a gold mine for local merchants. Moreover, 200 of Gimli's 2000 citizens were gainfully employed there.

Recovering from the initial shock, the citizens of Gimli and the Government of Manitoba launched a campaign to convert the vacant base into an industrial park within 5 years. Wonder of wonders, the campaign is succeeding! Recently, Canadian National Railways assisted by establishing at Gimli its first training centre for diesel-electric locomotive engineers. Scheduled to open June 5, the centre provides 7 to 12-week courses for CN personnel to ensure a continuous supply of qualified unit engineers. For the 1973 school year, CN proposes to purchase a locomotive simulator, the first of its kind in Canada. A source for teachers for the new school has not yet been established. Editorial Staff.

## PRECISION NATIONAL CORPORATION.....

well-known diesel-electric unit leasing company, has purchased the entire fleet of Canadian Bellequip Limited, consisting of 6 GP7s and 18 GP9s, for a total of 24 units. Since this acquisition brings to a considerable total the number of units owned by PRENCO, it was rumored that the company was seriously considering the construction of a half-million dollar operating headquarters and maintenance and repair base, housed in a two-level, multiple-track diesel shop on the property in Dorval, Québec, formerly owned by H.J.O'Connell Construction Company, off CP RAIL's main line adjacent to Dorval Station.

The proposal allegedly was temporarily deferred because the present owner of the property wanted a 15-year lease and, although any diesel-electric unit leasing company's future looks good at the present time, in 15 years the electrification of CP RAIL from Calgary to Vancouver could be complete, thus releasing a considerable number of units for use in the east.

Nevertheless, PRENCO is busily repainting the ex-Bellequip, ex-QNS&L units. S.S.Worthen.

## AROUND MONTREAL IN THE MONTH OF MAY AND LATER.....

diesel spotters had a merry time, entertained by the sight of units from nearly a baker's dozen of different railways. Canadian National was using search unit No. 4215 from CP RAIL - classed by CN as an MR24 - while nearby 6 new SD40-2s for the Québec, North Shore & Labrador Railway (Nos. 233, 234, 237, 238, 239, 240) waited for a ship to take them to Sept-Iles, Québec.

On an adjacent track were QNS&L retired GP9s Nos. 140, 141 and 161. Then there was ex-Union Pacific Railroad DL640 No. 675, now numbered MLW 675, back from the Roberval & Saguenay Railway, now that the two M420TR units have been delivered.

More obvious among the diesel-electric units was 4-8-4 northern-type steam locomotive No. 6218, en route from Christie Street, Toronto to the Canadian Railway Museum at Saint-Constant, Québec.

Later, Number 6218 was taken to Point St. Charles Shops and stored outside, waiting the advent of Number 6060 from Jasper, Alberta.

In June, torrential rains and severe flooding in southern New York State severely damaged the main lines of both the Lehigh Valley Railroad and the Erie-Lackawanna. Solid freight trains, hauled by a very interesting variety of power, were routed east and west on CN and CP RAIL main lines to Niagara Falls (Suspension Bridge) and Fort Erie (Black Rock), Ontario. Westbound the E-L trains came on CP RAIL trackage at Delson, Québec, originating in Binghamton, N.Y. and coming north via the Delaware & Hudson and Napierville Junction Railroads. Some trains, routed west via Canadian National, used the old crossover at Rouses Point, N.Y. at about mile 1 on CN's Rouses Point Subdivision, proceeded thence to Cantic and onto the Valleyfield Sub to Coteau and the main line.

Apparently, LV and E-L units and cabooses made the entire trip without change and the trains stopped only to set out bad-order cars and to refuel the units. Some E-L trains were operating as late as July 7. An eastbound E-L 104-car freight with two U-Boats and a GM unit passed the Canadian Railway Museum about 2000 hours. S.S.Worthen.

## IN FEBRUARY, 1972, DIESEL DIVISION.....

General Motors of Canada, London, Ontario, received the largest single export order for diesel-electric locomotives ever awarded to a Canadian manufacturer. 110 units were ordered by Yugoslavia at a cost of \$ 34.5 million, plus \$ 3.5 million in related expenses. The order was for the Zeljeznicko Transportno Preduzece (ZTP), the state railway commission of Yugoslavia. 52 G-16 1800 hp. units were built first, followed by 58 G-26 2000 hp. units in March-July, 1973. The units will be used on four divisions of ZTP located in Zagreb, Beograd, Sarajevo and Skopje. Pierre Patenaude send the following pertinent information:

- Order No. C-352 Model G-16 1800 hp. Number: 15  
B/N A2709 to A2723, inc. Road nos.: 661-401 to 661-415, inc.
- Order No. C-353 Model G-16 1800 hp. Number: 37  
B/N A2724 to A2760, inc. Road nos.: 661-242 to 661-278, inc.
- Order No. C-354 Model G-26 2000 hp. Number: 58  
B/N A2761 to A2818, Inc. Road nos.: 664-001 to 664-058, inc.

## THE SUMMER SCHEDULE OF THE "PRINCESS OF ACADIA".....

of CP RAIL lists three sailings each way daily, writes Mr. John Whitmore of Windsor, Nova Scotia. The automobile rate, one way, has been increased to \$ 15 while the passenger fare is now \$ 3.50. In order to connect with the revised sailings, the Dominion Atlantic Railway's DAYLINER now leaves Kentville for Halifax before 0500 hours, returning at about 0700 hours. DAR trains are now dispatched from Saint John, N.B. and orders are issued using Eastern Standard Time, so that the watches of DAR train crews are two hours behind local time.

## DESPITE THE WORST MAIL DELIVERIES.....

in human memory, Canada's Postmaster General Côté recently announced a series of pictorial designs which will appear on the books of 8¢ stamps, sold in vending machines.

There will be a total of ten designs, on the theme of historic methods of mail delivery in Canada. There will be an early Canadian rural post office, a four-wheeled "Royal Mail" wagon, a stage-coach of the 1820s, the steamboat "Eastern City" - the latter carrying the mail between Saint John, N.B. and Boston, Mass., U.S.A. in 1855.

Very conspicuous by its absence is a portrayal of a railway RPO car, which would certainly antedate the "Curtis aircraft for airmail of 1918" and a "Model T for conveying mail in 1924". Also omitted was any mention of the Royal Mail streetcar which, as nearly everyone knows, carried the mail in the early twentieth century from Ottawa Union Station to the main Post Office in our Nation's capital city - where Mr. Côté has his office!

## AMTRAK SERVICE FROM MONTREAL TO NEW YORK,

like steam locomotives on Canadian National Railways, was thought to be safely "laid to rest". Neither project is dead. Early in the summer, non-railroader business executive Joseph V. MacDonald of New York began to beat the drum for a reinstatement of AMTRAK service up the Connecticut River Valley, via Penn Central, Boston & Maine and Central Vermont. The Governors of five of the New England states got

together to form a committee to see what could be done. The State of Vermont was the scene of the organization of the Vermont Railroad Passengers Association.

In the middle of all this drumbeating and fanfare came a surprise announcement from Mr. Jay Wulfson of the Vermont Railway - successor to the Rutland Railroad between Burlington, Rutland, Bennington and the connection with the Boston & Maine at White Creek, New York.

Mr. Wulfson declared that AMTRAK should establish passenger service up the Connecticut River valley to Bellows Falls, Vermont, and then turn northwest over the Green Mountain Railroad to the population centres of Rutland, Middlebury and Burlington, via the Vermont Railway. "This is where the population is", said Mr. Wulfson. "The largest cities in the State are bypassed on the proposed route via the Central Vermont Railway along the Connecticut River to White River Junction and through Montpelier to Essex Junction".

Mr. Wulfson admitted that it would take about an hour longer from New York to Montréal via his route, because of speed restrictions on the Green Mountain and Vermont Railway tracks. AMTRAK has a minimum acceptable speed of 45-50 miles per hour and Mr. Wulfson claimed the GMRR-VRY route is good for 40-45.

Certainly, it would be an interesting if prolonged ride. And it would include a genuine tunnel on the connecting portion of the Central Vermont, between Burlington Union Station (that was) and Essex Junction - nearly as good as Willsboro on the D&H above Lake Champlain. With more careful planning, the proposed route might include a sojourn on the St. Johnsbury & Lamoille County, which belongs to Mr. Samuel Pinsley of Boston and has a genuine restored covered bridge near Walcott, Vermont.

As Mr. Wulfson quite correctly concludes, "Anybody in a rush wouldn't take the train." But it is just barely possible that Mr. Wulfson has overlooked Interstate Highways 89, 91 and 93 in Vermont, which form a first-class right-of-way for Vermont Transit and other private (family) transport companies.

Sincere in his conviction, Mr. Wulfson has recommended his proposed route to AMTRAK President Roger Lewis, as well as Senators Aiken and Stafford and Governor Davis of Vermont. After all, if TURBO can be transferred to a run terminating in Parkersburg, West Virginia, there's no real reason why AMTRAK can't establish passenger service from New York to Montréal - via the Green Mountain State!

#### QUEBEC, NORTH SHORE & LABRADOR RAILWAY'S

twenty new units from Diesel Division, General Motors of Canada, London, Ontario, were delivered on the following dates, as reported by Pierre Patenaude:

April 11, 1972	Road Nos. 221-228	B/N A2613-A2620
April 17, 1972	229-234	A2621-A2626
April 25, 1972	235-236	A2627-A2628
April 27, 1972	237-238	A2629-A2630
April 29, 1972	239-240	A2631-A2632

The order for the Ferrocarriles Nacionales de Mexico for ten SD40s was Order C-346. Delivery was completed February 25, 1972 and unit serial numbers were A2603 through A2612.

## GENERAL DATA

Model Designation . . . . . SD40-2  
 Locomotive Type . . . . . (C-C) 0660  
 Locomotive Horsepower . . . . . 3000  
 Diesel Engine  
   Model . . . . . 645E3  
   Type . . . . . Turbocharged  
   Number Of Cylinders . . . . . 16  
   Cylinder Arrangement . . . . . 45° "V"  
   Cylinder Bore And Stroke . . . . . 9-1/16" x 10"  
   Operating Principle . . . . . 2 Stroke Cycle,  
     Turbocharged, Unit  
     Injection, Water Cooled  
   Full Speed . . . . . 900 RPM  
   Idle Speed . . . . . 315 RPM  
 Main Generator Model . . . . . AR10 - D14  
   Traction Alternator (Rectified Output) . . . . . AR10  
     Number Of Poles . . . . . 10  
     Nominal Voltage (DC) . . . . . 600  
     Frequency (At 900 RPM) . . . . . 75 cps  
   Companion Alternator . . . . . D14  
     Nominal Voltage (AC) . . . . . 215  
     Number Of Poles . . . . . 16  
     Frequency (At 900 RPM) . . . . . 120 cps  
 Auxiliary Generator Voltage (DC) . . . . . 74  
   Rating - . . . . . 10 KW  
 Traction Motors  
   Model . . . . . D77  
   Number . . . . . 6  
   Type . . . . . DC, Series Wound  
     Axle Hung  
 Driving Wheels  
   Number . . . . . 6 Pair  
   Diameter . . . . . 40"  
   Tread . . . . . Tapered  
 Air Compressor  
   Type . . . . . 2 Stage  
   Number Of Cylinders . . . . . 3  
   Capacity (At 900 RPM) . . . . . 254 Cu. Ft./Min.

DELIVERED FROM THE DIESEL DIVISION, GENERAL MOTORS OF CANADA, LIMITED at London, Ontario, on 25 February, 1972 were ten units for the NdeM (Ferrocarriles Nacionales de Mexico), Order No. C-346, B/N A2603 to A2612, road numbers 8576 to 8585.

The first "Dash Two" units produced by the Diesel Division were those for Order No. C-344, B/N A2564 through A2587, road numbers 5565 through 5588, for CP RAIL, delivered in February-March, 1972.

Next following was Order No. C-347 for the Québec, North Shore and Labrador Railway, B/N A2613 through A2632, road numbers 221 to 240. Options on these units, delivered between April 11 and 29, 1972, included extra-capacity fuel tanks, hand-brake wheels on the deck stanchions at the left rear and buffer pads on all four corners of the units. The buffer pads are used for moving the units through the ore unloader by means of loader pusher arms. DD-GMC DieselLines





Air Compressor Cooling . . . . . Water  
 Lube Oil Capacity . . . . . 10-1/2 Gal.  
 Storage Battery  
 Number Of Cells . . . . . 32  
 Voltage . . . . . 64  
 Rating (8 Hour) . . . . . 420 Amp Hr.  
 Supplies  
 Lubricating Oil Capacity . . . . . 243 Gal.  
     With Deep Sump Oil Pan . . . . . 395 Gal.  
 Cooling Water Capacity . . . . . 254 Gal.  
 Fuel Capacity (Basic) . . . . . 3200 Gal.  
     With Extra Capacity . . . . . 4000 Gal.

**Maximum Speed Options With Gear Ratio**

Gear Ratio	Top Speed* MPH	Minimum Continuous MPH
62:15	65	11.1
61:16	70	12.0
60:17	76	13.0
59:18	82	14.0

\*Based on rated RPM of traction motors.

**Major Dimensions**

Width Over Cab Sheeting . . . . . 10' 0"  
 Width Over Basic Arm Rests . . . . . 10' 4"  
 Height, Top Of Rail To Top  
     Of Cooling Fan Guards . . . . . 15' 7-3/16"  
 Distance Between Coupler Faces . . . . . 68' 10"  
 Distance, Pulling Face Of  
     Coupler To Truck Centerline . . . . . 12' 8"  
 Distance Between Bolster Centers . . . . . 43' 6"  
 Minimum Curve Negotiation Capability  
 193 Ft. Radius - 30° Curve -  
     Single Unit With Single Shoe Or Clasp Brakes.  
 262 Ft. Radius - 22° Curve -  
     Two Units Coupled.  
 359 Ft. Radius - 16° Curve -  
     Unit Coupled To Standard 50 Ft. Box Car.



### THE PROVIDENCE AND WORCESTER RAILROAD

May be the newest railroad in the United States and may be the first United States line to import motive power from Canada, if present negotiations are successful. The line from Providence, Rhode Island to Worcester, Massachusetts once formed part of the New Haven. The attempt to lease back the railroad from the New Haven was rejected by the New Haven's trustees and subsequently by the Penn Central when the NH became part of the latter corporation. However, a considerable amount of legal manoeuvring caused the Interstate Commerce Commission to approve the lease-back. The question now is: will PC appeal? If it does and if the appeal is unsuccessful, the Providence & Worcester intends to commence operation, using six RS3s from MLW Industries. Newer power - perhaps M42OTRs - will thereafter be ordered by the P&W, and these units would be the first ever exported from Canada to the United States.

### WHILE CANADIAN NATIONAL RAILWAYS HAVE ON LEASE

forty 1,750 hp. GP9s from the Chesapeake & Ohio Railroad, it is interesting to note - and a challenge to the statisticians - that a variety of units have come and gone. Pierre Patenaude and Barry Bigelow supplied the details:

<u>C&amp;O Road Nos. assigned Montréal Yard</u>				<u>C&amp;O Road Nos. assigned Calder Yard</u>				<u>Other</u>
5922	6004	6041	6150	5934	6025	6151	6172	5919
5952	6027	6042	6155		6045	6153	6179	5924
5955	6030	6050	6166		6048	6157	6186	
	6033	6051	6183		6095	6161	6194	6164
	6036	6054	6184			6163	6196	
	6037		6189			6168	6197	6205
			6192			6169	6198	
		(21)				(19)		(4)

#### Explanation of "Other":

Units Numbers 5919 & 5924 were trailing units in a freight wreck in northern Ontario. Returned to C&O for repair.

Unit Number 6205 was refused and returned to the C&O, reason not given.

Unit Number 6164 suffered fire damage in the electrical control system and was returned to C&O.

No. 6027 replaced No. 5919

No. 6030 replaced No. 5924

No. 6033 replaced No. 6164

No. 6198 replaced No. 6205

### THE NORTHERN ALBERTA RAILWAY COMPANY OF EDMONTON -

not to be outdone by its near northern neighbour, the British Columbia Railway - is continuing its expansion programme with the construction of a new half-million-dollar headquarters building at its Dunvegan Yards in northwest Edmonton.

The new building will enable centralization of offices, previously dispersed in several locations around Edmonton and will increase efficiency and economy. The present-day NAR's northeastern

main line serves the vast resources of the Athabasca oil sands, while the northwest main line runs to the Peace River area and a junction with the Great Slave Lake Railway, serving the mines at Pine Point on Great Slave Lake and the land and water transportation routes to the Northwest Territories and Alaska. R.A.Husbands.

#### MONTREAL URBAN COMMUNITY TRANSIT COMMISSION

has awarded a contract for 100 motor coaches to Diesel Division, General Motors of Canada, Limited. These units will be similar to the 30 buses recently completed by DD-GMC for Toronto. Production is tentatively scheduled for early 1973. Other large orders recently placed include 50 buses for Ottawa and 35 for Edmonton. To be delivered before the end of 1973 are buses for Sudbury, Ont., Victoria, B.C., Red Deer, Alta., Vancouver, B.C., Calgary, Alta., Lethbridge, Alta., Hull, Qué., Guelph, Ont. and Cité de Laval, Qué.

#### FORMER CANADIAN PACIFIC RAILWAY COMPANY 4-4-0,

Number 136, the property of Toronto lawyer Mr. Neil McNish, is said to have been loaned to the Ontario Rail Association Inc. of Brampton, Ontario. In return for the loan, the Association has agreed to restore the locomotive to operating condition and to place it in operation within a period of two years. When the ancient 4-4-0 is once again in revenue service, the initial lease presumably will have to be renegotiated. Due to the premise that the locomotive may operate on portions of Canadian National Railways' trackage, Number 136 will probably be relettered CREDIT VALLEY RAILWAY, which is the name selected for the proposed operation. Editorial Staff.

#### THE CANADIAN TRANSPORT COMMISSION

and the Department of Transport (Canada) finally got around to implementing control of the wholesale closing of Canada's railway stations and their replacement by centralized express, freight and passenger offices - in other words, service centres. Bill C-199 - first reading May 2, 1972 - will oblige the railways to give notice of intention to close a station in advance and to submit an endless amount of data justifying the removal of the station agent, caretaker-agent or caretaker. It also requires a public hearing so that all interested parties may be heard. But who will make the ultimate decision as to whether the station will be closed or not? You guessed it! The CTC - or rather, the Railway Transport Committee. The decision-making process will in all probability take ten times longer than it does now and will require one hundred times the present paper-work. S.S.Worthen.

PIERRE PATENAUDE PHOTOGRAPHED ONTARIO NORTHLAND'S TRAIN 87 - THE Northland - leaving Toronto Union Station, headed by ONR GMD FP7A Number 1517 and CNR MLW FPA4, Number 6761 on May 21, 1972.



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EDITOR S.S. Worthen

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