Canadian Rail

1932 - 1972

CANADIAN RAILROAD HISTORICAL ASSOCIATION, INC. ESTABLISHED 1932

40th. anniversary

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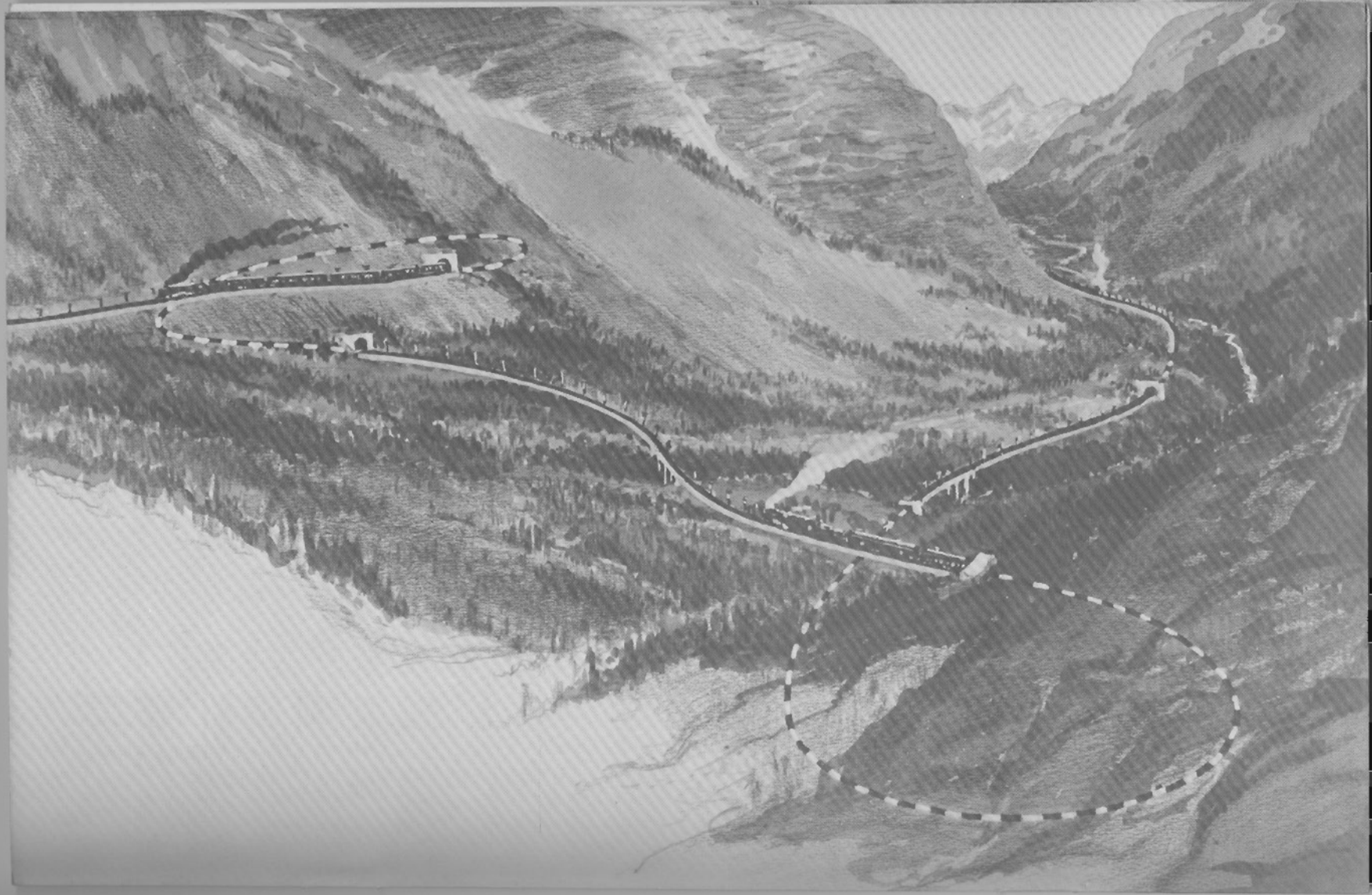
NOVEMBER 1972



ACROSS THE GREAT DIVIDE BY CP Rail

H.W.Elson

Whether it be on the head-end of CP RAIL's crack transcontinental passenger train, the "Canadian", or behind the throttle of a fast freight from Vancouver, British Columbia to Calgary, Alberta, railroading through Canada's Rocky Mountains is always a challenging and ever-changing experience.

The heart of this mountainous country is the 136-mile run over the Laggan Subdivision of CP RAIL, east from Field, British Columbia, up and over the main chain of the Rockies and the Continental Divide to the valley of the Bow River and onward to Calgary, Alberta, where the vast flatness of the prairies begins.

Waiting with the Laggan Sub. crew at the station at Field, the sound of the eastbound train's air-horn, coming up the valley of the Kicking Horse, ricochets echoing from side to side in the valley below and from mountain to mountain above. The new crew for the eastbound train makes a final check of their watches and orders, just as the lead units of the twenty-two car, stainless steel "Canadian" rumbles up to the end of the platform, exactly on time.

Let's ride the lead unit - Number 1400 - of a three-unit lash-up, which includes Number 1902, a powerful "B" unit, with "A" unit No. 1416, trailing. Even before the wheels have stopped turning, the engineer for the eastbound trip calls up to the cab, asking if all of the units are running all right and whether or not there are any problems.

"All okay", is the reassuring answer, as the Revelstoke-based crew climbs down from the cab.

There is still time to look back along the 164-foot length of tuscan red, chrome yellow and grey and to listen to the rhythmic throb of the prime-movers, recalling that these giants cost about $ 100 per horsepower-unit and that there are 4,500 such units combined in the

WINDING DOWN THE "BIG HILL" BETWEEN PARTRIDGE AND YOHO, B.C., CP RAIL westbound freight with a couple of DRF-30a units on the point, was caught for this month's cover on 18 August 1971 by Ronald C. Hill.

FROM THREE-QUARTERS OF THE WAY UP MOUNT OGDEN, YOU CAN LOOK WEST DOWN the valley of the Kicking Horse River to Field, B.C. in the distance. When the artist made this sketch, the tunnel under Cathedral Crags had not been daylighted and no one had heard of the Trans-Canada Highway. But the Lower and Upper Spiral Tunnels were there, as were the two crossings of the Kicking Horse River. Sketch courtesy CP Ltd.

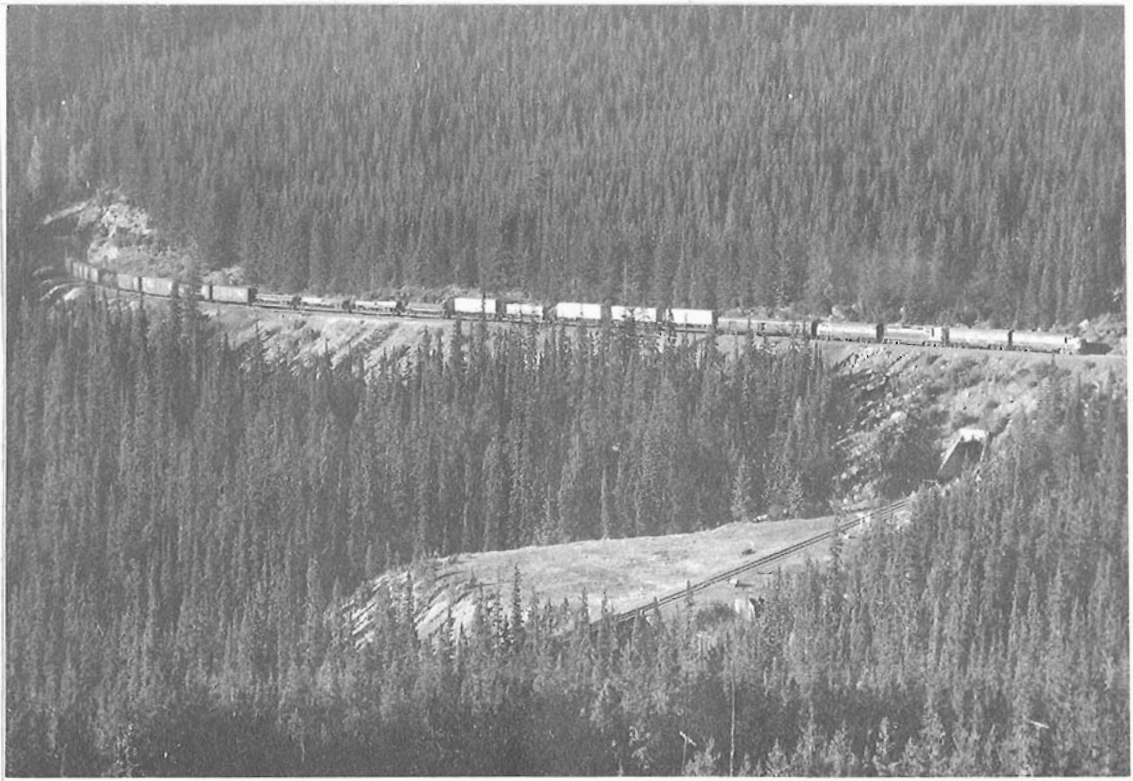
three engines. Although popularly called "diesels" or "diesel units" these engines are basically electric locomotives which carry their own generating plants.

The prime-mover in each of the three power sections is a 16-cylinder, two-cycle, V-type diesel engine, rated at 1,500 horsepower. This prime-mover turns a generator which, in turn, feeds electrical energy to the traction motors on the trucks. These motors are geared to the axles and thus provide power for the train.

Let's reach for the grab-iron and follow the engineer and fireman up the steel side of the unit to the vantage point of the cab, while the airbrake test is being made for the car inspectors along the train. Safety is of prime importance on CP RAIL and the Company does everything possible to guarantee it. Brake tests at Field are obligatory. Moreover, in addition to the engineer, the fireman is on board to check the diesel engines, pick up orders, check signals and act as engineer in an emergency.

In front of the fireman's seat is a control panel, on which a bell rings or a light flashes whenever part of the equipment malfunctions. The engineer explains that the safety devices on the unit include a "dead-man" pedal, which must be depressed by his foot at all times when the diesel unit is operating. Whenever the pedal is released, power is cut off and the airbrakes are applied to stop the

ANOTHER DAY - ANOTHER CP RAIL TRAIN 902 - CLIMBS LABORIOUSLY UP THE SIDE of Cathedral Mountain, past Morantt, B.C., through the avalanche shelter. Units Numbers 5529, 5520, 5554 and 5523 were on the point. W.R. Linley, Secretary of the Ottawa Branch of the Association, took the picture on 11 September 1968.



FOUR UNITS WITH PIGGYBACKS GROWL UP THE "BIG HILL" EAST OF CATHEDRAL, B.C. - Canadian Pacific Railway's Train 902 - on the way to the top of Kicking Horse Pass, Lake Louise, Banff and Calgary. Photo courtesy CPR.

train. Thus,if the engineer were to become ill,the train would still be brought to a stop safely,or slowed down until the fireman could take over the operation of the train.

The cab of the unit is clean,roomy,quiet (as compared to the engine room behind the bulkhead) and weatherproof. A control panel is installed in front of the engineer,with half-a-dozen or so gauges and switches,the latter operating the headlight,marker lights and other accessories on the unit. At the engineer's left is the throttle stand,airbrake controls and track-sanding valve,while on his right is the engine-bell lever. Overhead,within reach,is the air-horn cord.

Soon,the air-whistle sounds twice. The engineer releases the brakes and gradually notches up the throttle. The prime-movers begin their powerful roar and the train starts slowly out of the station, through the yard,on its eastbound run to Calgary. Ahead,the brilliant green light on the CTC signal announces a clear block ahead. In the distance,the track winds up the lower slope of Cathedral Mountain.

To cross the Continental Divide,the "Canadian" must overcome a difference in altitude of 1,265 feet,from the town of Field to the top of the hill at Stephen. The "Big Hill" is 11½ miles of curving , twisting railway and includes some of the most extraordinary mountain scenery in Canada,along what is probably the most notable part of CP RAIL's transcontinental line.

With the diesel engines roaring just behind the bulkhead, the

shiny stainless steel train winds up the hill,in the shadow of Cathedral Mountain,through the avalanche shelters,past the long siding at Cathedral, finally turning towards the lower portal of Spiral Tunnel Number 1 . Just before entering the tunnel, the train rumbles across the bridge over the foaming,rushing Kicking Horse River.

Entering Spiral Number 1, the engineer flips on the headlight switch and explains that in the 2,922-foot long circular bore, the train will turn through 226 degrees and emerge 50.4 feet higher on the side of Mount Ogden,travelling in a westerly direction upgrade towards the lower portal of Spiral Number 2. In the cab, the exhaust fumes from the diesel engines are hardly noticeable,but as the train emerges from the tunnel,the pale blue haze of diesel exhaust hangs over the cars. As the long,silvery train curves around the side of the valley,it passes over the lower portal of the tunnel it has just left and crosses the raging,foaming Kicking Horse River for the second time. Just ahead is the operating point of Yoho, 6.8 miles from Field. About a mile-and-a-half further on,below the parking area and overlook on the Trans-Canada Highway,is the long siding at Partridge, where a westbound freight is often waiting for the eastbound "Canadian".

As the train slowly climbs the 2% grade,the lower portal of Spiral Tunnel Number 2 comes into view. In this 3,255-foot bore under Cathedral Crags and Vanguard Peak - both portions of Cathedral Mountain,10,464 feet high - the "Canadian" will turn through 288 degrees, emerging 55.7 feet higher on the side of Vanguard Peak and on a level with the rushing Kicking Horse River,as it emerges from Wapta Lake, its source.

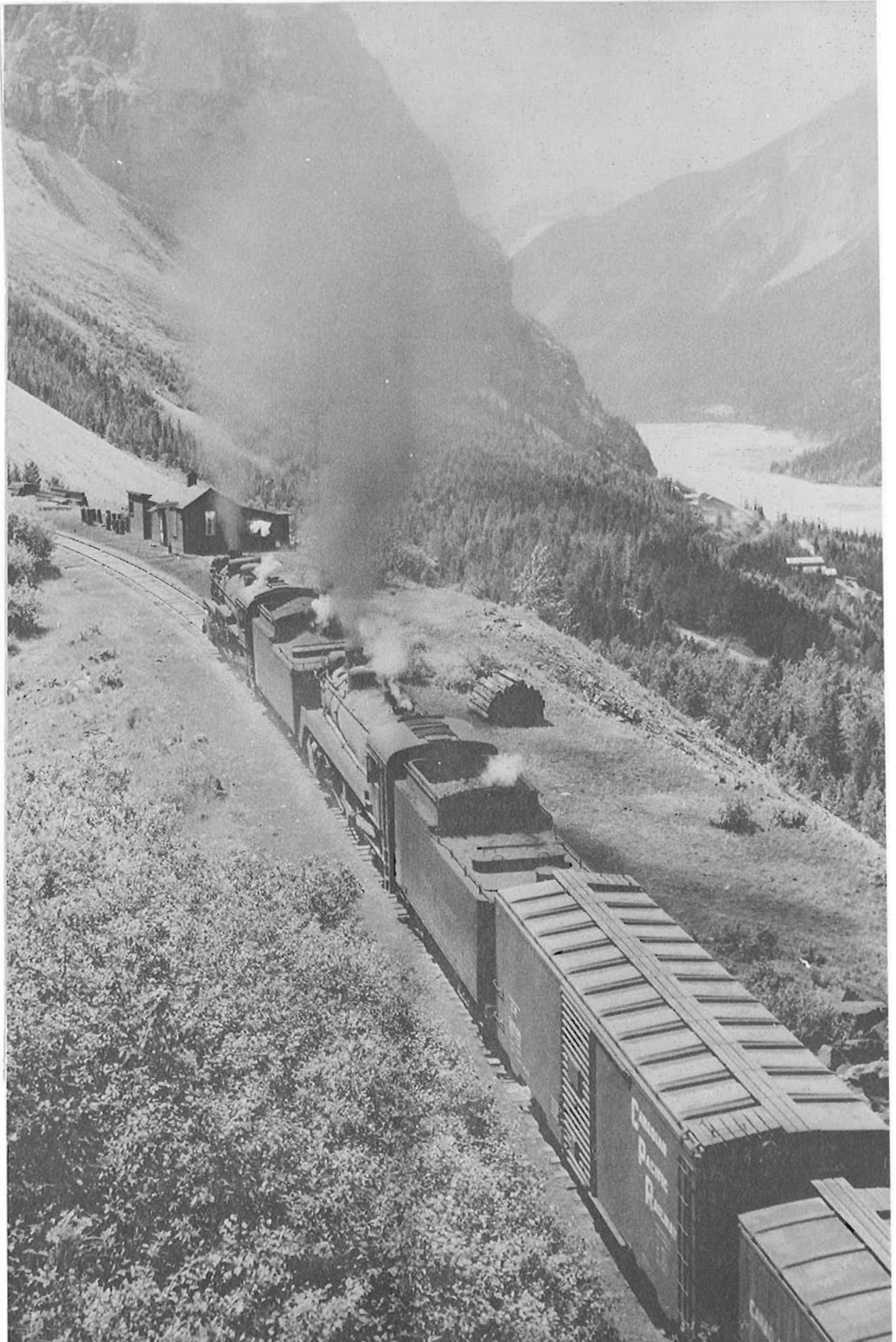
Coming out of the tunnel,there is a magnificent view of the Kicking Horse and Yoho Valleys below. In less than a mile,as the crow is supposed to fly, the "Canadian" has climbed 105.7 feet. But this 11.5-mile stretch of track is true mountain railroading, requiring constant vigilance on the part of the engine crew. CTC signals are invariably checked, as are the warning flags, protecting the maintenance-of-way crews and track inspectors,who are constantly patrolling and working on this section.

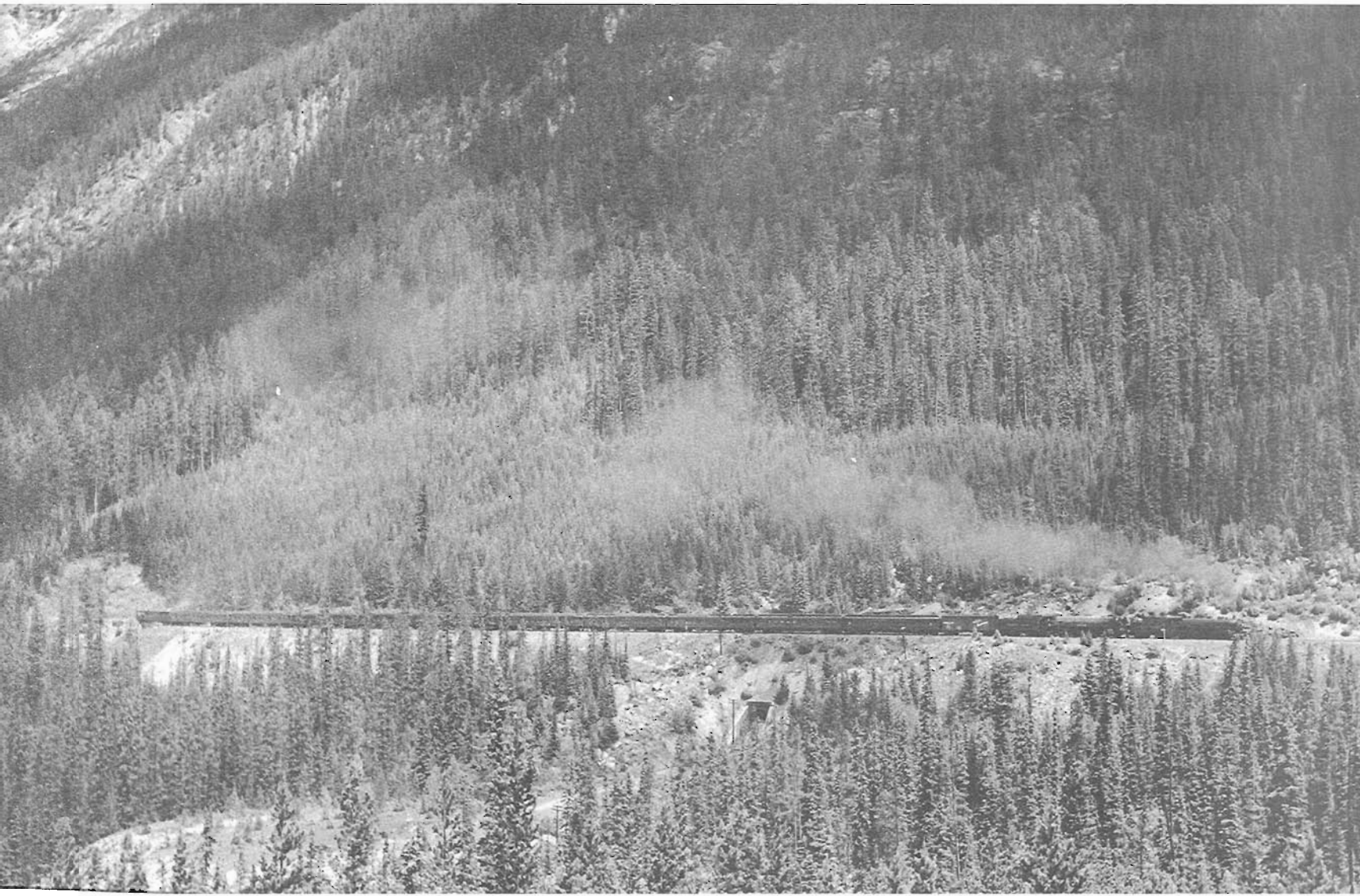
The names of the operating points on the "Big Hill" are of interest. Partridge is named for the railway employee who gave the alarm when,in 1925,a huge rockslide came roaring down the bare slope of Cathedral Mountain. His timely warning cleared the immediate area in time to prevent any loss of life.

THE LAUNDRY ON THE STATION CLOTHES-LINE AT PARTRIDGE,B.C., WASN'T THE same after a Canadian Pacific eastbound freight pounded up the hill to the Upper Spiral Tunnel above Field with engines Numbers 5352 and 5443 on 11 July 1951. The photo is from the E.A.Toohey Collection.

HIGH ON THE MOUNTAINSIDE ABOVE THE KICKING HORSE RIVER, SECOND NUMBER 2, doubleheaded with a 5800-class and Number 5924, passes over the lower portal of Spiral Tunnel Number 1 near Yoho, B.C., on 11 July, 1951. The photo is from the E.A.Toohey Collection of the Association.

THE SECOND SECTION OF CANADIAN PACIFIC RAILWAY'S TRAIN 2, ENGINES NUMbers 5811 and 5927, works up the grade to the Upper Spiral Tunnel near Yoho, B.C., on 10 July 1951. The photo is from the E.A.Toohey Collection.


Canadian Pacific Rail




CANADIAN PACIFIC

Suddenly, the engineer interrupts the conversation to point out several Wapiti elk at the edge of the woods. He can tell you about the time when a train was forced to come to a stop to avoid killing several of these beautiful animals. Because this area is in Yoho National Park, the elk are protected from hunters and they seem to know it!

Soon, the train rumbles slowly past the site of the old station and wye at Hector, which used to be the "top of the hill" in the days before the Spiral Tunnels. As first constructed in 1882-83, the line between Field and Hector climbed steeply up a 4%-plus grade, trains requiring up to six steam locomotives to make the climb. The line was relocated in 1907-08, the Spiral Tunnels were driven and today, the Trans-Canada Highway occupies parts of the original line.

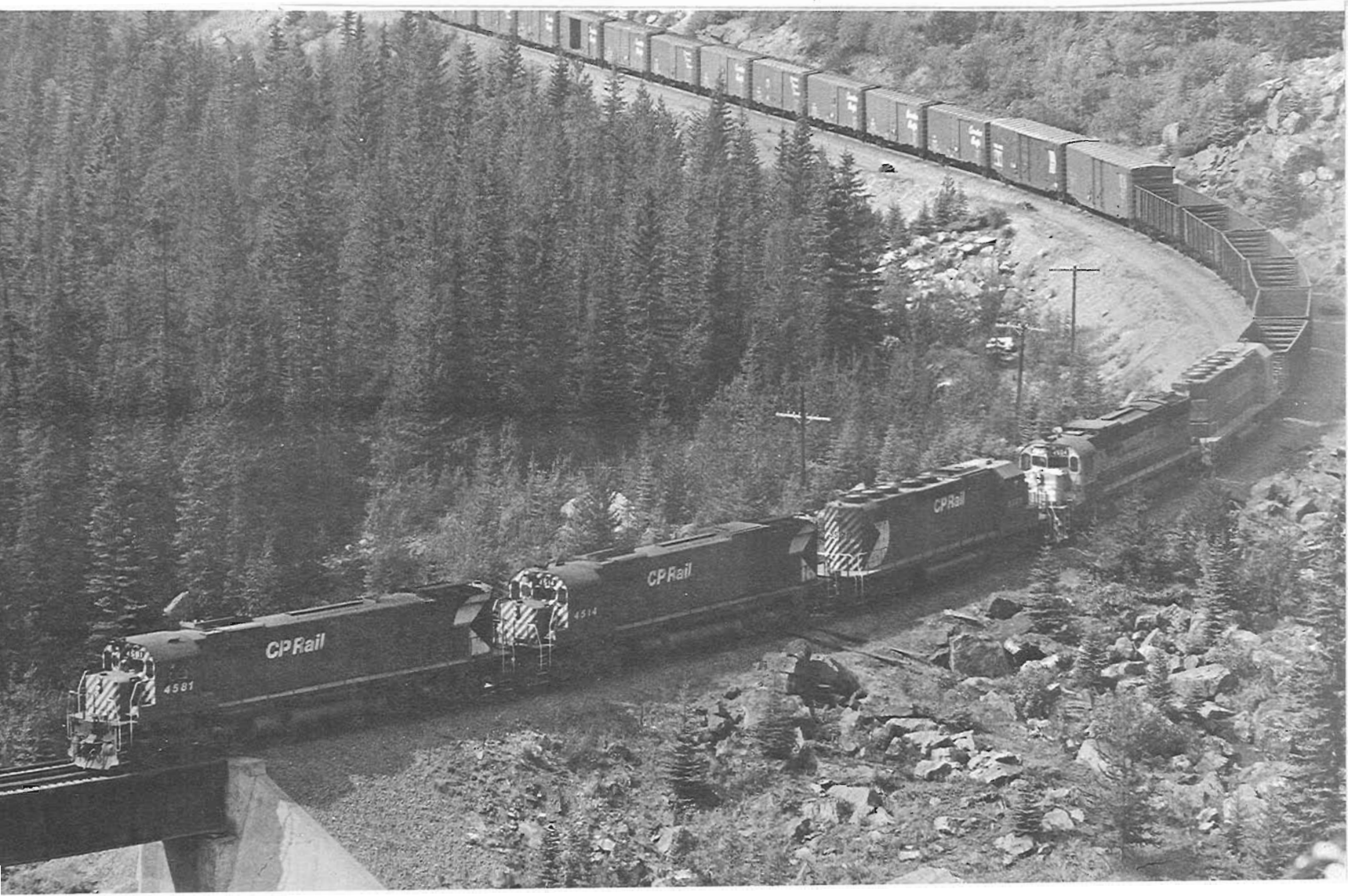
The station at Stephen, now demolished, used to stand 219 feet west of the Continental Divide, which is also the boundary of Banff and Yoho National Parks, at an altitude of 5,399 feet, the highest elevation on CP RAIL. To the right, through the trees, it is sometimes possible to catch a glimpse of the massive wooden arch over the old highway, which marks the "Great Divide" and the boundary between British Columbia and Alberta. Through (or under) this wooden arch runs a little brook, which divides some distance further on into two tiny streamlets. One of these turns westward to flow into Wapta Lake and the Kicking Horse River, finally reaching the Pacific Ocean through the mighty Columbia River. The other rivulet turns east to join the Bow River and reaches the Atlantic Ocean through the South Saskatchewan River and Hudson's Bay.

From an altitude of 5,332 feet at Stephen, the "Canadian" begins to descend the 1.8% grade towards Lake Louise and Banff. Using the dynamic braking system, the engineer controls the speed of the train to the permitted maximum. At the top of the grade, the dynamic brake system is selected on the throttle stand and the traction motors become generators, the energy required to turn them holding back the train. The power produced is dissipated through resistance grids, located in the roof of each unit.

Minutes later, the station at Lake Louise appears in the distance. The train has descended only some 280 feet from Stephen.

"Red board!" calls the fireman and crosses to the engineer's side to lean out the cab door to pick up the order hoop, held aloft by the operator on the station platform. There are no extraordinary instructions to the crew of the "Canadian" and after the station stop, the train will proceed onward to Calgary.

IT TAKES A FEW UNITS TO BOOST FREIGHT TRAINS OF EMPTIES AND LOADS OF British Columbia forest products up the hill at Field, B.C. and over the summit of Kicking Horse Pass, through the Spiral Tunnels. Here is an eastbound CP RAIL freight on the middle level - with an MLW M-630 on the point - about to cross the Kicking Horse River - for the second time - on 15 August 1971. Photo was taken by Ronald C. Hill.


CP Rail
4581
CP Rail
4514
CP Rail

BY 1968, PARTRIDGE, B.C. WAS JUST A MILE-BOARD WHEN SECOND 901 WESTBOUND came down the hill, headed by units 8652, 4447, 4445 and 8631. W.R.Linley was there to take the picture on 11 September 1968.

There is a brief stop at Lake Louise station to entrain and detrain passengers for the Chateau Lake Louise, before continuing the run down the Bow River valley to Banff, through Banff National Park. Now and again, trackside signs point to the high mountain peaks, telling the passenger their names. It is a comfortable ride through beautiful mountain scenery, yet no matter how scenic the country may be, the crew is constantly on the alert, but not so preoccupied as not to be able to wave a greeting to the sectionmen patrolling the right-of-way or to hikers on the mountain trails.

Castle Mountain, now named Mount Eisenhower, is a well-known landmark. In its shadow, we can see the westbound "Canadian" waiting in the siding at Massive for us to pass on the main line. Our train slows, to pass Train 1 and members of the crew wave a greeting from the open vestibules. As the rear of our train clears the east switch, the speed begins to increase on the descending grade to Banff. Banff is a well-known and important stop for the "Canadian" east and westbound and, while passengers are alighting and boarding, the crew has the opportunity to check around the diesel units, before starting on the last non-stop lap of the long descent to Calgary.

In the afternoon sunlight, the long silvery train winds along the banks of the Bow River, in the shadow of the Fairholme Range, past several osprey nests built on specially-constructed crossbars on the telegraph poles. The famous Three Sisters Peaks and Grotto Mountain appear and are left behind. Then the train rolls through the Bow River Gap, described as the eastern entrance to the Rockies. Leaving the Gap behind, the click-clack of the wheels on the rail joints in-

creases in tempo. Down the spacious, green valley the speed climbs to 50 and then to 60 miles per hour, the green CTC signals pass with increasing rapidity and the scenery changes from majestic mountains to bare, high hills and then to ever-broadening plains. Suddenly, the train rumbles across the bridge over the Bow River and the mileage board on the telegraph pole shows 25 miles to Calgary, the end of the Laggan Subdivision. Road crossings become more frequent. The engineer sounds the air-horn for every one of them; nevertheless, a battered automobile barely beats the train across a crossing ahead.

"Whenever I see a crossing-beater", exclaims the engineer, " I wish that he could be up here in the cab himself, to see how stupid motorists can be. Then he'd know what it really feels like to be in my place!"

Around a bend in the track, the skyline of Calgary appears, growing larger, taller, higher with each passing minute. The speed of the train begins to decrease, as the engineer makes a brake application . Now the train slows almost to a walking pace, as the first of the innumerable switches in the yard slide by. Then, under the towering spire of Husky Tower and beneath the Palliser Hotel, to slow to a stop in the station, some 1900 feet below the Continental Divide.

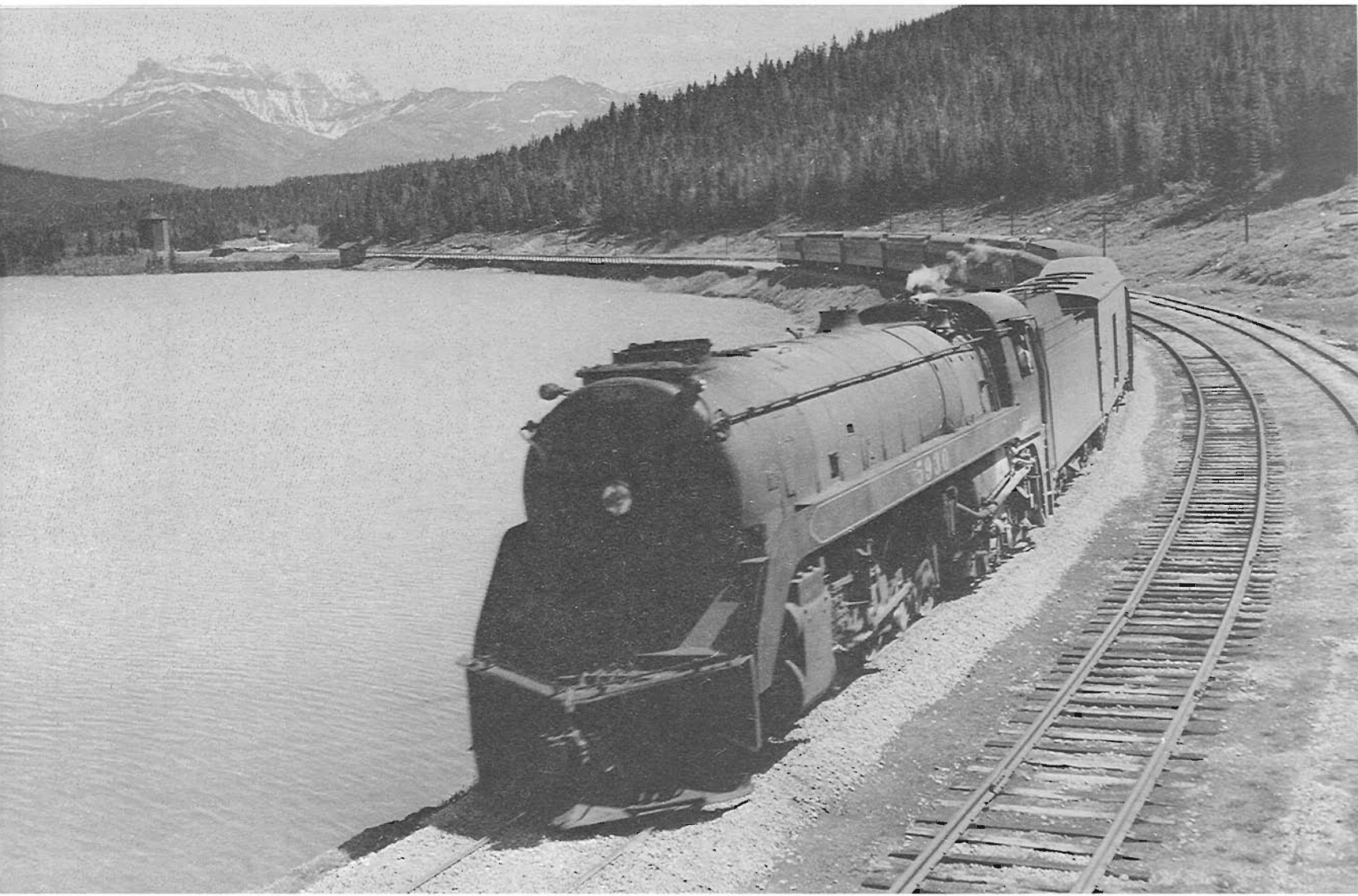
On this particular trip of the eastbound "Canadian" over the Laggan Subdivision, everything was pleasant and without incident. But there are days and nights when this run is a nightmare, in a blinding blizzard, in a terrible thunderstorm or in the spring, when dangerous rockslides threaten. Late in January, 1972, the "Canadian" was stuck fast in the mountain snow for over 48 hours.

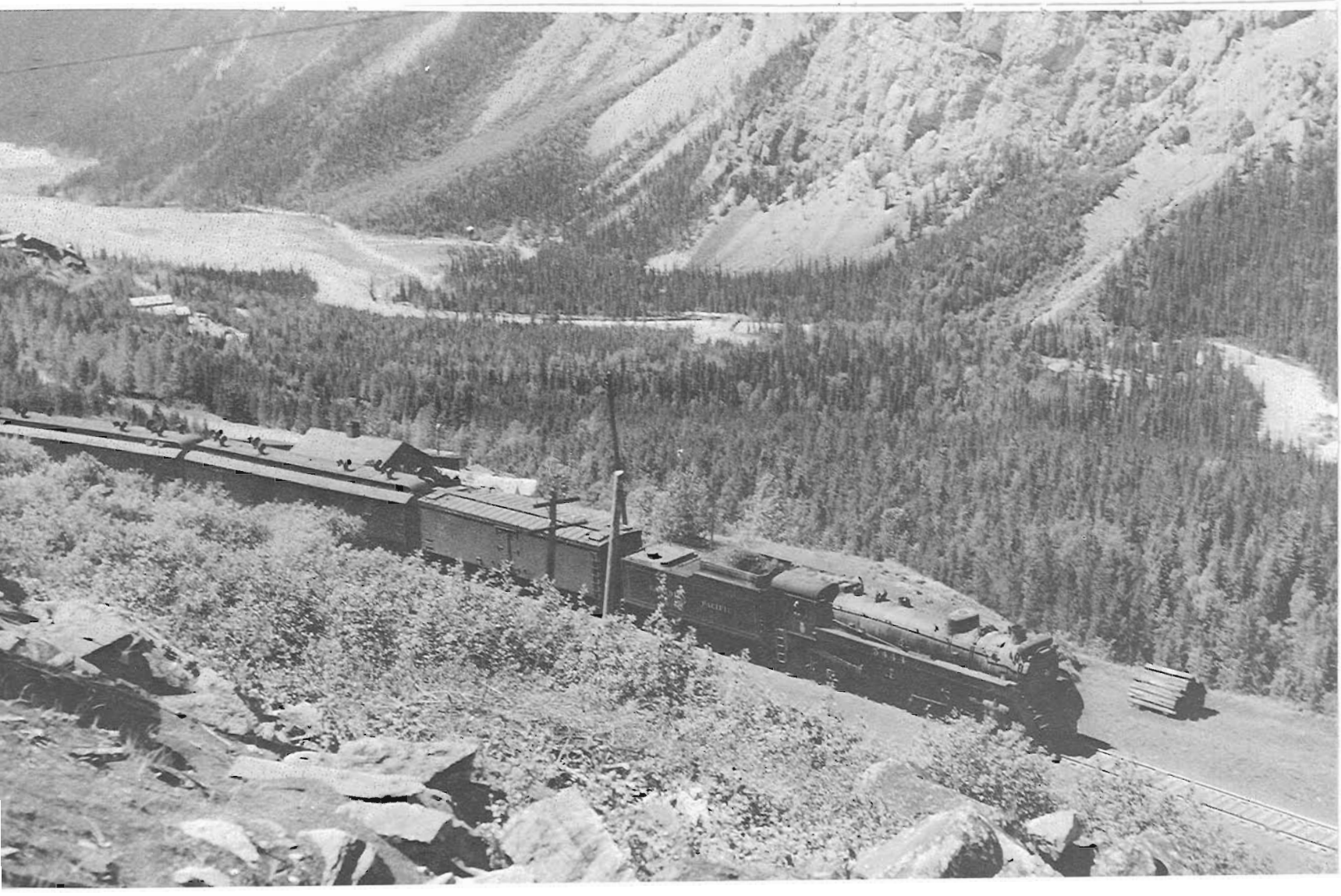
In 1972, with diesel-electric engines for power, centralized traffic control and dynamic braking, railroading in the Rockies could perhaps be said to be less hazardous and less exciting than it was fifty years ago. On the contrary. The never-ending battle with the forces of nature continues and, to win this battle, the crews of the "Canadian" must be ever watchful - true railroaders - possessing that essential quality, derived from years of experience, which enables them to take the "Canadian" from division point to division point promptly and safely.

And after all, to the occasional traveller, these men are long-time employees of CP RAIL, who are doing the job that is expected of them.

TRAIN 13 WESTBOUND WITH ENGINE NUMBER 5930 ROUNDS LAKE WAPTA, NEAR HECTOR, B.C. on the Canadian Pacific Railway on 13 July 1951. The photo was taken by the late Allan Toohey and is from the Association's archives.

CANADIAN PACIFIC'S TRAIN FIRST NUMBER 3, ENGINE NUMBER 5444, PASSES THE station at Partridge, B.C. on the downgrade to the lower Spiral Tunnel and Field. The photo was taken on 10 July 1951. E.A.Toohey Collection.





POSTSCRIPT

Mr. J.A.Beatty, Director of Membership Services of the Association, has kindly provided the following historical background for Mr. Elson's story of the Field-Calgary main line of CP RAIL, with particular reference to the Spiral Tunnels:

When the main line of the Canadian Pacific Railway was opened in 1885 and for many years thereafter, the stretch of track between Hector and Field, British Columbia, bore unchallenged the reputation of being the most difficult piece of standard-gauge railway to operate in North America.

It was well-built, well-ballasted and kept in perfect condition, but the descent westbound and the climb eastbound over the "Big Hill" was so steep (4.5%) that the operation of trains was both dangerous and expensive.

It required the use of 4 steam engines weighing 154 tons each to haul a train in the eastward direction (consisting of from 14 to 28 freight cars, or 11 coaches) over the summit, taking, under favourable conditions, about an hour to make the trip.

Every westbound train was required to stop on reaching Hector, at the top of the "Big Hill", while the air brakes and sanders were tested. Eight miles an hour was the enforced speed limit for passenger trains descending the hill, while freight trains were restricted to a maximum of 17 loaded cars by day or 9 by night.

If a descending train got out of control, there were three safety switches, about 0.9 miles apart, with spurs leading away up the mountain side on a steep incline. These three switches were manned twenty-four hours a day. The switchmen were notified by telephone whenever a train started down the hill. The switches were set for the safety spurs in the normal position. As the down-bound train approached the safety-switch, the switchman consulted the automatic speed indicator and, if the descending train was exceeding the speed limit, he kept the switch lined for the safety spur. If the speed of the train was normal, he threw the switch to allow the train to continue on to the next safety point. After the train had passed, he returned the safety switch to "normal", set for the spur.

Trains were operated over the "Big Hill" on the staff system. Staff machines at Hector or Field allowed the removal from the machine of a small steel wand, which allowed the train conductor to proceed. The replacement of this metal staff in the interlocking machine at Hector or Field allowed another staff to be removed, whereupon the train conductor of the next train on the line was allowed to proceed.

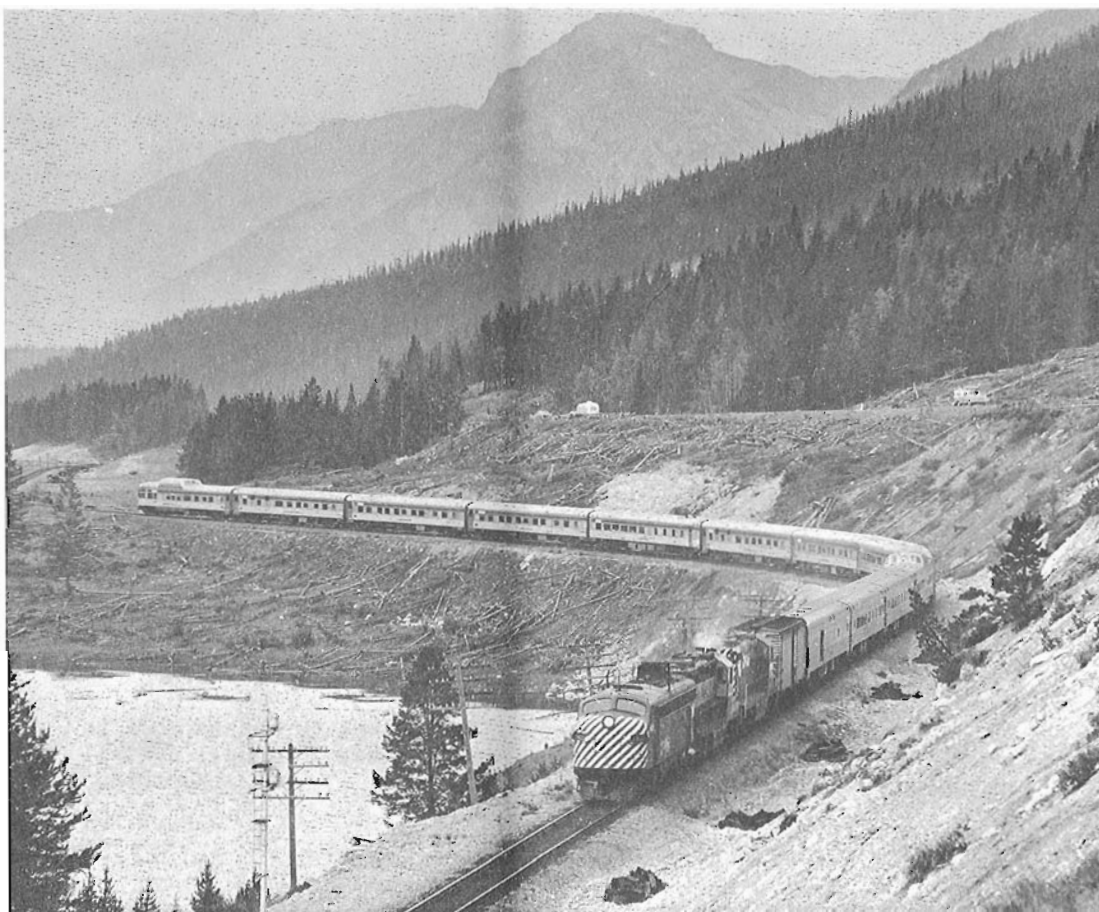
In 1907, the Company decided to reduce this remarkable gradient and, in 1909, after twenty months of rapid work, the two Spiral Tunnels, the first in North America, were opened. The approximate cost of this vast project was $ 1.5 million,

and the "Big Hill" became a thing of the past. The 4.5% grade was reduced to 2.2%, all danger was eliminated and, instead of being able to make only 4 or 5 miles per hour with four engines, two engines could now haul a train at 20 miles per hour.

The project involved an increase in distance of 4.5 miles, two bridges over the Kicking Horse River and the removal of 650,000 cubic yards of rock from the two spiral tunnels. There were 75 carloads of dynamite (1.5 million pounds of explosive) costing $ 250,000 used in the excavation.

In spite of the special complications introduced by the spiral curves, the sections of the tunnels, which were constructed from both ends, met exactly and the work is notable for having been completed from start to finish without a hitch in spite of its magnitude.

THE DOME TRAIN OF THE '70s - CP RAIL'S "CANADIAN" EASTBOUND REACHES the summit of the Canadian Rockies at Sink Lake, B.C. at the top of Kicking Horse Pass. Ronald C. Hill took the picture in August, 1971.



WAYBILLS Editorial Staff CANADIAN RAIL

AMTRAK - AMERICA'S NATIONWIDE RAIL PASSENGER SYSTEM - finally made it to Montréal, Canada, on 30 September, 1972.

Designated in Canadian National Railway's advance information sheets as CN Trains 26 & 27, this first AMTRAK train was OSed Central Station as Extra 4036 at 1130 hours EST, somewhat after the advertised arrival time of 0845 hours.

The consist of AMTRAK Train 60 - "Montrealer" - was:

AMTRAK equipment Number		Train 60 can no.
4036	"A" unit - nose forward	-
4316	"A" unit - nose forward	-
4038	"A" unit - nose backward	-
7002	coach	none
7003	coach	none
3952	coach	none
5611	coach	none
5613	coach	front 8357 - rear 8358
7000	coach	6031
8300	diner	none
2633	sleeper PACIFIC SKIES	none
2619	sleeper PACIFIC MEADOW	none
2616	sleeper PACIFIC HOME	none
8301	diner	none
2608	sleeper PACIFIC CREST	ED-1
2606	sleeper PACIFIC COMMAND	ED-2
3212	sleeper PINE TREE STATE	ED-3

The first four coaches had stencil marks on air reservoirs and water tanks indicating that they had been inspected by the Washington Terminal Railroad on 09/23/72.

Apparently, every one of the six New England States - with the possible exceptions of Maine and Rhode Island - was anxious to get a piece of the "action". There was an emotion-charged message distributed by the New Hampshire Association of Railroad Passengers, brochures from STEAMTOWN U.S.A. and cocktail napkins from the Yankee Silversmith Inn, Wallingford, Connecticut - all equally irrelevant to this particular AMTRAK operation. There was a cute blonde in one of the windows of the PINE TREE STATE. She was relevant!

Applicants for space reservations in Connecticut were advised about 15 September that the first four northbound trips were sold out.

AMTRAK's second "Montrealer" on 1 October showed a definite improvement in schedule-keeping, being OSed Central Station, Montreal at 0925 EST with 2 units and 6 cars.

And then - or, at least, soon - AMTRAK had to settle down to the mundane task of reducing the estimated $ 400,000 annual deficit predicted by the sceptics.

S.S.Worthen.

Montreal STAR Thursday, September 28, 1972.

AMTRAK INAUGURATES OVERNIGHT SERVICE TO NEW YORK AND WASHINGTON, D.C.

ALLEZ!

Starting September 29th, northbound; September 30th, southbound.

Amtrak puts its best foot forward with this new international service. So you enjoy restful, reclining coach seats. A choice of private accommodations. A spacious lounge for socializing. And, in the diner, Amtrak's inviting new menus at attractively low prices. Come aboard soon.

"WASHINGTONIAN" (Southbound-read down)		"MONTREALER" (Northbound-read up)
Lv. 7:10 p.m.*	Montreal (Central Station)	Arr. 9:40 a.m.
Arr. 9:10 p.m.	St. Albans	Arr. 7:20 a.m.
Arr. 10:10 p.m.	Essex Jct.	Arr. 6:50 a.m.
Arr. 10:40 p.m.	Waterbury	Arr. 6:20 a.m.
Arr. 10:55 p.m.	Montpelier Jct.	Arr. 6:05 a.m.
Arr. 12:13 a.m.	White River Jct.	Arr. 4:40 a.m.
Arr. 1:30 a.m.	Bellows Falls	Arr. 3:31 a.m.
Arr. 2:10 a.m.	Brattleboro	Arr. 2:50 a.m.
Arr. 4:25 a.m.	Springfield, Mass.	Arr. 12:13 a.m.
Arr. 5:03 a.m.	Hartford	Arr. 11:42 p.m.
Arr. 5:50 a.m.	New Haven	Arr. 10:45 p.m.
Arr. 7:33 a.m.	New York (Penn Station)	Arr. 8:55 p.m.
Arr. 8:15 a.m.	Newark	Arr. 8:40 p.m.
Arr. 9:00 a.m.	Trenton	Arr. 7:57 p.m.
Arr. 9:40 a.m.	Philadelphia	Arr. 7:18 p.m.
Arr. 10:07 a.m.	Wilmington	Arr. 6:50 p.m.
Arr. 11:19 a.m.	Baltimore	Arr. 5:50 p.m.
Arr. 12:00 N	Washington, D.C.	Lv. 5:05 p.m.*

Low, Money-saving One-Way Coach Fares: Montreal to New York US$19.50. To Washington US$28.00.
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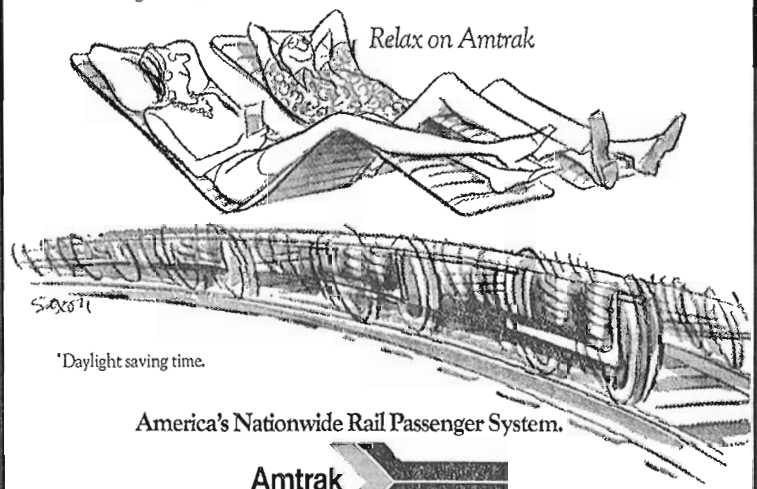


*Daylight saving time.

America's Nationwide Rail Passenger System.

Amtrak

For train reservations and information, call (514) 877-6550, or see adjoining Amtrak ad for list of travel agents.

FIFTY YEARS AND MORE HAVE PASSED since the Government of Canada was in the railway business and cars bearing the inscription "Canadian Government Railways" could be seen. But in July, 1972, the Government of Canada , in the person of the Honorable Otto Lang, Minister responsible for the Wheat Board of Canada, announced the awarding of three contracts for 2,000 covered grain hopper cars.800 will be built by the National Steel Car Company of Hamilton, Ontario, 500 by Marine Industries of Sorel, Québec and 700 by Hawker Siddeley of Canada at Trenton, Nova Scotia. Deliveries will begin early in the autumn of 1972 and will be completed by mid-March, 1973.

The new cars will be 59 feet long and will have a cubic capacity of 4,550 cubic feet. Tare weight will be 61,000 pounds and load limit will be 202,000 pounds. Carrying capacity will be 3,000 bushels of wheat weighing 100 tons. The car design allows top-loading and bottom unloading and it has been calculated that they can bring to Canada's ocean ports about 150 million bushels of grain a year.

Canadian National Railways and CP RAIL car designers, in consultation with the Canadian Wheat Board and Information Canada have produced a distinctive colour design for the new cars. The right-hand third of the car is a bright canary yellow with two stylized heads of wheat - the full height of the car - one in solid salmon brown and the other in brown outline. The same brown covers the remainder of the car. At the opposite end above the centre-line, running from the car end towards the centre is the "bar and leaf"of the Government of Canada logo,followed by the words "Government of Canada" in the English and French languages, in two-line groupings, all in yellow.

Wanting to make the announcement in mid-July, the Wheat Board was unable to secure a prototype car from the contractors on such short notice. Accordingly, Canadian National Railways loaned the Government of Canada one of their new covered hopper cars and it was painted above. However, it still retained Canadian National reporting marks and was, in fact CN 379024, temporarily altered to CX 379024 for July 14, 1972, the day the announcement was made at Ottawa's CN-CP RAIL station.

The first loaded movement of the prototype car in its new colours was from Rowatt,Saskatchewan to Thunder Bay, Ontario, on 24 August 1972. L.C.Perry and CN News Bureau.

MR. JOHN HOFFMEISTER'S EXCELLENT ARTICLE on CP RAIL's Baldwin diesel-electric units on Vancouver Island prompted a reader to write to point out that Baldwin-built units are operated by two other companies in Canada, both located in British Columbia. At Delta, B.C., a Baldwin switcher loads and unloads B.C.-Alaska train ferries at Delta Alaska Terminals. Currently, this unit is painted a "total" sky-blue (even the trucks) except for small white letters under the cab window saying "DAT 1". Even the builder's plates have been removed. This unit is believed to have been used previously in the Crowsnest coal region.


Government of Canada
Gouvernement du Canada

The remaining Baldwin unit lives at Ladysmith, B.C., on Vancouver Island and inhabits a small wooden engine house belonging to Crown Zellerbach Corporation, about 100 feet from the crossing at grade with CP RAIL's Esquimault & Nanaimo Subdivision. The crossing at grade is remarkable in that it is still protected by upper and lower quadrant semaphore signals, worked by pipe-throws from an ancient signal tower.

The Crown Zellerbach Baldwin is powered by an in-line, 8-cylinder Delavergne diesel engine and the roof of the unit is studded with eight exhaust stacks, one per cylinder.

This arrangement is advantageous for the motive power superintendent, as it is easy for him to tell which cylinders are working efficiently and which not. On one day, cylinder 1 smoked greyish-white; number 2 emitted black smoke; numbers 3 and 4 showed no smoke at all, while 5 blew intermittent smokerings. 6 & 7 emitted very little smoke and 8's exhaust was invisible, due perhaps to an apparent serious internal maladjustment which caused the engine to produce an odd, gargling noise, as though something were gravely wrong internally.

This remarkable unit operates weekdays, starting its daily tour at about 0600, heading off 22 miles to the Nanaimo Lakes region. Returning to Ladysmith mid-worning, it dumps the logs on the racks into Stuart Channel, an inlet of ths Straits of Georgia, and dashes back into the forest for more. Two trips daily are made and the C-Z Baldwin is usually back in the enginehouse by 1300.

K.R.Goslett.

THE ROSTER OF THE BRITISH COLUMBIA RAILWAY included in Mr. C.W.Creighton's excellent article "North to the Yukon" in the September, 1972 issue of our magazine CANADIAN RAIL, No. 248, is clarified by Mr. R.F.Corley, one of the contributors. Mr. Corley points out that:

(1) there are three B-B S-13 switchers: Nos. 1001-1003;
(2) two RS3s were purchased from the Lake Superior and Ishpeming Railroad in February, 1972.,Numbers 1605 & 1606. These became Numbers 559-560 of the Pacific Great Eastern Railway;
(3) Two C-420s were purchased from the Lehigh & Hudson River Railroad, their Numbers 25 & 26, renumbered 651-652 by the Pacific Great Eastern.

CP RAIL'S FM C-LINERS, THE SUBJECTS OF MUCH INTEREST TO diesel-electric enthusiasts recently, early in September were in storage at Nelson, B.C. Numbers 4053, 4057, 4065 and 4105 were stored outside with their stacks capped. Number 4104 was in the diesel shop with pistons and connecting-rods removed . Also stored outside with stacks capped were 12 H-line FMs.

Meanwhile, two H-16-44s, Numbers 8715 & 8716, were working with the SPENO rail-grinding car between Megantic, Québec and Greenville, Maine, on CP RAIL's "Short Line" to Saint John, New Brunswick.

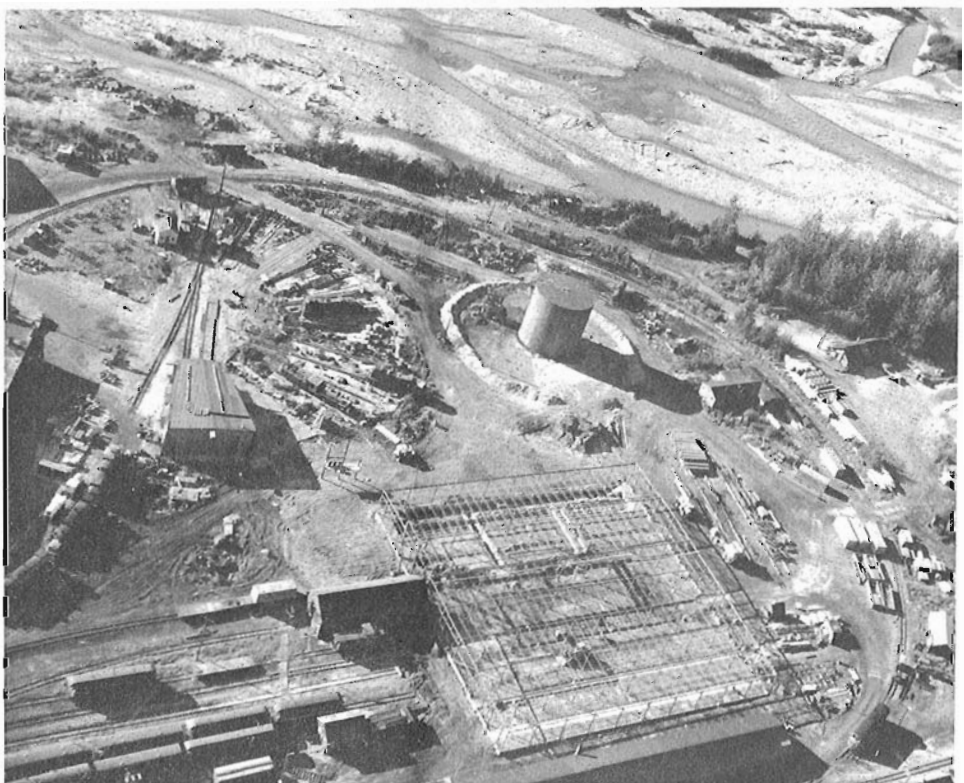
THE WHITE PASS AND YUKON ROUTE during the past year was just as busy renewing some old structures and building one important new one as it was hauling containers to Skagway and passengers to Lake Bennett. Scheduled for completion late in 1971 was a replacement steel bridge for the old wooden A-frame trestle at mile 14 - Glacier, Alaska. The new structure, 76 feet long and about 40 feet high, was built outside and around the trestle which it replaced. Designed by Kirwen Engineering Limited of Vancouver, B.C., it was built by Manson-Osberg Construction Company of Seattle, Washington.

Following the disasterous fire which destroyed the roundhouse and shops at Skagway, Alaska, the site was cleared and new car and locomotive repair shops were constructed. These facilities are housed in a new 200 x 200-foot building. The heavy-duty repair track, 180 feet long, is equipped with platforms at different levels for efficient work. Alongside it is the running repair track of the same length, with a pit for changing out traction motors on diesel units. This track is serviced by a 20-ton overhead crane.

In the centre of the building is a machine shop, woodwork shop, stores room, offices and a lunchroom area.

On the other side of thie centre core are the Car Repair and Maintenance Shops, with two 200-foot tracks.

The new service and repair facilities have been designed and constructed with great attention to fire-retardant details. The design and construction were by Manson-Osberg Construction Company of Seattle, Washington. White Pass "Container Route News".



THE AUSTRIAN FEDERAL RAILWAYS (OBB) PURCHASED from the Swedish firm AESA in the winter of 1971-72, four thyristor-controlled electric locomotives (B-B) similar to the Rc2 series, used on the Swedish State Railways and tested on the Norwegian State Railways by CP RAIL. These locomotives, road numbers 1043.01 through 1043.04, were assigned to the depot at Villach and have been in use principally on heavy freight trains on the "Tauern Line" from Villach to Salzburg.

Naturally, with the international interest shown in this type of electric locomotive, the new units were subjected to important technical studies and many tests. The main problem encountered in the use of thyristor-controlled electric locomotives is the potential problem of interference with signal and telecommunication circuits. In addition, their power demand is exceptionally high. To study this latter condition, two of the units were double-headed on the Tauern Route, hauling freights of about 1,600 tons. Of major interest is the effect of the heavy current demand on the catenary voltage and measures were examined to maintain and support line voltage in substations and transmission lines supplying sections of the line where the use of thyristor-controlled units may eventually be increased.

The importance of these experiments to the proposed Calgary-Vancouver electrification of CP RAIL is evident and at least one observer has been to Villach to investigate the operation.

Editorial Staff & La Vie du Rail.

IN MID-1972, CANADIAN NATIONAL RAILWAYS HAD ON LEASE a number of Chesapeake & Ohio Railroad units, which were assigned to Symington Yard, Prairie Region. In addition, there were Quebec, North Shore & Labrador Railway units Nos. 138, 171, 177, 170 (GP9s) and 120 (GP7); Bangor & Aroostook Railroad's GP7s, Nos. 62 & 63. By July, there was a QNS&L GP9 No. 132 added, while Precision National Corporation had contributed GP8s, Nos. 969 & 971 (ex-Detroit, Toledo & Ironton Railroad) and GP10s Nos. 3419, 3445 & 3634. This information from Pierre Patenaude.

THE MOMENTUM CREATED BY THE OPENING OF THE EXTENSION of the British Columbia Railway to Fort Nelson, B.C., is not by any means being lost. A new coal deposit, discovered in the Chetwynd, B.C. area, will hopefully bring some quarter-of-a-million dollars annually over a 20-year period and will convert Chetwynd to a thriving mining-railway community. A 37-mile branch line from the town to the mine location will be undertaken by the BCR, regardless of whether or not Brascan Limited of Toronto decides to exercise its option to develop Brameda Resources Limited (Vancouver) Sukunka coal deposit.

If development is undertaken, BCR will invest $ 9 million on construction and $ 15 million to buy 300 coal cars and 17 diesel locomotives. MLW-I is said to be very interested in this order, as nearly all of the present units on the BCR are products of this Montréal firm.

Editorial Staff.

SIX YEARS AFTER THE OFFICIAL END OF STEAM

on the Société National des Chemins de fer Belges - otherwise the Belgian National Railways - which occurred at Denderleeuw, near Bruxelles on 20 December 1966, steam locomotive Number 29.013 of the SNCB was brought out of storage to assist in commemorating another event.

On 2 September 1972, SNCB engine Number 29.013 hauled a special train on a circular tour around Bruxelles to commemorate the Tenth Anniversary of the Association pour le Musée du Tramway at Val de l'Aisne. The trip started at Schaerbeek and ran through Hal, Denderleeuw, Zottegem, Bruxelles Midi, Bruxelles Nord and terminated at Schaerbeek locomotive dépôt.

No 29.013 was one of 300 2-8-0s built by the Montreal Locomotive Works, Montréal, Canada in 1945 for the SNCB. These consolidation-types were designated as "Type 29" by the SNCB and were frequently used on passenger and freight trains in the Meuse River valley, which was the native region of our member, Mr. A.E.G.Arnold, who sends this information.

The accompanying photograph, taken by Mr. Arnold's friend Mr. G. Gauthier on 2 September 1972, shows the AMUTRA " Tenth Anniversary Special" at Hal, where the consist of antique compartment-type coaches was exchanged for an all-steel coach train, for the remainder of the excursion to Denderleeuw-Bruxelles-Schaerbeek.

THE ORDER FOR THIRTY M420 MLW INDUSTRIES DIESEL UNITS placed in mid-July 1972 by Canadian National Railways, is significant because these units will have entirely new cabs, the product of SN's structural and visual redesign groups. The new design will provide better visibility, improved heating and ventilation systems, more comfortable seating and an improved display of gauges and instruments.

Amenities for the engine crew will include a refrigerator, a hotplate, lockers for clothes and an enclosed, heated toilet. The four windows in the cab front are of double-thickness glass, with a fine wire mesh laminated between the two layers, which enables rapid defogging and defrosting.

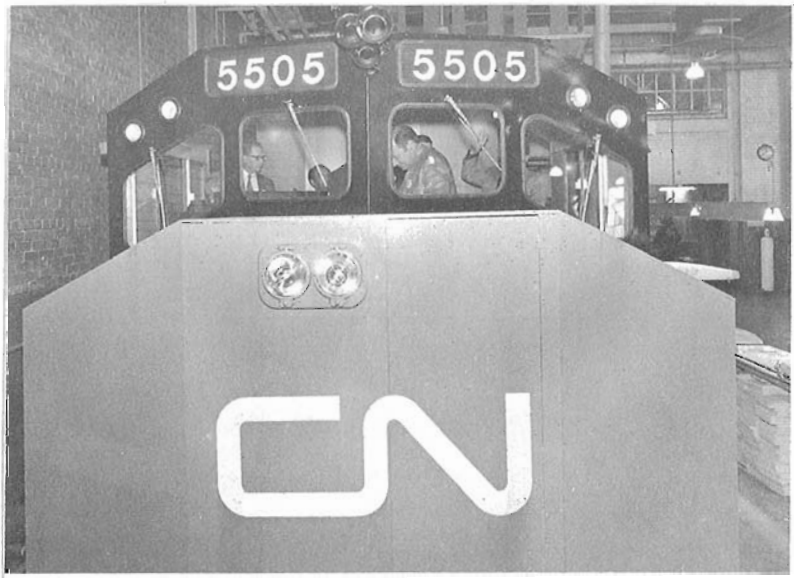
Instruments and gauges will be larger and more legible.The speedometer is mounted above the windows at the midpoint of the cab so that it is visible from almost any position in the cab. On the control stand, dials and gauges are arranged in a pattern which will be standard in all future CN units. Controls and levers have also been redesigned to a standard pattern. The noise level in the new cabs will be lower than the 90-decebel limit specified by the national standards for diesel-unit cabs. Heavier cornerposts for the cab will strengthen the structure and provide extra protection for the crew in case of accident.

In the full-width nose, there will be a clothes locker , an enclosed toilet room with full-height access door and the sandboxes, one on each side, will act as force-absorbers and cushioners in case of collision.

Crew comfort in the cab is assured by two doors at the rear of the cab with overlapping door-jambs, sinilar to the door leading to the nose of the unit. These doors are essentially draft-free and easily opened in emergencies. Interior walls of molded fibreglass can be easily cleaned and have no sharp edges. Half-inch-thick steel plate is used in the overall construction. To reduce drafts even further, number boxes and classification light-receptacles are accessible only from the outside!

The new cabs for these units represent a great improvement in diesel cab design and this is the first time that this essential part of a diesel unit has been constructed incorporating recommendations from many design and operating groups. CN News Bureau.

THE NATIONAL TRANSPORTATION SAFETY BOARD OF THE UNITED STATES is being urged to take steps which would considerably change the appearance of the conventional boxcar now running on North America's railways. Because of the increasing frequency of accidents involving trespassers on railroads and unauthorized climbing on and over cars and structures, the Board has been urged to consider the expeditious removal of side-ladders, grab-irons and switching ladders and steps from boxcars, a safety requirement scheduled for implementation by April 1, 1974. John D. Welsh.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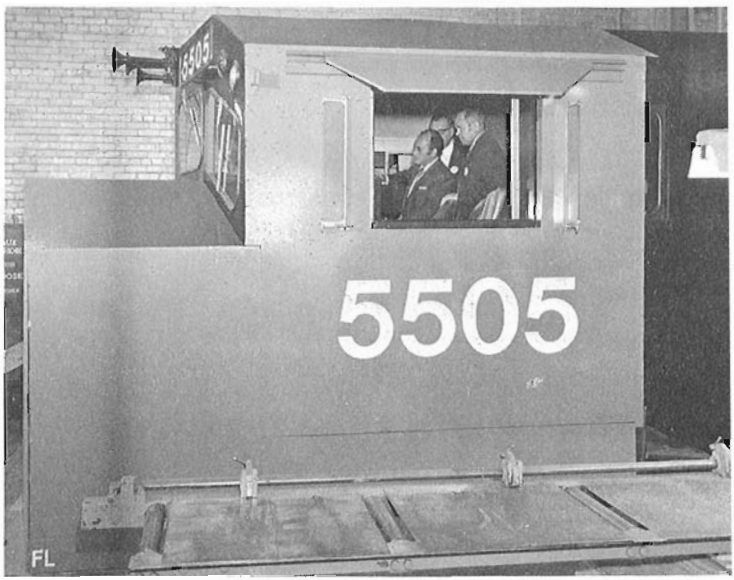
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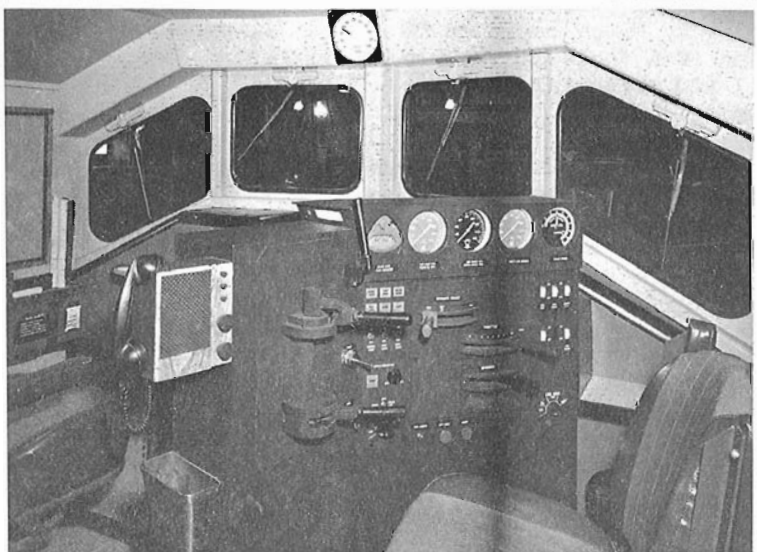


CP RAIL IN BRITISH COLUMBIA had more than its usual share of difficulties resulting from the heavy snow melt in the spring and early summer of 1972. In mid-June, the Okanagan Subdivision from Sicamous to Vernon, British Columbia, was under 18 inches of water in places and traffic was rerouted over Canadian National Railways' Oakanagan Subdivision. On Tuesday, 13 June 1972, 75 feet of track was washed out about 3 miles east of Albert Canyon on CP RAIL's main line, in the Illecillewaet River gorge, with the track left dangling over a hole that varied in depth from 35 to 75 feet. The roadbed was washed out just after Train 944 had passed. Fortunately, trackmen patrolling this section alerted the dispatcher so that another freight train was stopped before it reached the wash-out.

Repair of the wash-out was begun immediately and service was restored rapidly, expeditiously and completely on 16 June, three days later.

Attempts were made to reroute westbound tonnage from Golden via the Windermere, Cranbrook, Nelson, Boundary, Carmi and Princeton Subdivisions - the southern British Columbia line of CP RAIL - but without much success, as the right-of-way on the Windermere Sub near Lake Windermere (Invermere) was some inches under water. Replacement ties, lying beside the track in this area, floated off down the Columbia River in the direction of the tie yard at Golden.

Railway enthusiasts travelling by the "Canadian" this winter need not be alarmed if they see a stretch of catenary overhead, west of Glacier, in the winter of 1972-73. It is said that CP RAIL will install a short stretch of wire to determine the effect of snowslides on overhead catenary. Editorial Staff.

LONGTIME WESTCOAST RAILWAY ENTHUSIAST MR. TERRENCE FERGUSSON, President of Pacific Tours Limited of Vancouver, B. C., this year accomplished the impossible when operation began on the Victoria Pacific Railway of which he is also President and majority stockholder. The operation of passenger trains on the VPR, which began on 24 June 1972, represented the realization of a four-year battle to overcome governmental, technical and financial obstacles, according to the Toronto GLOBE AND MAIL.

The Victoria Pacific Railway uses that part of Canadian National Railways' former Victoria-Sooke line, last used in 1965, between two trestles presently in poor condition and not "train-worthy". Mr. Fergusson has leased 5 miles of the old line, but presently can use only 2.5 miles of it. As a consequence, the passengers miss out on a spectacularly excellent view of Portage Inlet, just north of Victoria.

Canadian National has leased the 5 miles of trackage to the Victoria Pacific for $ 7,500 a year, plus 30% of the profits above $ 30,000 per annum. VPR is responsible for all necessary track maintenance and must terminate operation should CN decide to resume service itself. This lease arrangement, as reported in the Toronto GLOBE AND MAIL, contrasts rather sharply

with other, less restrictive arrangements concluded by CN with other enthusiast organizations in Canada.

Moreover, Mr. Fergusson's Victoria Pacific Railway has been placed under the regulatory jurisdiction of the Canadian Transport Commission and must adhere tp all of the operating regulations established by that government body.

If operation of the project is successful, the operating base will be moved from the Victoria area to the junction of the Trans-Canada and Patricia Bay Highways, a point passed by an estimated 2 million tourists each summer.

Passenger service in the initial period of operation was provided by ex-Comox Logging and Railroad Company's 2-8-2 - built in 1929 - and two 1932 CPR sommuter coaches, purchased in Montréal.

The VPR operated trains "daily except Tuesday" this summer from its southern terminus at Millstream Junction in the outskirts of Victoria. The fare was $ 1.50 per adult and 75¢ per "young person".

OUR HEARTY CONGRATULATIONS ARE EXTENDED

to the Commonwealth of Pennsylvania of the United States, the Secretary of Transportation of the Commonwealth and the Pennsylvania Historical and Museum Commission, on the occasion of the ground-breaking ceremony for a new $ 1.8 million Pennsylvania Railroad Museum at Strasburg, Pennsylvania, just across the highway from the Strasburg Rail Road station.

Conceived in 1963, the plans and proposals for this Museum were forwarded by Mr. Sylvester K. Stevens, then-Director of the Pennsylvania Historical and Museum Commission. At this time, Mr. Stevens visited the Canadian Railway Museum several times and discusses the proposed Pennsylvania museum with Directors of the Association. Finally, a 15-acre tract of land was selected, just across the highway from the well-known Strasburg Rail Road, Strasburg, Pa.

The simiarity of the Pennsylvania museum, as planned, to the Canadian Railway Museum at St-Constant, is striking. There will be a rectangular four-track rolling stock exhibit building, adjacent to an already-existing 100-foot turntable, which can hold more than 25 railroad cars. The preserved cars and locomotives, some dating back to before the War Between the States (1861-65), are in various stages of renovation.

The entrance or "headquarters" building will house the library and will include an orientation room, offices and lavatory facilities.

Recently, the Wohlsen Construction Company of Lancaster, Pa., was awarded a $ 1.47 million contract to erect the museum. The overall cost of the new facility is estimated at $ 1.804 million.

Lancaster, Pa., U.S.A. LANCASTER NEW ERA.

THE DELAWARE & HUDSON RAILROAD

has repatriated PA-1s Numbers 16 & 18 from the Greenbrier Railroad and has also "repatriated" a new President - Mr. Bruce Sterzing - who has a warm spot in his heart, so 'tis said -

for these units. With the Washington-Montréal AMTRAK passenger service running via the PC-NH-B&M-CV, one wonders what in the world the PAs will be doing on the D&H.

Another annoying situation for the D&H is Penn Central's move to abandon freight interchange with the D&H at Wilkesbarre, whose rail facilities were severely damaged by Hurricane Agnes. Penn Central thereafter routed northbound New England-Canada traffic through Williamsport, Pa. to Newark, N.Y., near Rochester,N.Y., thus interchanging with the D&H at Mohawk Yard, near Schenectady. D&H thereby lost the haul from Wilkesbarre to Schenectady.

Sterzing said this large revenue loss would be enough to nudge (push, shove) the D&H into bankruptcy. "Not so" said PC,since the agreed division of revenue netted D&H as much as before, while saving PC $ 1.5 million annually at Wilkesbarre.

In August 1972, D&H got a little more business. The roof of Boston & Maine's ancient Hoosac Tunnel (1877) caved in in one short spot, forcing B&M to detour freights north and west to St. Albans and Cantic, Québec to Rouses Point, New York and thence to Mechanicville Yard via the D&H. The roof was repaired shortly and service was normal by mid-August. Mohawk & Hudson THE CALL BOARD.

TRAFFIC ON CP RAIL WEST OF CALGARY, ALBERTA

began to pick up in September, after a slump in August,due primarily to the protracted dockers' strike at Vancouver , which was settled by government legislation. Grain and sulphur unit-trains were the first to start rolling. Some westbound grain extras were filled out to 11,500 tons at Chase, B.C., west of the heavy grade up Notch Hill, west of Revelstoke. S.S.Worthen.

THE PHOTOGRAPH ON THE BACK COVER

of the September 1972 issue of our magazine (No. 248) , was identified by Mr. Glenn Wallis of Hantsport,Nova Scotia. Mr. Wallis writes:

"The location of the photograph is on the bridge at La Salle, Québec, which spand Route 37 or La Salle Boulevard. This bridge is part of the northern approach to CP RAIL's Lachine Bridge over the St. Lawrence River.

Thus, the obvious answer to the question is that this is a CP RAIL train, headed by a leased unit from the BAR. The Canadian National boxcar has nothing whatever to do with it".

CANADIAN NATIONAL RAILWAYS CANCELLED THEIR ORDER

for twenty SD40-2s (road Nos. 5241 through 5260) for unknown reasons, writes Pierre Patenaude, and instead ordered sixty-one GP38-2s, which include the 16 units previously reported on in CANADIAN RAIL Numbers 240 & 247.

The order number for these units was C-350, the railway's class is GR-20b and the serial and road numbers are:

A2673 through A2708	5500 through 5535
A2819 through A2843	5536 through 5560

These units are expected to be delivered by Diesel Division, General Motors of Canada Limited, London, Ontario, in October and November, 1972.

EX-DELAWARE & HUDSON NUMBER 4097 was prettied up for lease to the Pacific Great Eastern in British Columbia. Alas, the inspector said Number 4097 was a "no-no" and so the unit still sits at Canadian National's Montréal Yard, waiting for something to happen. The photo was taken by Mr. Barry Bigelow.

EDMONTON TRANSIT - LATE IN JUNE, 1972 - followed the lead of three other western Canadian cities and introduced an exact cash-fare system on all its routes. Now, when a passenger boards a bus in Edmonton, as well as in Calgary, Vancouver and Victoria, he must pay an exact cash-fare of 25¢ . Transfers are still issued as before, but tickets no longer exist and drivers no longer make change. The reason for the introduction of these practices was the increasing number of robberies aboard Edmonton Transit vehicles.

Surprisingly, the exact-fare system seems to have caused few difficulties, as patrons quickly became accumstomed to having their exact fare ready. For those without change, a dollar bill may be deposited in the fare-box, a receipt for the 75¢ overpayment obtained from the driver and the refund collected at City Hall.

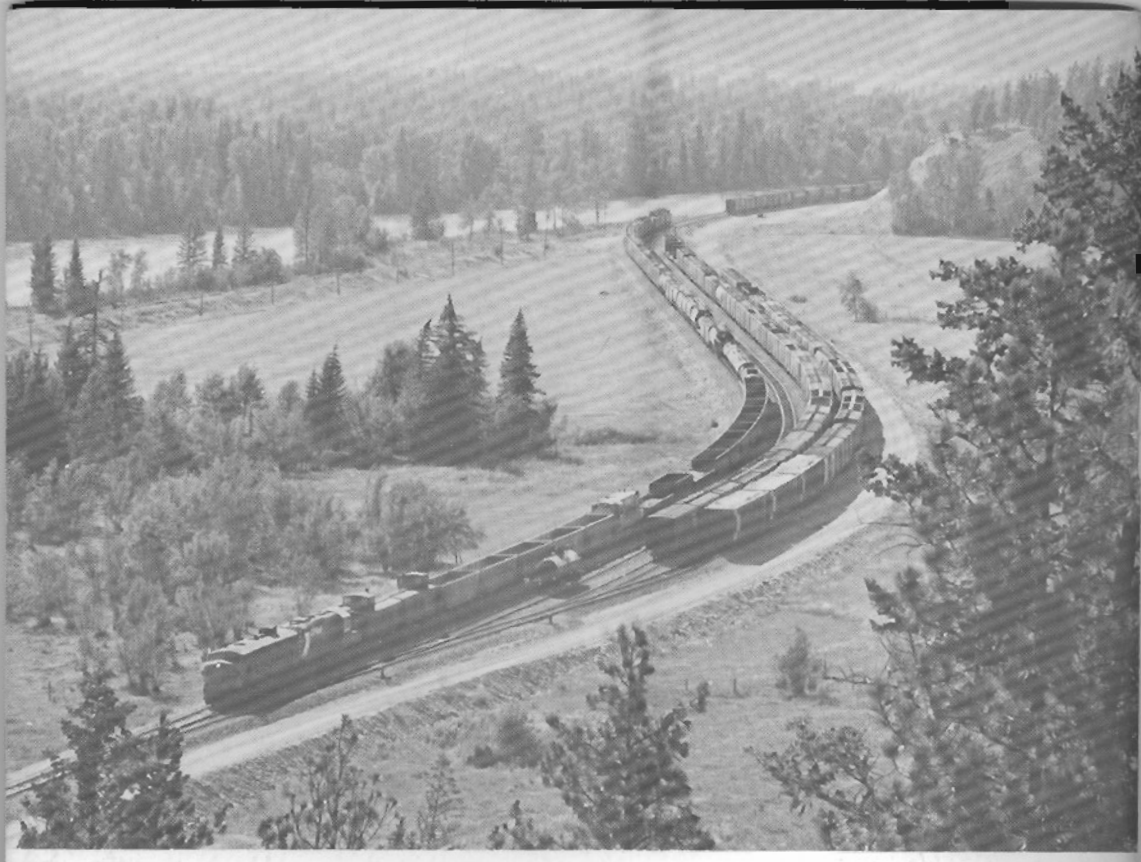
Glenn F. Cartwright.

FOR THOSE WHO ARE INTERESTED in the whereabouts of ex-CPR business car Number 8, it was spotted parked on a siding at the foot of Carrall Street one block north of Alexander in Vancouver's famous "Gastown" district, at the enf of June, 1972.

Although located not far from CP RAIL's Vancouver station, all signs of former Canadian Pacific ownership have been painted out, presumably because the car is now in the possession of Town Group Realty Company, which hopes to rent the car to an imaginative shopkeeper. The "For Rent" sign, displayed prominently on the car, suggested that it was considered as an ideal location for a "hair-styling, toy, jewellery" or similar establishment.

Glenn F. Cartwright.

A SOUTHBOUND CP RAIL FREIGHT, WITH AN INTERESTING AND VARIED CONSIST, passes the balancing yard at Fort Steele, B.C. en route to Colvalli and the Crows Nest district. Ronald C. Hill to the picture on 08/14/71.



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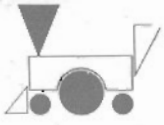
EDITOR S.S.Worthen PRODUCTION P.Murphy

VISIT THE
Canadian Railway Museum
OPEN MAY - SEPT.



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