

# The CARIBOO



Published by the BC Rail Historical & Technical Society

Issue 16

April 1994

# IN THE NEWS

## **Edited by Jim Moore**

BC Rail has decided to retire RDC-1 #22 following damage sustained when she and BC-21 recently hit a rock slide near Mt. Currie while southbound as Train #2. BC-22 was one of the regular "Lillooet" cars, operating for local passengers on an almost daily basis. She was equipped with walk-over seats (as is BC-21) for this service. BC-22 was built in 1962 for the Reading, and worked for SEPTA before being purchased for BC Rail. (WCRA "News")

BC Rail has three SD40-2 units on lease to the Grand Trunk Western for nine months. The units are #737, #739, and #742 (nee Kennecott Copper 102, 104, and 107) and are designated for "trail use only". (WCRA "News")

BC Rail's new service initiatives have helped Petro-Canada Products re-engineer its B.C. Logistics system. Prompted by the closure of Petro-Canada's Taylor refinery in 1991, the company had to bring fuel from Edmonton to northern B.C. The increased distances and transit time strained the distribution system.

BC Rail's customer service staff helped to design a program to monitor Petro-Can's transit times for loads from the refinery to their destination, including the return of the empties. They then adjusted BC Rail's train times to accommodate Petro-Can.

By helping its customer, BC Rail has received new Petro-Can business to ship an extra 200 tank cars of fuel from Prince George to Williams Lake. ("BC Rail Carrier")

A new mill has become a reality for Ainsworth Lumber after many years in the planning. An oriented strand board plant is in the final stages of construction at 100 Mile House and is expected to produce approximately 2800 carloads of OSB products each year. The plant will be the second OSB plant on BC Rail's line, the other being Louisiana Pacific in Dawson Creek. BC Rail has already added a rail spur into the mill and operations should begin this fall.

Ainsworth Lumber currently operates one veneer and three lumber mills on the BC Rail line. ("BC Rail Carrier")

BC Rail has spent more than \$7.5 million dollars for 150 new woodchip cars to increase its fleet capacity and benefit

customers. The cars, which cost \$50,000 each, allow for easier woodchip unloading.

The distinguishing feature of these new cars is the absence of the usual crossbars on the top. In the past, customers such as Fibreco Export had to roll the cars a number of times to remove woodchips stuck behind the bars. Now, one roll clears the car which means more efficient unloading. ("BC Rail Carrier")

CORRECTION DEPT.: Last issue (page 23) we published Ron Tuff's review of Patrick O. Hind's "Pacific Great Eastern Steam Locomotives". Unfortunately, the wrong address was listed. "Cariboo" readers may order this book at a special price (thanks to Paul J. Crozier Smith) direct from BCRHA, Box 8114, VCPO, Victoria, V8W 3R8.

Bob Deno, retired Supervisor of Special Equipment-Mechanical, wrote to comment on our July 1993 feature entitled "Railway Robots". According to Bob, this name, as well as the term "slave", were never officially used on the railway, although they may have been used by people in the running trades. In all written company references (Ed Note: of which Bob was the primary author) the terms "Remote Control Car" or "Remote Car" were used.

In Issue 15 (page 3) we printed a story describing the present-day Seapsan operation in North Vancouver. Included therein was a brief history of PGE marine operations. Unfortunately, through an error in punctuation, it appeared that PGE barges 1, 2, and 3 all ended up with Island Tug & Barge Company. Barges 2 and 3 did go to Island Tug & Barge following the end of the railway's marine operations. However, PGE 1 was sold in 1938 to the Mayo Brothers Lumber Company for use at Cowichan Bay.

The article referred to within the opening paragraph of Peter Hansmann's SD40-2 article (Issue 15, page 6) should be *Model Railroading* (July 1989).

FROM THE PUBLISHER: "Cariboo" survives 6.6 earthquake! Sincere thanks to those of you who called or wrote inquiring as to our safety. We reside about 12 miles from the epicenter of the January 17 Northridge earthquake. Needless to say, this has made for a very challenging lifestyle during the past two months. Our home remains structurally sound, although we did lose a significant amount of personal belongings. The BCRH&TS archives are safe, although a complete reorganization was required. The drawers of file cabinet in which the archives are stored all opened up, spilling the contents throughout the room.

As you will note, our publication schedule has remained on

track. If you have agreed to help in the preparation of a feature for publication in "The Cariboo", please do your best to meet the agreed upon deadline. If you have been contacted to assist with a project, now is the time to come through. We need material of all types and lengths to continue publishing this newsletter. Within the next year's material you will note many first time authors. If they can do it, so can you!

If you wrote inquiring about your subscription, a back issue, etc. and have yet to receive a reply, please write again. It is possible that your inquiry did not reach us, or may have been lost in the quake's aftermath. We will do our best to answer you cards and letters in a timely fashion.

We have several projects that still need some polishing prior to publication. Contained elsewhere in this issue is a list of planned features for the balance of 1994. If you have anything to contribute (e.g. photos, drawings, historical info, etc.) relating to these features, please contact me as soon as possible.

Remember: "The Cariboo" is reader driven...It is through sharing your knowledge that we all learn a bit more.

# INTERCHANGE

"Interchange" space is available only to subscribers. All adverts subject to editing. Inclusion based on space availability.

TUMBLER RIDGE INFO: Can anyone explain why, on what must rank as one of the most modern electric railways in the world, was regenerative braking not fitted to the motive power rather than the totally wasteful dynamic braking? Regenerative braking would, in fact, have eliminated the peaking (Ed Note: demand for power) by balancing the demand from up-grade trains with the input from downgrade ones. Lawson Little, 18 Highfields Drive, Old Bilsthorpe, Notts. NG22 8SN, England.

WANTED...copies of selected pages from the Revenue Freight Car Catalogue (July 1980), issued by the British Columbia Railway's Mechanical Department, to complete BCR Historical & Technical Society archival collection. If you have an original of this catalogue, please contact Jim Moore (c/o "Cariboo") to obtain a list of the needed pages.

TOP DOLLAR PAID for issues one through ten of "The Cariboo". Originals only, no photocopies, please. A.E. Roach, 6919 Harrison Lane, Alexandria, VA 22306.

**DRAFTING SKILLS** needed to assist with the preparation of scale drawings for publication in future issues of "The Cariboo". The BCR Historical & Technical Society has dimensional data pertaining to numerous on-line structures. Your help is needed to turn this information into scale drawings. Please contact Jim Moore (c/o "The Cariboo") if you can help with this project.

PAINT CHIPS: The BCR Historical & Technical Society has available prototype colour chip samples. "Cariboo" editor Andy Barber has generously donated a limited number of samples prepared from actual BC Rail paint supplies. Included are both greens, silver, red, white, blue, and yellow. Please send four dollars (either US or Canadian) for postal charges, to "The Cariboo" editorial address. Limit one each. Available only to members in good standing.

## THE TEAM

**PUBLISHER:** Jim Moore

**EDITORS:** Andy Barber

Paul J. Crozier Smith Greg M. Kennelly

## **CONTRIBUTORS:**

Doug Davies
Marcel Devlieger
Laszlo Dora
Grant Ferguson
Patrick O. Hind
Eric L. Johnson
Lawson Little
Ken Rowlen
Ron Tuff

All contributions are welcome. It is helpful if submissions are on a 3.5" disk in IBM WordPerfect, as a "flat" ASCII file, or typewritten.

All submissions are subject to editing as a condition of publication. Material will be retained unless other arrangements have been agreed upon in advance.

The editors encourage submission of photographs and illustrations which help reinforce the content of material submitted. Appropriate captions should be included. Photographs may be either black and white prints, colour prints, or colour slides.

Authors are responsible for all original statements made in their work. Submissions are accepted with the understanding that they are not under consideration elsewhere.

"The Cariboo" is copyrighted as a collection, and retains all rights editorial changes, designs, and artwork used in features.

EUROPEAN MEMBERS: Ian Bareham (10 Cullingham Road, Ipswich, Suffolk IP1 2EG, England) wishes to hear from fellow Europe-based PGE/BCR modelers and enthusiasts. Goal is to establish a support and information exchange network.

WANTED: I am looking for either a print or slide depicting MLW S-10 #6612 or #6613 in hybrid Canadian Pacific/PGE colour scheme. Units operated on the PGE in the late 1950s. I have some historical information that I would like to publish in "The Cariboo", but I need a photo of one of the MLW S-10s to illustrate this. Contact Jim Moore.

If you received a response to your "Interchange" query, kindly share it with your fellow readers. "Interchange" was designed to provide a non-commercial exchange amongst "Cariboo" subscribers.

# **UPDATE:**

The photograph of PGE gas car #107 (Issue 15, page 24) was taken in Lillooet in the late 1950s.

The PGE advertisement reproduced in Issue 15 (page 28) originally appeared in "Sunset Magazine" in 1957.

# PGE/BCR RESOURCES

- The May/June 1993 issue of Canadian Railway Modeller had as its cover story an article by frequent "Cariboo" contributor Marcel Devlieger. Marcel describes his modeling of a BC Rail Alco C425. Featured in the popular two-tone green color scheme, Marcel used an Athearn HO scale engine as the basis for his kitbashing.
- Diesel Era (January/February 1994) has as its over story a ten page article on BC Rail's Dash 8 fleet. Numerous photos are included, including several detail shots. Two pages of the feature are dedicated to reproducing factory painting and lettering diagrams from General Electric. This is a must read for those "Cariboo" readers modeling the contemporary period.
- Ron Tuff sent along photocopies of two short features from a book entitled "35 Modelbuilding Projects" (volume 1), by Walter Olevsky, 1971. The first describes construction of a wooden paint shed which formerly sat in the North Vancouver yard.

The second item consists of a photo and accompanying caption. The photo depicts a fiberglass gondola cover, as frequently seen on the railways's copper concentrate loads.

• The introduction of the Canadian Railway Model Parts

Guild's castings by Kirlin Scale Models (100 Horae Street, Winnipeg, MB R2H 0V9), when used in conjunction with presently available HO kits from several manufacturers, permits the accurate modeling of numerous variations of the AAR 40-foot boxcar in HO scale. The February 1994 edition of Railroad Model Craftsman includes an eight page story by Stafford Swain detailing modeling of CN's 40-foot AAR boxcars.

Swain's article, which is thoroughly documented, contains informative charts detailing forty-nine distinct car variations, some of which also operated on the Pacific Great Eastern and British Columbia Railway.

- The July 1989 issue of *Model Railroading* contained a diesel detail close-up for British Columbia Railway's GMDD SD40-2. Within the four page article are several photos along with an extensive detail parts listing. This piece is a complement to Peter Hansmann's SD40-2 feature as published in Issue 15 (January 1994).
- "Freight Car Journal" (Number One Box Cars), Kratville Publications, August 1971, had a two page article detailing the Thrall-Door cars. Included were photos and a scale drawing.

# MUSEUM SCENE

Author and railway historian (and BCRH&TS member!) Robert D. Turner recently spent two days at the Prince George Railway Museum (POB 2408, Prince George V2N 2S6) performing an evaluation of the historic value of the collection. Specifically, the museum's programme of putting together three complete trains was reviewed.

Two of the planned trains depict PGE consists. The first will be a 1950s work train. The museum has all of the rolling stock for this train, including locomotive, work cars, dining cars, sleeping cars, tool and wash car, and caboose.

The second train will be a representation of one of the railway's first trips (January 1953) into Prince George. So far, the museum has a caboose and eight cars for this project. Still needed is a pre-1953 PGE locomotive.

"On Track", the museum's newsletter has both a new look and a new editor. Greg Phillips has assumed the role of editor. "On Track" will now appear six times per year. Thanks to "Cariboo" contributor Roy Smith for his efforts as newsletter editor.

The Central British Columbia Railway & Forest Industry Museum Society operates the Prince George Railway & Forest Industry Museum. The Society is a registered charity with Revenue Canada. Donations to the Society qualify for an official income receipt.

# **NEW PRODUCTS**

Jim's House of Trains (3507 Debbie Drive, Lafayette, IN 47905) has published a small catalogue containing various railroadiana items available for purchase. Included therein were heralds for both the PGE and BCR. These heralds, priced at three dollars each, are printed (silkscreened) on 12" washable cardstock.

The brochure contains two different herald styles for the PGE: the moose (sic) and the provincial map silohuette.

There is a further entry for British Columbia Railway: black and white steam engine photos (8x10s). Priced at \$4.00 each or two for \$7.00.

Let them know that you read about their product in "The Cariboo".

Editor Note: The product news listed above is for informational purposes only. I have not personally seen any of the these items. Therefore, I cannot attest to their quality. If any reader purchases either the heralds or the steam engine photos, please write me with your comments/evaluation.

HOT SCOOP! Microscale has expressed an interest in producing a decal set for PGE's first two (diesel) colour schemes: orange and orange/green. These sets would be designed for the GE 65 and 70-tonners, along with the RS/RSC-3. Anticipated release date is first half of 1994. Microscale has asked our Society for research assistance. If you have any prototype data for these schemes, please contact Jim Moore, c/o "The Cariboo". Please do not send material directly to Microscale.

OVERLAND UPDATE: The long awaited release of the HO scale extended visions caboose remains indefinately delayed. Tom Marsh cites low reservation numbers. If you ordered/reserved these cabooses through an independent dealer, please reconfirm your order directly with Overland.

# PRODUCT REVIEWS

#### By Ken Rowlen

Atlas HO Scale Alco C-425 as British Columbia Rwy #805

I was very pleased with this unit. It is quite heavy -- a plus with me--, comparable to a Spectrum F40PH, all wheel-drive, and has horn-hook couplers of much better quality than average.

The general appearance is good. The upper long hood is a medium olive green with a thin white Z stripe extending back to the cab. The cab is black with "British Columbia" titles side by side, with the logo and the road number in white.

The model comes with hand rails in place painted black, sturdy enough for handling. The walkway and front and rear steps are yellow. Below the walkway, the running gear and details are black. Above the walkway, the long nose and the short nose have black and white zebra stripes. Above the windshield (on the short nose) are number boards. Between theses are dual headlights (vertical). On the left-side short nose (forward) is a three-chime diesel horn. Representations of MU sockets are cast on front and rear. The paint job is neither glossy or dull. The general appearance is neat and clean, about what you would expect from a fairly new unit just off the wash rack.

This unit starts off at about two-tenths of an amp (using an MRC 9500 power pack) and can be throttled back to a point where it is barely moving. It starts very smoothly, and picks up speed just about the way you hoped it would. The engine will cruise at freight speed at around 8 to 10 volts, drawing .15 to .20 amps.

This model is easier than most to put on the track, but it has one peculiarity, which even fooled the repairman at my nearest hobby shop. The coupler goes on a sort of plastic tube and, as received, is held in place by what looks like a phillips-head screw. You could work a screwdriver all day and it will never come out. Finally, I put a parts picker on it and lifted it out. It turned out to be a plastic plug like Con-Cor uses to secure trucks to a car.

I put a 2/56 tap about 3/8 inch into the mount hole, and as the spacing for the coupler in the nose of the unit is very tight, filed it just a little bit. I then took a Kadee box and had to file it just a little bit to fit through the nose. The shank of the Kadee #5 is just too short for the nose of the unit. So happening to have a Kadee #36 sample, installed it with a #5 spring and a 1/4" 2/56 machine screw. It worked just fine.

The Atlas C-425 lists for \$109.95. I purchased my engine for \$74.95 from Express Station, Tukwila WA.

"THE CARIBOO" WELCOMES READER SUBMISSION OF PRODUCT REVIEWS FOR PUBLICATION.

# WCRA CORNER

Once again, the West Coast Railway Association is offering its BC Rail nine-day system tour. This is an all-inclusive package all the way to Fort Nelson. These tours are WCRA's "crown jewel", and always result in rave reviews from tour participants. In addition to the usual spring and fall departures, some new options such as one way bus/one way train packages are being introduced. Pricing for these all-inclusive trips start at \$1588 for nine days, with an eight day shortened version as low as \$1378 (all prices based on double occupancy). Contact the WCRA at (604) 524-1011 for further details.

Tell 'em the British Columbia Railway Historical & Technical Society sent you!

\*\*\*\*

The Museum's restored Pacific Great Eastern RSC-3 #561 is alive and well. Out-shopped in january. the engine is being periodically used around Squamish during test-runs. Our congratulations to the WCRA and to those members who worked tirelessly in their effort to preserve this beauty.

Plans are underway to prepare the Car Shop building for visitors this summer. Still ahead is the fabrication of five sets of huge doors for the five track entrances to the structure.

The museum has received a generous donation of labour from George Third & Sons for the fabrication of the door hinges (valued at \$835). The WCRA match is for the materials. Here is an opportunity to assist with the complete of the former PGE car shop in a very significant way. Contact Grant Ferguson at (604) 987-5926 for more details.

# CAR SHOP

• In Issue 15 (January 1994) we published Richard Yaremko's article entitled "The All-Door Boxcar, As Found on The BCR". Included therein, on page 20, was prototype series numbering data. Since publishing this article, some additional information has come to light. For instance, within the LUNX 4100-4124 series, is (was) contained a block of cars leased to Armstrong Building Materials. Armstrong is neither a past nor present BCR on-line customer.

The above observation has lead us to further research which indicates that, while every effort was made to insure the accuracy of the numbering schemes listed therein, information provided by the leasing companies may not have been complete. Therefore, we must return to what has become the standard for modeling the prototype. In order to insure the greatest degree of accuracy possible, base your car number selection on actual prototype car observations.

- For those readers modeling the 1970s to the present: Here's some info regarding North American Car Corp. (NACC), now known as General Electric Railcar Services Corporation (GERSCO). Cars marked ALPX are leased to POTCAN, while those marked PTEX are leased to CANPOTED LTD.
- CGTX info: the CGTX 123xxx series are general-service tank cars built in March 1990.

The 26270-26324 series features 25,500 gallon tank cars generally used for styrene monomer service. These cars were built by Hawker Siddley in May 1986.

The 90134-90145 series, built by Trinity Longview in June 1985 are used for chlorine service.

• Procor Limited series PROX 23100-23160 are general service tank cars built by Procor Oakville in June 1989. These are 100-ton, 21,350 imperial gallons, lined tank cars used for styrene monomer service.

The series PROX 13600-13637 are acid tank cars built in October 2988 by Procor Oakville. These are 11,151 imperial gallon, insulated, coiled tank cars.

Credit: Society of Freight Car Historians.

# MOTIVE POWER NOTES

## Edited by Paul J. Crozier Smith

On January 23rd, BC Rail Train #2 hit a rock slide at Mile 93.5 of the Squamish sub. RDC-1's BC-22 and BC-10, and RDC-3 BC-30 made up the consist. BC-22 was severely damaged by riding up and over the rocks, and then rolling onto it side. Fortunately, no one was seriously injured. BC-22 has been retired, and its parts will be used to upgrade BC-15.

\*\*\*\*

Add another one to the increasing list of Cat re-engined RS-18's. Engine #613 is the latest and was completed January 5, 1994. Currently units 601 and 629 are under rebuild.

\*\*\*\*

On January 29th, a low-bed truck with a D-8 Cat collided with BC Rail's log train at Mile 104.0 of the Takla Sub. The consist of the log train was M420 #640, and M420B's 686, 688 and 684. All four locomotives and eight cars of logs were derailed when the truck slammed into the side of #686. The locomotives were heavily damaged and are being moved to Squamish for repair or retirement evaluation.

\*\*\*\*

With these temporary or permanent loses, BC Rail is arranging for the lease of some GP40-2's for branchline service. (Ed Note: A group of GP40-2s from Helm Leasing arrived in North Vancouver in early March.)

\*\*\*

BC Rail's ex-Kennecott Copper SD40-2's are on long-term lease until January, 1997. However, SD40-2's 737, 739 and 742 are now considered excess to BC Rail's needs. BC Rail is now working out a sublease arrangement to transfer these three engines to GTW for nine months.

\*\*\*

BC Rail has reportedly placed an order with General Electric for an additional four Dash 8 locomotives (GE Dash 8-40Cm's #4627-4630) for a planned January 1995 delivery.

Also, with the above noted possible need for four-axle power, something else new or used may also be in the offing.

# Pacific Great Eastern / British Columbia Railway Preserved & Restored Equipment

## By Ron Tuff

The challenge of accurately reproducing the prototype in minature often leads to historical research through magazine articles and photographs. But these sources may not contain specific information or dimensions required for modelling projects. Sometimes the only reliable source is the prototype.

The following is a list of retired British Columbia Railway locomotives, rolling stock and structures that still exist in a modified, preserved or restored state. (A complete history of each piece is not included.) Many of the pieces are on private property and permission should be obtained from the owner before trespassing. Others are in the collection of Railway Historical Associations or Museums. Our thanks go to these organizations who have helped to preserve a portion of our railway heritage.

In addition, several "Cariboo" contributors helped fill in the missing details. They include Andy Barber, Greg M. Kennelly, Jim Moore, and Paul J.C. Smith.

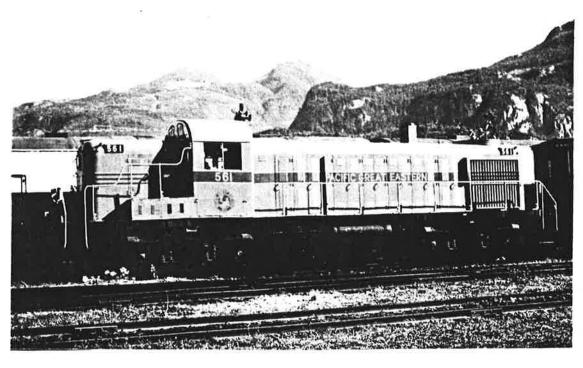
## Locomotives

Num Bldr Model Date	Loc'n	Comments
501 MLW S-13 1959		Ex BCR 1001. Acquired 1989. For sale.
502 MLW S-13 1959	10	Ex BCR 1002. Acquired in 1992, renumbered 827.
503 MLW S-13 1959	22	Ex BCR 1003. Acquired 1989, now 201.
551 GE 65 T 1948	18	Acquired 1990 and being restored.
556 GE 70 T 1950	23	Acquired 1965 & renumbered 1.
561 MLW RSC-3m 1951	18	Acquired 1986 & being restored.
586 MLW RS-10s 1956	12	Acquired 1986.
624 MLW RSD-17 1957	24	Ex PGE 624. Bought by CP & renumbered
		8921. (Demonstrated on P.G.E. in 1959).
803 Alco C-425 1964	26	Ex EL 2453. Acquired 1992.
804 Alco C-425 1964	26	Ex EL 2454. Acquired 1991.
805 Alco C-425 1964	26	Ex EL 2455. Acquired 1991.
806 Alco C-425 1964	26	Ex EL 2456. Acquired 1991.
3716 MLW 2-8-0 1912	12	Tender only from 3716. Acquired 1991.
2 BLW 2-6-2T 1910	18	Ex Howe Sound & Northern 2. Nee Howe
		Sound, Pemberton Valley & Northern 2. Acquired 1993.

#### Robot Control Cars

Num	Bldr Model	Date Loc'n	Comments
	Alco FB-1		Ex SP&S 866-B. Acquired 1988.
RCC 1	EMD F-7B	1950 12	Ex BN RCU 112. Acquired 1992. (Previously BC Rail RCC 10).
RCC 2	MLW FPB-2	1955 27	Ex CN 6854. Acquired 1988.
RCC 3	CLC CFB 16	-4 53 17	Ex CP 4455. Retired 1990.
RCC 4	CLC CFB 16	-4 53 17	Ex CP 4456. Retired 1990. Painted in
			VIA colours.

Note: Refer to "Cariboo" #13 for details of the fate of the RCC.



PGE RS-3 #561 Squamish Yard Jim Moore October 1991

## Passenger Equipment

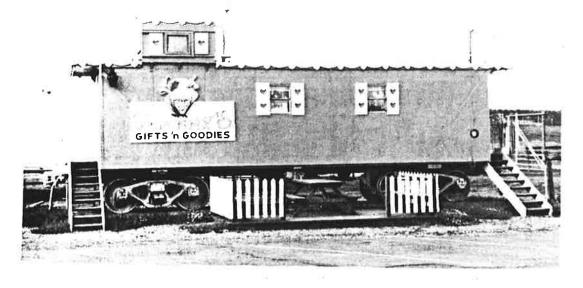
Number Bldr Type	Date Loc'	n Comments
3704 CC&F Mail/Baggage	1949 18	Ex CP 3704, exx CP 4810, nee CP 3635.
6508 Diner	12	Ex BCR. Exx CPR mail-express.
Clinton ACF Sleeper	1924 18	Ex Interstate Public Service
		Co "Scottsburg", acquired 93.
D'Arcy CC&F Coach	1949 17	Ex CP 2267, acquired 1973.
Endeavor BSC Combine	1920 12	Ex Reading 592.
Quesnel CC&F Coach	1949 17	Ex CP 2271, acquired 1973.
Resolution BSC Club Car	1920 17	Ex RDG coach, acquired 1973.
Sundance CC&F Coach	1950 17	Ex CP 2283, acquired 1973.



"Endeavor" PG Rwy Museum Andy Barber June 1993

## Num Bldr Type Date Loc'n Comments

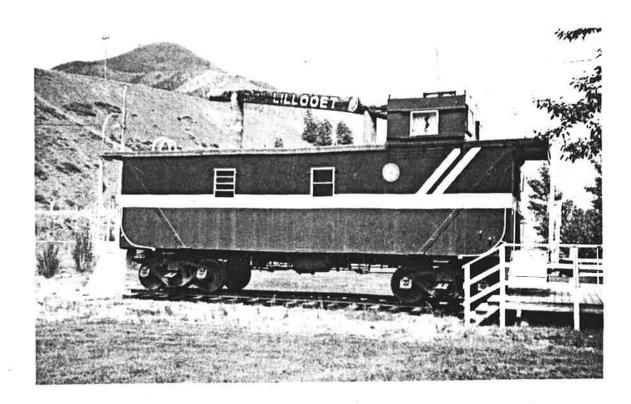
CP PGE PGE PGE PGE PGE PGE PGE PGE PGE PG	Wood 1906 Wood 1956 Wood 1956 Wood 1956 Wood 1956 Wood 1956 Wood 1956	01 03 20 05 09 16 19	Private owner?  Ex 990510, exx PGE X150, exxx PGE 1810. Nee EJ&E. Purchased by PGE in 1949.
1817 PGE 1821 PGE 1822 PGE 1823 PGE 1825 PGE 1832 PGE 1833 PGE 1836 PGE 1837 PGE 1840 PGE 1843 1845	Wood 1956 Wood 1956	18 18 15 07 08 11 02 17 12 12 14 12	Ex SL-SF. Acquired by PGE 1961 and rblt. Ex SL-SF. Acquired by PGE 1961 and rblt.



Ex PGE #1832 100 Mile House Jim Moore June 1993



Ex PGE #1837 PG Rwy Museum Andy Barber June 1993



Ex PGE #1823 Lillooet Jim Moore June 1993

## Freight Equipment

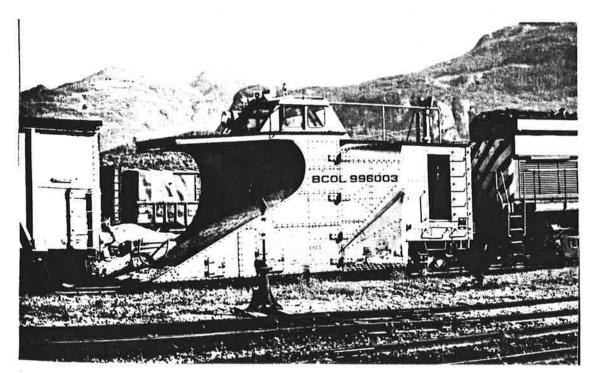
Num	Bldr	Type	Date	Loc'n	Comments
582	PGE	Box	1913	18	Ex PGE 582, nee CP 108210. Fowler Patent outside braced box car. Ex stock car.
1924		Tank	1920	04	Ex PGE 1924. 33' steel tank car.
1926		Tank	1920	18	Ex PGE 1926. 33' steel tank car.
5000	PGE	Stoc	c	12	Ex PGE. 40' stock car.
5242	NSC	Box	1971	12	Ex PGE 5242 sliding/plug door box car.
5309	NSC	Box	1971	12	Ex BCR. 50' boxcar.
5667	NSC	Box	1973	12	Ex BCR. 50' boxcar.
5698	NSC	Box	1971	12	Ex BCR. 50' boxcar.
8030	NSC	Box	1969	12	Ex PGE. 50' insulated boxcar.
9929	PGE	Gon	1954	12	B.C. Woodchip gondola rebuilt from PGE
					gondola.
4031	9 NSC	Box	1971	12	Ex BCR.
4039	8 NSC	Box	1971	12	Ex PGE 40398 sliding/plug door box car.
		Box		18	Ex CN 404396, exx CNoR 404396.

## Structures

Туре	Date	Loc'n	Comments
Car Shop Depot Speeder Shed	1915 1950 1919	18 12 12	Relocated to this site in 1991. Panabode style. Moved from Hixon BC. Reconstructed from PGE plans.
Station Station Water Tower	1920 1921	13 21 06	Standard #3 two storey wooden design. Octogonal design. Heated interior. Scale drawings in "Cariboo" #4.

# Maintenance of Way

Num	Bldr	Type	Date	Loc'n	Comments
X 210	CP	Box Car	.1914	01	Ex PGE 1210, nee CP outside braced box car.
X 219		Box Car		12	Ex PGE. Outside braced.
X 401		Flat		18	Ex Railway Appliance Research 4901.
X 551		Tank		18	Ex PGE.
	ussell	Snowplow	1903	12	Ex PGE 6001. Retired 1950.
6506		Combine		12	Ex BCR Tool/Wash Car, nee CPR express baggage.
990191		Box Car	1913	18	Ex PGE X191, exx CN 406346, nee CNoR 406346. Fowler Patent outside braced box car.
990201		Flat		12	Flat car with tool/fuel house on one end.
990231	Pullma	n Baggage	1943	18	Ex PGE X231, exx PGE 722, nee US Army Troop Sleeper 7223.
990242	Milw	Coach	1934	18	Ex BCR Rule Instruction Car, exx PGE X242, exxx PGE 623 nee Milw coach/dormitory 4442.
990245		Diner		12	Ex BCR.
991130		36' Flat			Ex PGE.
992010	CPR	Bunk car		12	Ex BCR. Nee CPR 40' box car #245550.
992253		60' Flat	1954	12	EX PGE.
992356		Box Car	1921	12	Ex PGE. Converted into camp supply car. Nee CPR 245950.
992417		Diner		12	Ex BCR.
993015		Box Car	1928	12	Ohio Crane tool car. Nee CPR 246535.
993030		Tool Car		12	Ex BCR 993030, nee CNJ.
993565		Tank Car		12	Ex PGE. Riveted tank car.
996002	NSC	Snowplow	1957	18	Ex PGE 996002. Exx PGE 6002.



Snowplow #996003 Squamish Yard Jim Moore October 1991

## Locations of Preserved and Restored Equipment

## British Columbia

- 1. Burnaby; Burnaby Landscape Co., 5883 Byrne Road.
- 2. Chetwynd; Along Hiway #97.
- 3. Coquitlam; BC Transit Information Booth, Blue Mountain St., east of Brunette.
- 4. Ladysmith; Ladysmith Railway Historical Society.
- 5. Langley; 21168 80th Avenue. (Private owner?)
- 6. Lone Butte; BC Rail property.
- 7. Lillooet; Cayoosh Creek Campsites.
- 8. MacKenzie Jct; Tourist Information Booth, Junction of Hiway #97 & #39.
- 9. N. Vancouver; Pemberton Station Pub, adjacent to BC Rail Station.
- 10. N. Vancouver; Vancouver Wharfs Railway, adjacent to BC Rail.
- 11. 100 Mile House; Souvenir Shop.
- 12. Prince George; Central British Columbia Railway and Forest Museum Society, Cottonwood Island Park.
- 13. Quesnel; BC Rail property.
- 14. Ouesnel; Lebourdais Park.
- 15. Saanichton; Saanich Pioneer Museum, 7321 Lochside Drive.
- 16. Seton Landing; Along BC Rail mainline.
- 17. Squamish; BC Rail Shops.
- 18. Squamish; West Coast Railway Association Collection.
- 19. Vancouver; Kids Only Market, 1496 Cartwright St., Grandville Island.
- 20. Williams Lake; Along BC Rail mainline.
- 21. Williams Lake; BC Rail yard.

#### Other Canadian Locations

- 22. Winnipeg Man; Greater Winnipeg Water District Railway.
- 23. Whitby Ont; Lake Ontario Steel Company (LASCo).
- 24. Montreal Que; CP Rail System.

### American Locations

- 25. Portland Or; Pacific Northwest Chapter of the National Railway Historical Society.
- 26. Carthage NY; Mohawk, Adirondack & Northern Railroad.
- 27. Swedeland Pa; Locomotive Preservation Society.

## Resources

- "Canadian Trackside Guide 1993", Bytown Railway Society Inc., Ottawa, Ontario.
- "On Track", (Roy Smith, editor). The Central B.C. Railway & Forest Museum Society, Prince George, B.C.
- "The Cariboo", (Jim Moore, editor). BC Rail Historical & Technical Society, Valencia, California.
- "The Guide to Canada's Railway Heritage", Lawrence Adams.
  - North Kildonan Publications, Winnipeg, Manitoba.

The CARIBOO is published quarterly for enthusiasts and modelers of the Pacific Great Eastern Railway and its successor lines. Sample issues may be obtained for \$4.00 U.S. funds (posted to North American addresses). All editorial contributions are welcome. Send all correspondence to: Jim Moore, 25729 Floral Court, Valencia, California 91355-2139, U.S.A.

### A B C RAIL CABOOSE YOU CAN BUILD

Text, Photos and Diagrams by M.C. Devlieger

In the late 1960s, faced with a significant increase of freight traffic, British Columbia Railway found itself with a shortage of cabooses. BCR was already building assorted rolling stock at its new Railwest Manufacturing facility in Squamish. With this capability on hand, BCR decided to produce an order of steel wide-vision cabooses in-house. (Ed Note: A total of 34 steel wide-vision cabooses were produced between 1968 and 1975.)

Being a Trainman on the BCR in the early 1970s, I spent a good amount of time in these cabooses. I recall them being rather plush since they came to us new, with the comfort of two high-back seats in the cupola, and two high-backs at the desk at each end of the caboose. Each came with full interior facilities: running water, stove, fridge, and even a toilet. To offset the cold Canadian winters, it was decided to include two heaters rather, than the standard one. I always found it odd that these cabooses never included sleeping facilities, but then we always stayed in the trainmans' bunkhouse on our turn around trips. Yes, with cushioned couplers, these new cabooses were a far cry from the old PGE wooden backs, which were now relegated to work train service.

Unfortunately, this caboose has never been offered in styrene or brass. Therefore, I decided to scratchbuild this model out of necessity. I referred to one of Patrick Lawson's articles about modelling a Canadian Pacific wide-vision caboose using 2 Model Dic Casting wide-vision cabooses. However, upon a closer look, I found that this method would involve more work than building the BCR model from scratch. Luckily for us modellers, BC Rail chose to build their cabooses utilizing a rather simple all welded box-type construction. Therefore, the model would begin with a rather basic styrene box.

Even though I started this project before seeing Carter Cram's drawings in "Cariboo" issue 11 (January 1993), I would still recommend reviewing these, for not only does Carter show outside dimensions, but inside details as well.

## Geading Stanracal

I started building styrene parts using the various templates pictured in Figure 1. The floor and car ends are cut from .040° styrene. Before assembly, a heater fuel filler was installed at both ends of the ear. Cut an 8 inch square hole on the left side of the end door (see car end template, figure 1). A small strip of .010° styrene was then comented to the top of the opening and angled inwards, down to behind the bottom of the opening. Coment the car ends over the end landings on the car floor, butted up against the floor. Make sure you have a square alignment. The car sides were cut from .020° styrene. Cut out the windows first. Cement the car sides to the floor and car ends. I allowed the side of the car to extend past the floor by about 1/16 of an inch.

A Details West underframe was cut to size, then comented in place as shown in the template (figure 1). Using a file and 600 grit sandpaper, round the vertical corners of the car and end door entrance way. The door was cut from .020" styrene. Next the window opening was filed out using a small round jewellers file.

The end doors are now comented on the inside. Using the marker light housing template, create 4 roof trusses from .040" styrene. Coment these inside, across the top of the ear, according to the four marks on the side template (figure 1). A scale 6 inch square piece of .010" styrene is comented at the top right hand corner of the sides for a car vent. Finally, glue two ounces of weight inside the ear floor.

## The Cupola

Cut two cupola sides from .040" styrene. Frame the inside with a strip of .040" styrene for the outer side and bottom edges (see template). Fabricate both cupola ends from .020" styrene and cut out the windows. Cement these cupola ends onto the edges of the cupola sides. Let this sub-assembly set up for five minutes, then place onto the caboose. Adjust so the cupola sides slip over, and fit snugly, to the sides of the caboose. Make sure the cupola is square. When dry, use .020" styrene to fill in the bottom leading edge of the cupola side so that the surface is flush with the cupola ends. The inner set of roof trusses should now be positioned so as to lend support to both ends of the cupola.

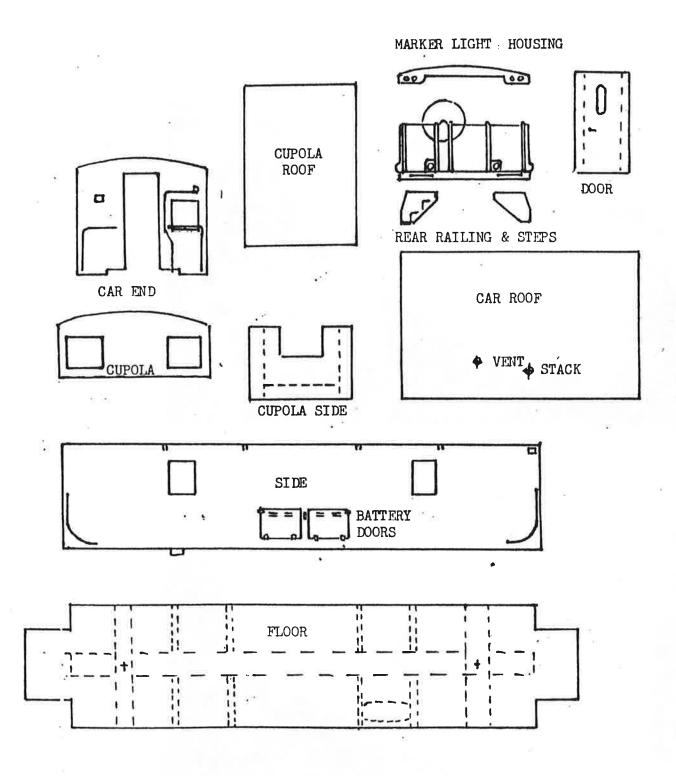
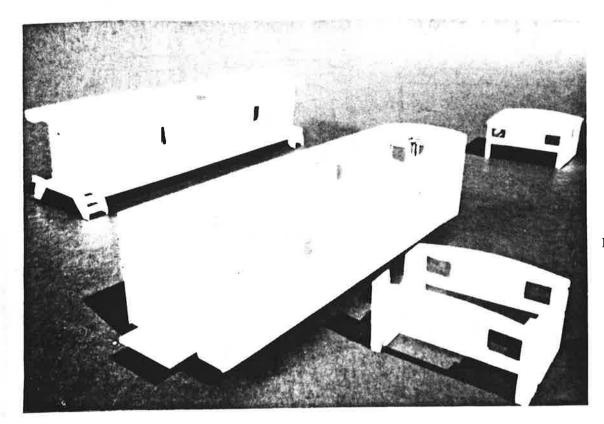
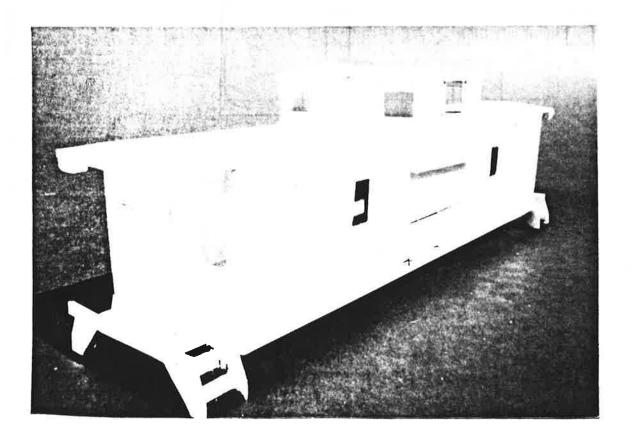


FIG. 1



Roof trusses in place. Note cupola inner framing.



Make sure cupola has a snug fit.

#### Chappables readile

Create the cupola roof using .020" styrene. When the cupola has thoroughly dried, file the top of the roof to ensure a snug fit. The roof template was drawn slightly oversize to allow for trimming afterwards. Cement the roof at one end first, and allow to dry. Next cement the other end over the roof curvature, and hold in place using clastic bands or pipe cleaners. When dry, trim the roof so that there is a 1/32" overhang on the front and back of the cupola.

The sides of the roof are to be trimmed to 1/64" overliang.

Next Fout a 1/2" piece of 1 x 2 styrene strip. When comented above the side cupola window, this piece becomes a top rain gutter. With a file and 600 grit sandpaper, round off all of the corners, including the bottom edge.

#### Caur moduli:

From .020" styrene sheet, cut 2 roof sections. The template is slightly oversize to allow for trimming. With the cupola in place, cement the two roof halves, fore and aft of the cupola. Make sure the roof butts up against the cupola snugly. Allow for a bit of overhang on each side. I found it easier to cement one side at a time (due to the roof curvature, just as I did with the cupola roof). When dry, trim the sides, and sand smooth. Do not trim the end car overhang yet.

#### Right raddings

I created two end railings as per the template. Assemble the railings directly on the template. I started with a bumper out from 4 X 8 strip styrene. At the left side of the railing, I used two pieces of 1 X 2 strip styrene, and cemented this assembly to the back of the brake wheel housing.

Cement the brake wheel in place. On the inside, now cement the entire assembly as per the template. Remember: there are two brakes on this caboose. For the right railing, I cut two pieces of .035" styrene rod (a bit larger than the template). I drilled a #78 size hole to accommodate the hand rail, which I formed from .015" wire. The right hand rail was cut at the brake housing. I then threaded the hand rail through the two posts. I moved the two posts to the vertical portion of the hand rail and trimmed to the same size. The same procedure is done for the left side of the hand rail, but using only one styrene post.

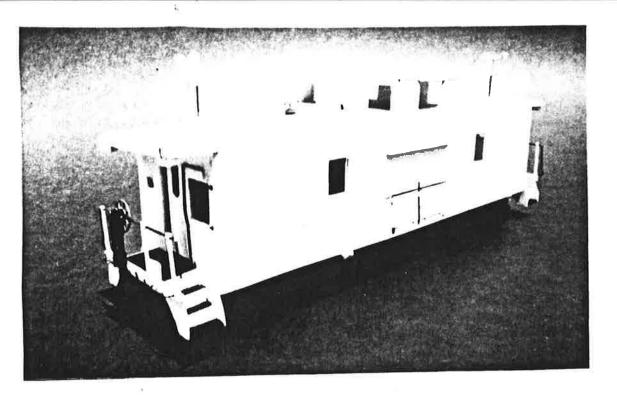
Some of these cabooses had a floodlight directly above the rear observation window. These lights were fed by an electrical conduit which ran up the left side of the window from the floor. I used .015" wire to simulate this. Later, BC Rail decided to install two ditch lights at both ends of the car, in favour of the single floodlight. This second arrangement was done on a trial basis on some cabooses. Therefore, the electrical conduit (for the floodlight arrangement) was left intact. I created one of each versions.

For the two ditch light housings, I cut a 1/8 inch square piece of .020" styrene. I then framed the top an one side using I x 2 strip styrene. The center was drilled (not through!) to accommodate the MV lens. The center, where the 1 x 2's meet, was filed "round". These two housings were cemented on top of the humper as per the template. Two grab irons were also installed on the face of the humper, as per the template. Trim the protruding grab iron on the opposite side "flush". Remember to create the exact same railing for the opposite end of the ear.

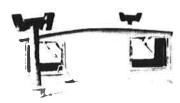
#### Siteps:

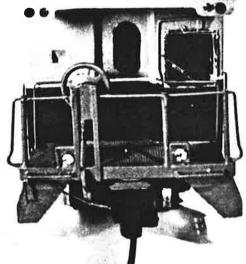
Lused eigarette paper foil (from eigarette package), which I corrugated and cemented (using white glue) to the top of the platform. When dry, trim off the excess material using an Xacto knife. Cement the end railing assembly in place against the platform, top being flush. The sides for the steps were cut from .010" strip styrene, two per car end as per the template. Cement directly inside the bumper, with another directly opposite. Three steps were then cemented between the sides. .010" sheet styrene was used as the "face" of the steps. I used Detail Associates caboose end platforms, which were cut to fit for the tops of the steps.

Create a marker light housing using the template. Laminate two .040" styrene sheet pieces together. Drill two #60 size holes to accommodate the marker lamps. Cement this end housing below the roof, in line with the railing. I cut a 3/8 inch piece of 1 x 2 strip styrene for the rain gutter, which should be cemented along the overhang above each step.

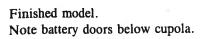


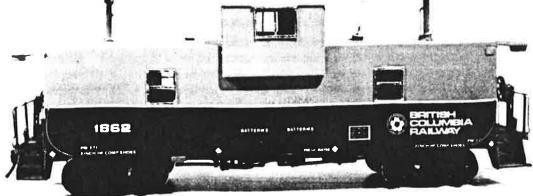
All details installed, Ready for painting.





Painted model. Note wipers and ditchlights.





#### Details, details

For the roof vent, I obtained some McKean Models truck bolster pins from my scrap box. I filed the tops into a cone shape, and installed a looped piece of .015 wire in the center for the pipe. Cement this assembly in place as per the roof template. Do the same for the smoke stack. A piece of .015" wire was used for the line running mid-way from the stack, over the collar, and into the roof.

I am not sure how the brake rigging is placed. However, I noticed the triple-valve is opposite the air reservoir. The air hose is mounted on the right side of the coupler box.

There are two different styles of equipment side doors, which are located at the ear's center. One version has the equipment box mounted underneath the ear frame (one side only), with a propage access door directly above. Figure 1 shows the second, more popular version, which has 2 battery access doors directly below the cupola. I fashioued these doors using .010" sheet styrene.

#### ll<sup>p</sup>avionú,

Gently wash the caboose using dish washing liquid. Two colour schemes were used: the two-tone green and the newer (1985 to present) red, white, and blue. The R/W/B scheme also had a white chevron variation for the 1986 Expo.

The two-tone green saw both the PGE map herald and the BCR dogwood herald. The upper half of the ear is painted light green, including the roof and cupola. The lower half, frame, and some trucks are dark green. The colour separation line is directly below the side windows. The end platforms, steps, railings, grab irons and spare knuckle are yellow. The decals were applied per the manufacturer's instructions.

The newer R/W/B scheme receives 3 equal portions of colour around the circumference of the caboose, with the first colour fine being directly below the cupola. The roof, top car-half, and cupola are red. The bottom colour (dark blue) separation line runs 3 feet above the bottom edge of the carbody. The remaining mid-section is painted white. The trucks, underframe, end platform, steps and railings are all painted aluminum. The smoke stacks are also painted aluminum, with the tops receiving a dark brown dusting. The bottom of the smoke stack may be oversprayed with the roof colour, as is often found on the prototype. After the decats have been applied, a clear layer of dullcoat is applied.

#### Winnellanws:

No windows are commercially available for this caboose. Therefore, I decided to install the windows on the outside of the caboose. I fashioned my own windows from .013" clear glazing, making the overall size about 20% larger than the opening. I used foil tape for the window frame to simulate the prototype's aluminum frame. By covering the entire window with tape and trimming the excess (using a double-wide Xacto blade, 2 blades bolted together), I scribed the window's perimeter. The inner foil is now removed. I cemented these windows, with the foil on the inside, using white glue. Some of the prototype cabooses had round-cornered windows, however, for simplicity, I chose the square windows instead.

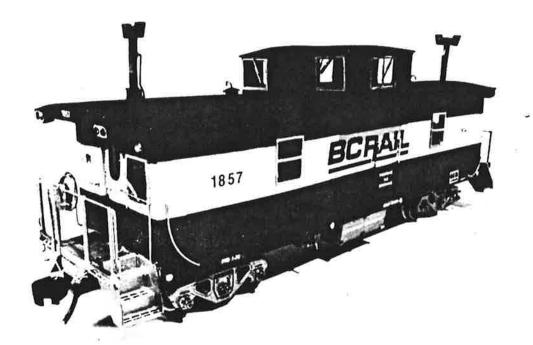
The end observation window and cupola window are the same size. Wipers were installed here. The cupola's side windows are larger, having a two slider-window arrangement. The caboose side windows are smaller and double-hung. I used the cut ends from the grab irous for wipers, by cementing two pieces 1/8 inch midway together. Cement as indicated in the template.

#### Hümsell dlestanills

Using .015" wire and a #78 drill, I installed hand railings, as per template. These were then painted yellow.

The jewels were comented in place for the marker lamps using white glue. Green inside and red outside. The MV lenses were also comented in place using white glue, either as the two ditch lights or single floodlight above the observation window.

Next install the Kadee couplers as per the manufacturer's instructions, with an uncoupler bar mounted on the left side. Last, but certainly not least, the trucks are mounted to the underframe bolsters.



Finished model. Note equipment box below frame.

### BILL OF MATERIALS

Andy W. Scale Models

BC Rail diesel decats #1

Detail Associates

6206

air hoses

6502

caboose end platform

### Details West

183

underframe

196

knuckle

6215

coupler bar

## Evergreen Scale Models styrene

220

.035" rod

8102

Lx 2 strip

8408

4 x 8 strip

9006

.010" sheet, clear

9010

.010" sheet

9020

.020" sheet

9040

.040" sheet

## Hoquit

110010 black

110011

white 11003 t

yellow 110040 dark green

110048 light green

110050 red

110050

dark blue

110101

aluminum

Herald King

C230

caboose, BCR dogwood herald

C424

caboose, PGE map herald

K & S Engineering

498

.015" wire

McKean

10

brake set

Miniatures By Eric

\$6

smoke stack

Model Die Casting

2961

jewels, red

2962

jewels, green

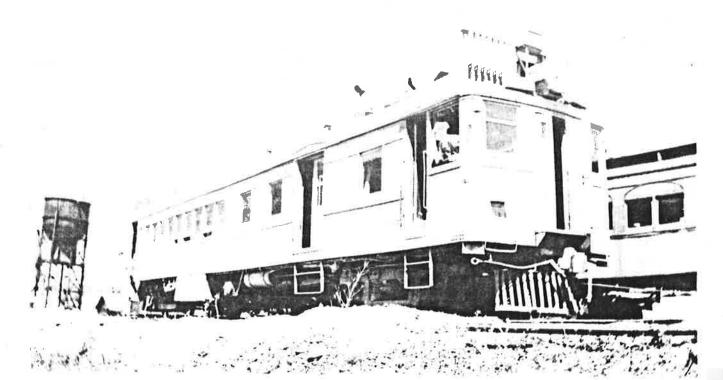
**MV** Products

ditch light 1.\$18

# PACIFIC GREAT EASTERN RWY: Gas Passenger Cars

Road Nbr	Builder	Year	Туре	Comments	
101	Hall Scott	1913	Gas/Electric	Wrecked/burnt, 6Oct14. At Larson's Station.	
101(2)	Hall Scott	1914	Gas/Electric	Cvtd by PGE to combine #1800, Mar51. Scrapped.	
102	Hall Scott	1913	Gas/Electric	Cvtd by PGE to combine #1801, Apr51. Scrapped.	
103	Hall Scott	1914	Gas/Electric		
104	GE	Jan 1913	Gas/Electric	Serial #3742. Model CRE70B11. Delv'd to GN as #2301. Used on Victoria/Sidney Rwy. Sold to PGE April 1919. Scrapped @ Squamish, /52.	
105	GE		Gas/Electric	Serial #3741. Model CRE70B11. Delv'd to GN as #2300. To Morrissey, Fernie & Michel. Sold to PGE, May 1920. Scrapped @ Squamish, Aug 47.	
106	Westminster Iron Works	1923	Gas/Motor	Four-wheel type. Used for line inspection and transporting Squamish shop crews. Scrapped @ Squamish, June 1956.	
107	Ottawa Car	1926	Gas/Electric	Later cvtd to diesel.  Ex CNR #15823. Sold to PGE /49.  Scrapped @ Squamish /62.	

Compiled by Patrick O. Hind.



#### A LIMEY ON THE CARIBOO Lawson Little

Back in 1981, I made my first trip across the Atlantic from England. After a few days in Vancouver, I planned to follow a circular route through the Rockies -- by rail, of course. I had absolutely no idea that twelve years on, my most enduring memories of that journey would not concern the Rockies, but the first leg of the journey, from North Vancouver to Prince George on BCR Train No. 1, the "Cariboo Dayliner".

It was very early on a sunny September morning when my taxi dropped me at North Van Station. The three Budd RDC's stood gleaming, their twin GMC diesels burbling quietly -- but I knew that all was not quite as well as it seemed. Only a few months previously, BCR had been forced to reduce train frequencies drastically because of chronic unreliability of the then 25-year old Budds. An immediate and vociferous response from the public soon caused a change of heart, fortunately for my plans. And with the promise of Government financial aid for a rebuilding program, BCR reinstated the full passenger schedule.

At the time of my trip, the upgrade program had yet to take effect, however, so I was looking forward to the trip with more than the usual anticipation. Apart from any possible problems with the train itself, I knew that operations on the line were currently affected by a long-running labor dispute in the forest products industry, with many passing tracks clogged by idled freight cars. Problems seemed far away, though, as prompt at 7:30 a.m. the Allison torque converters took the strain, and BC-30, an RDC-3, smoothly led BC-10 and BC-12 (RDC-1s) out through the North Van yards.

Having spent the previous day riding the Royal Hudson train, I was already familiar with the first stretch of line along the coast to Squamish. But the spectacular scenery was well worth seeing a second time, and all too soon we left the sea behind, climbing along the Cheakamus River through Garibaldi Provincial Park, pausing briefly at whistle stops with evocative names -- Brandywine Falls, Rainbow Lodge, Owl Creek, Seton Lake, and finally -- and uneventfully -- into Lillooet.

Here there was a short pause while BC-12 was detached for the afternoon return run to Vancouver, but soon the other two cars were climbing north along the flank of the Fraser River valley. Almost before we were out of sight of Lillooet, the fun started -- BC-10 lost its brakes! After a brief trackside discussion, the crew isolated the circuits and we carried on.

Not for long, though; as we ground slowly up the 2.2% grade, both engines on BC-30, in which I was traveling, suddenly cut out, and we came to an abrupt halt. More consultations. The engines were re-started, but as soon as we began to move the circuit breakers dropped out and the engines stalled again.

Some of the passengers, aware of the unbraked BC-10 hanging on our tail, and looking at the muddy waters of the Fraser hundreds of feet below, were getting decidedly edgy. But as often happens, the crisis produced a Man of the Moment. This time it was a gentle giant by the name of Ray Rebagliati, Conductor of Train No. 1. After calming frayed nerves, he opened the control cabinet, and held the circuit breakers with both hands while the engines were again re-started and we crawled to the top of the grade. For the rest of the journey BC-10 pushed us along!

As mentioned earlier, most of the passing tracks were blocked with surplus freight cars, so for our next meet with a southbound freight we were directed to reverse into a little-used spur. Unfortunately, our Engineer was unable to persuade the cars into reverse gear! This interesting situation was further enlivened when the radio crackled to life with a laconic message from the freight already visible in the distance, "Well, I don't care what you do, but we sure ain't stoppin'"!

I think he was only kidding, but our Engineer wasn't taking any chances. He sprinted through the cars, transferred control to the rear cab, and drove forwards into the spur from there -- no problem!

Our next encounter with a freight was a planned run-around of northbound No. 23 at Soda Creek. Unfortunately, as he went into the passing siding, he put a couple of cars on the ground. More debate. It was decided that No. 23 would carry on ahead, with No. 1 jogging along one hundred yards behind. When we reached Gibraltar Mine, we headed in the spur (forwards this time!), then the freight reversed past us at all of 40 mph so that we could get ahead. Incidently, on this occasion all the freight power (SD40-2, M420W, C630, M420B, RCC, M420W) was on the head end.

After all the excitement, and rather to my disappointment (though I suspect the other passengers were relieved), the rest of the journey was uneventful. We eventually rolled into Prince George at 9:30 p.m., just an hour off the advertised, after 468 unforgettable miles.

#### Postscript

Five years later I brought my new wife to Expo, and needless to say, the Rockies trip was again on the program. For the sake of variety, this time we went the other way around, starting with the eastward leg and finishing up at Prince George for the southbound journey. Since my previous visit, one Budd had received the promised face-lift, with new Cummins engines and virtually everything else (apart from the indestructible stainless steel frame and shell) also replaced, but the cost was a staggering \$1,400,000 -- much more that the Government was prepared to repeat. So the other cars just got new Cummins engines, which didn't do a lot for their overall reliability. So again I had cause to look at the prospects for the journey with anticipation!

Again it was a fine sunny morning as we left Prince George, this time with four RDC's --loadings were up! The journey to Lillooet was spectacular, if uneventful, but immediately afterwards things began to get interesting.

Within a few yards, we had to make an emergency stop --the Train Orders had blown out the window! After sorting this minor problem, we continued southward, now hauling an additional pair of Budds picked up from the short working between Vancouver and Lillooet. Traditionally, these were the two cars in worst condition, and this occasion was no exception -- the added cars were each running on only one engine.

The extra load soon made its presence felt; one by one engines shut down, and by the time we reached Darcy only FOUR of the twelve were still on line. Faced with another 2.2% grade, the Engineer wisely decided not to risk stalling in section, and went in the hole to await assistance. After an hour or so help arrived in the shape of a young mechanic laded with tools and a large supply of oil. Eventually, he persuaded two of the reluctant engines back into life, though it might have been a better idea to send the Lillooet Switcher to push us the rest of the way! We crawled up the grade and at last reached the summit, to cheers from the passengers. The rest of the journey was mainly downhill, but things were far from happy -- the non-working engines were affecting the air-conditioning and generators, so most of the cars were cold and in darkness. The galley was bare and water tanks empty. The condition of the restrooms was indescribable!

Still, at last we limped into North Vancouver in darkness, three hours late this time. It had been another unforgettable trip. I'm looking forward to another visit one day!

## **Locomotive Number 161**

Number 161, builder's number 2287, was received at Squamish at the same time as No. 160 and like her was immediately placed in traffic. This was the beginning of the boom years for the Pacific Great Eastern Railway and traffic was increasing, not only in freight, but in passenger services. People were becoming aware of the interior and the unique service that was being provided by the P.G.E. Railway. Tourists were coming from far and wide to ride the trains and to enjoy, in the summer months, the open observation car that was placed on the end of passenger trains.

After a leisurely journey from Vancouver via Union Steamship to Squamish, passengers would board Train No. 1 at Squamish dock. The locomotive that was assigned to the train would be coupled to the headend cars on an adjacent track. Once these cars were loaded the locomotive would then couple the headend cars to the waiting passenger cars and the train would proceed to Squamish station, 1.3 miles north of the dock station, where the balance of the passengers would be taken aboard. The train then left at 15:00 hours and proceeded through Cheakamus Canyon to Pemberton where it would arrive at 18:25. A short stop was made there then it was on to D'Arcy at 19:53 with final arrival at Lillooet at 21:50.

Along the line the train would likely pick up or set out freight cars. Quite often leaving Squamish there would be ten or more freight cars ahead of the passenger cars and these would be set out where required. After a locomotive change at Lillooet, or perhaps the same locomotive would run through, the train left at 22:20 for Williams Lake where arrival was made at 06:30 the next morning. Another locomotive change would take place, or, as at Lillooet, the same locomotive would work through. Departure from Williams Lake for Quesnel was at 07:00. Quesnel and the end of track was reached at 10:40 after a pleasant ride through the rolling Cariboo countryside.

The 161 was placed on this run with the 160 and the two new Mikados held the assignment until the arrival of the diesels in 1949. It was a very leisurely way of travel and it was not unusual for the train to be late. In fact, tardiness was a part of the routine. The trains stopped where and when required at a small isolated cabin in the woods or at a creek where a prospector might be waiting. At one location a dog would meet the train whereupon the Vancouver newspaper would be handed down to him; his master having trained him to pick it up from the crew.

From Lillooet north the railway clung to the side of the

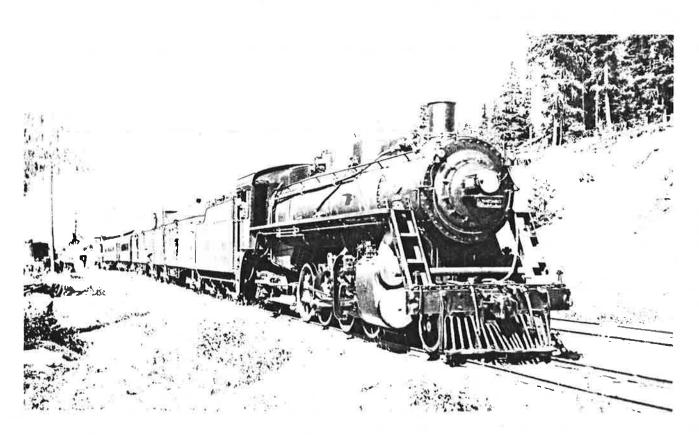
Fraser Canyon where it rose from 793 feet above sea level o 3509 feet at Kelly Lake in 34.8 miles. Most of this was on a steady 2% to 2.2% grade. The No. 161 served on all livisions in passenger, freight and mixed train duties and in vinter she was often found in snowplow service. Nevertheless, she was best remembered for her service on he passenger trains.

3y 1950 the railway had for over a year been operating passenger service with diesel locomotives. The two 1945 ?-8-2s had been relegated to freight service and were serving on all subdivisions of the railway. As the supplies noved north to Quesnel where the line to Prince George vas under construction, various steam locomotives were used in work train service and it was to this job that the No. 61 was assigned in September of 1951.

To the operating crew it was a routine assignment, pallasting freshly laid track and cutting back the sides of earth cuts and September 23rd was a typical day on the ob. At the end of the day the No. 161 returned to Quesnel o tie up for the night. An inexperienced watchman was left o look after her as she was to be kept steamed up for the

next day's work. For some reason known only to himself, he left the engine. After returning, he found the waterglass empty. Instead of dumping the fire he immediately turned on the injector. This was a fatal mistake as cold water and hot steel do not mix. With a thunderous roar the No. 161's crown sheet blew out. The watchman was miraculously blown clear to survive with bruises and cuts and to be fired on the spot.

The locomotive's trailing truck was blown into the ground and her frame was twisted with her driving wheels appearing as if they were held by threads. Over a quarter of a million horsepower had been unleashed by the cold water turning suddenly to steam. The No. 161 was in a sad state and the once beautiful locomotive, pride of the Pacific Great Eastern, was nothing but a twisted mass of scrap metal. She was removed from where she had blown up and the mechanical staff dismantled her at the Quesnel yard. Her remains were taken to Squamish where whatever could be salvaged was taken apart and saved as spares for the remaining steam locomotives on the railway. The rest was shipped to the smelter at Tacoma. So ended the life of one of the 1945 Mikados after only six short years.

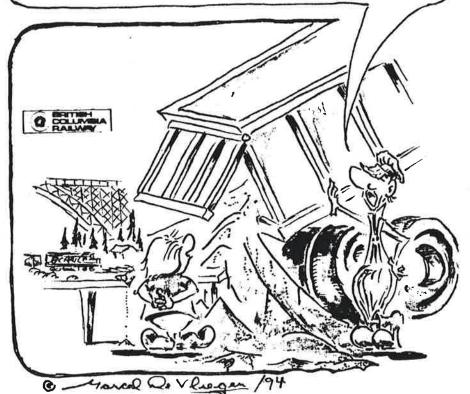


Train No. 2 southbound near Owl Creek (Parkhurst) with Mikado #161. Of particular note is the consist, made up of former interurban equipment.

Photograph by Ernie Plant from the W.C. Whittaker Collection. Courtesy of Greg M. Kennelly.



GOT A
REAL BARGAIN ON THIS NATURAL
SCENERY FOR THE CLUB LAYOUT.



# BC Rail in the 90's - The Squamish/Lillooet Wayfreight Eric L. Johnson

The only wayfreight on BC Rail's system, the Squamish-Lillooet wayfreight, is something of a throwback to earlier days of railroading. Probably BC Rail's most interesting train, it makes two return trips per week year round, and provides the crew with something different every trip. The daylight hours of operation (although daylight in name only in winter) and the variety of duties in route have made the wayfreight the choicest of jobs for train crews - only those with highest seniority need apply.

Power on the wayfreight is almost always two SD40-2's, and it is operated by either a "full crew" of engineman, two trainmen and a conductor, or a "reduced crew" of only one trainman with an engineman and conductor; the reduced crew is limited to a maximum of ten hours per shift, the full crew eleven hours. The choice will depend on the availability of crewmen. The wayfreight crew is generally on duty at 09:00 every Tuesday and Thursday at Squamish, and is usually away on its 117-mile run by 10:00. Departures are sometimes made an hour or two earlier. After anything from a six to eleven hour run, the crew beds down at the company bunkhouse in Lillooet, to be roused next morning at 05:00, and heading back south by 06:00. Before all departures the conductor is handed a DOB (Daily Operating Bulletin) which might list as many as two dozen items: works crews, slow orders, and restrictions on the road ahead. The conductor must make frequent contact with the dispatcher (now known in Canada as the Rail Traffic Controller or RTC for short), other trains, and work foremen for clearances, ticking off the items in order as the trip proceeds. Additionally meets with opposing trains will be set up by the RTC, and sometimes the wayfreight will be overtaken by faster moving trains, such as the passenger extras (Budd cars). With daylight operation in summertime and on weekdays when track maintenance is busiest, the wayfreight never has clear sailing.

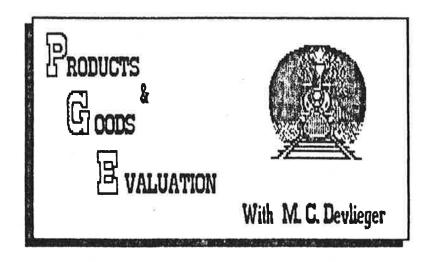
In addition to hauling freight, fully fueled wayfreightengines may be exchanged for those on work trains which have been working up-line for several days, and re-serviced engines will similarly be exchanged at Pemberton ro D'Arcy for those on helper duty. While passenger trains and through freights are always preceded by a patrolman on both the Cheakamus Canyon, and along Anderson and Seton Lakes, the wayfreight will not always be so escorted. Leaving Squamish, the wayfreight might consist of no more than two engines and a caboose; or it may have as many fifty empty cars, of any and all types separating the head end from the caboose, if the RTC decides northbound through freights will not stop to make a pickup at Squamish or elsewhere. Northbounds are generally made up of empties, southbounds loaded. If a way car (a boxcar) to be unloaded in route is in the consist however, the number of cars will be limited to 35. The way car will be positioned immediately ahead of the caboose.

Once on the road the wayfreight will have a variety of jobs at sidings and on the main line. A bad-order car, cut out from a freight and repaired by carmen, might be picked up at any one of the sidings. Food, supplies and heavy equipment will be dropped off with work trains or B&B gangs; station supplies will also be delivered to Pemberton. At Mons, propane cars may be switched at the special fenced siding. Although seldom used, there is a short spur leading to a pole yard at Mount Currie. Some deliveries will be "mainline load/unload" operations, done where there are no sidings. Along Anderson and Seton Lakes, in particular, the way carcomes into common use in this way. At the many flag stops along the lakes which have no other access, the wayfreight drop off a cylinder of propane, pre-fab houses, piece of furniture, or machinery and so on. A telephone call in advance made from the caboose if possible, alerts the recipients or senders. The community of Seton (Portage) has road access, but by way of fifty miles of twisting gravel road from Lillooet, along the Bridge River, over Mission Pass, and down severe switchbacks to Seton - unsuited for truck freighting. A fair amount of freight is handled here by the wayfreight, servicing BC Hydro's hydroelectric plant and supplying the village with practically all its needs.

Southbound from Lillooet the wayfreight may pick up carloads of lumber and chips manufactured here, although the OV will sometimes pick up these cars. At mile 97.7, there is a big gravel pit from which the wayfreight may pick up hoppers heavily loaded with ballast. Wayfreights do not get the benefit of the Pemberton "pushers" very often, and so weights of the trains must be well calculated (by the conductor). Occassionally, actual weights significantly exceed the "theoretical" weight, in which case the wayfreight is in trouble. The 2.2% grind from Pemberton to Mons will soon tell if tonnage has exceeded the power rating. Should the wayfreight stall, the RTC will be the first informed. The train may then be backed up to a more level stretch from which a "run" at the hill may be made. If this is unsuccessful, the train will be split, preferably at a siding, and the locomotives will "double the hill" - that is the brakes will be set on one-half of the train while the other half is taken over the hump, the locomotives then returning for the tail end. This event is rare, as is the possibility of damage to traction motors from rocks, or in engine failures, which will reduce available power, also causing a train to stall. Once past Mons there are no problems in getting home to Squamish.

As many as six through freights per 24 hour period - running night and day - routinely power their way over the wayfreight's route, stopping only for meets and helpers. In contrast the Squamish sub's four-times-per-week wayfreight is both express and freight trair friends indeed, stopping wherever needed and performing a job much like that done by branch line trains of many years ago. The crew is envied by railroaders and railfans alike.

With thanks to Norm Abrahams of BC Rail.



51" Plug Door Box Car Lionel #T-20201 \$4.95

This car represents one of the manufacturer's many attempts to penetrate the HO scale marketplace. And like many of Lionel's earlier efforts, this one will also be seen as a failure.

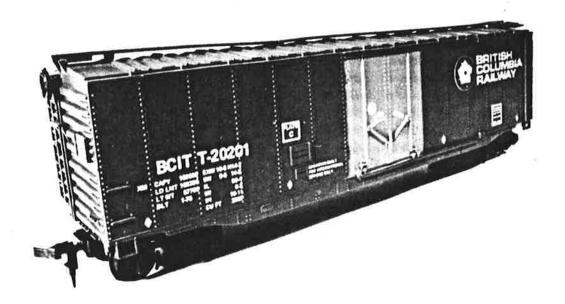
The discrepancies are both numerous and obvious. The first to catch my eye was the fact that the body colour is too light, while the road number "T" prefix is a Lionel invention. (Ed Note: The car's number seems to be reflective of Lionel's product stock number.)

This model does measure in at 51'; and yes, BC Rail does have 50' plug door box cars with outside rivets. However these prototype cars, numbered within the 4600-series, were built by National Steel car.

The model's overall quality lacked crispness. The appearance is rather toy-line, with all grab irons, stirrups, and ladders molded in the body. A removable roof is included, which is inappropriate for this style car.

Coupler boxes are molded to the trucks, which happen to only be double spring at that. The wheel flanges are too thick, as are the rivets and many other details.

I could only recommend this car as a "filler" for your train yard, or perhaps as the basis for an extensive detail overhauling.



REPRINT: The Hack Track by Ken Vere, Brian Nicol, and Cam Porteous.

Subject this issue is a conversion of a Mantua Mike by Cam to PGE Mikado #160, with a history of the old gal dug out of Bert Mills, an honest-to-gosh PGE hogger, by Brian.

## The History

Engine 160 was out-shopped by Canadian Locomotive Works at Kingston in 1945. Pge had four Mikes (160-63), and they were the pride of the line. Number 160 was the only one of the class with a silver-painted boiler, and her sister, #161, had an all-weather cab. Nos. 162 and 163 had plain, square cabs.

Number 616 blew up at Quesnel. The other three headed varnish between Squamish and Quesnel until the first PGE diesels made their appearance in 1948. They then suffered the indignity of having to grub about in the Squamish years doing Joe-jobs until their tires wore thin. 163 was scrapped December 16, 1953, and 162 went under the torch July 27, 1956.

160 made her last run on a fire train to Garibaldi, May 30, 1956. She was made into a stationary boiler during the winter of 1957-58, but has not been used since, and now stands forlornly rusting away on the rip track at Squamish. 160 lived longest as she evidently had a healthier constitution which mad her worthy of being re-tubed in 1954.

#### The Model

Cam took off most of the detail cast into the boiler of the Mantua model above the running board, leaving only the top feed check valve, injector control housing, domes, and stack. A good file or motor tool is needed for the operation. He ground away a section of the running board just below and in back of the steam dome, wide enough to place in a Kemtron Westinghouse air pump. Then the related pipes were positioned and connected. Kemtron injectors were placed on the sides and hooked up to their correct locations into the housing and out to the top feed check valve. The rest of the pipes and air lines were then connected. Large wires for steam lines -- small for water, and smaller still for air.

The second phase was to work on the pilot and deck. The air pumps between ladders were ground out and the ladders attached to the deck. A CPR 900 class pilot was added, and air and steam lines run down along the deck to the glad hands.

The third step was adding all of the extra detail...bell, 4 chime whistle, headlight, classification lights, generator, pop valves, and sand lines. Next, the hand rails were located. Steps were made of shim stock and placed. The trailing trucks were ground down to the journal and springs positioned to represent a Bowser trailing truck. Like the prototype 160, the model was given an all-weather cab (Kemtron).

The appropriate tender should be a 5 or 7 thousand gallon tank. Cam was lucky enough to be given a Penn Line Consolidation tender, and this, with a few modifications and Kemtron's oil conversion kit, did the trick.

A new coupling bar was made. For the paint job, Cam chose Kolor-Brite black enamel on the firebox, smoke box, and running gear, with Aero- Dope silver on the boiler. Red trim on the windows and white on the edges of the running boards, and on the tires, and the project was almost done. Lettering consists of "160" under the window, and the PGE caribou-headed herald on the tender.

Reprinted form "The Dispatcher (May/June 1960). Published by the Seventh Division/Pacific Northwest Region/NMRA. Courtesy of Grant Ferguson.

PLEASE NOTE:
CLOSING DATE FOR
OUR NEXT ISSUE
IS JUNE 1, 1994.

#### "CARIBOO" PHOTO FILE



BC Rail Trackunit V-10
Gas Engine
North Vancouver
June 1990
Eric L. Johnson

#### 1994 "Cariboo" Editorial Calendar

The editorial staff is preparing several features for publication during the balance of this calendar year. Please review the list below. If you can supply answers to any of the questions listed, or have photos or drawings to lend in support of these projects, please contact Jim Moore as soon as possible. Our goal remains to present the most accurate and complete information possible.

#### 1. 8000-series insulated/heated boxcar.

- a) Information concerning either on-line origin or destination points (i.e. customers).
- b) How did the car's charcoal heater work?

  How was its operation monitored during transit?
- c) Near the cars' "a" end could be found a box and rod assy. What was its function?
- d) Did the cars ever have roof-walks?

#### 2. North Vancouver Yard.

- a) Information (drawings, schematics) showing the yard's configuration prior to 1980.
- b) Information pertaining to any of the on-line customers located within the North Vancouver area (i.e. Who were they? What was the nature of their business? When did they cease operating?)

## 3. PGE General Electric 65-tonner #551.

a) Has anyone attempted a kitbash of this engine using a Spectrum GE 44-tonner. If so, how did you handle the steps modification? And what was your source for engine compartment louvers?

# LAST TRAIN ORDERS ISSUED BY BC RAIL

# COURTESY OF F.A. (NINI) ROY

# JIM MOORE COLLECTION

TRAIN ORDER NO		225		
		MAY 12	19	90
ENG 752	47	WILLIAMS	LAVE	
	AI	WILLIAMS	LAKE	
		i		-
ENG 752 RUN EXTRA				
	EVTDA '	TOAINS		
MILH KIGHI OAFK MOKIHMAKD	EXTRA	CHINA		
FAR				
2				
. •				
REPEATED AT 19	41	- ()		•
Com 1947			ndo	Q
MADE TIME			(	
	ENG 752  ENG 752 RUN EXTRA WILLIAMS LAKE TO EXETER WITH RIGHT OVER NORTHWARD  FAR	ENG 752 RUN EXTRA WILLIAMS LAKE TO EXETER WITH RIGHT OVER NORTHWARD EXTRA  FAR	ENG 752  ENG 752  AT WILLIAMS  ENG 752 RUN EXTRA  WILLIAMS LAKE TO EXETER  WITH RIGHT OVER NORTHWARD EXTRA TRAINS  FAR	ENG 752  ENG 752 RUN EXTRA WILLIAMS LAKE TO EXETER WITH RIGHT OVER NORTHWARD EXTRA TRAINS  FAR

CLEARANCE		BC	RAIL
STATIONWI	LIAMS LAKE	MAY 12	1990
TRAIN EX	ra 752 south		
Orders for your train are	- 225	100000000000000000000000000000000000000	(Ver-
your train are	605-601-603		
The next train ahe	Ad from this station left at	ulull	Operator