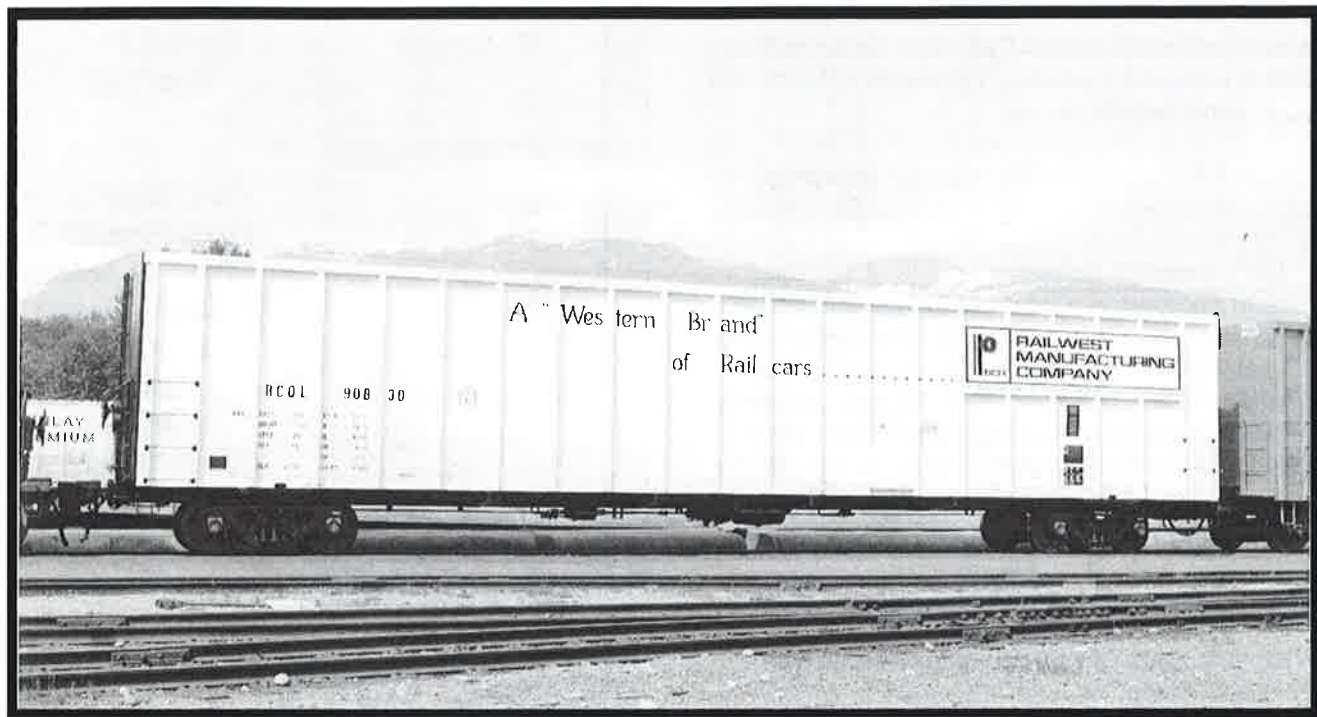




# The CARIBOO



The British Columbia Railway Historical & Technical Society



Issue 25

July 1996

BCR in N Scale

Leased Motive Power

Wood Chip Hoppers

Convention Update

## NEWS ITEMS

Edited by Jim Moore

The redevelopment of Lower Lonsdale as a heritage town centre moved one step closer to reality when the North Vancouver City Council recently voted to proceed with the first two phases of the project.

Subject to completion of financing, the former PGE railway station will be returned from Mahon Park to its former location at Lonsdale Quay, near the Seven Seas floating restaurant's parking. The station will serve as a museum and archives storage.

The move was expected to be completed this spring.  
(*North Shore News* via Grant Ferguson) □

A slide occurred on January 10 at Mile 32.5 on the Tumbler Subdivision. Crews were dispatched to clean it up, however a bulldozer plunged into the nearby canyon. The following day, SD40-2's #758 and RCL #745 left Wakely at 0800 with a work train. The units got past the first slide, but came upon another at Mile 32.5. Both units derailed, with #758 getting the worst of it. RCL #745 was repaired at Prince George while #758 was taken to Squamish for repairs. (Paul J. Crozier Smith) □

The snowplow that was destroyed in the above accident was #996005. A replacement plow was expected to be acquired from Canadian National sometime in March. (Patrick O. Hind) □

The fifty new 5150-cubic foot grains cars recently acquired on lease from USL Capital feature the slogan "BC Rail Bringing the Peace to You!", in tribute to Peace River area agricultural community. (WCRA News) □

Royal Hudson #2860 operated January 16 from North Vancouver to Lillooet for the filming of a Kodak advert which aired during January's Super Bowl telecast.

### On Our Cover...

Gary Oliver captured BCOL 90830 in North Vancouver on May 8, 1976. This is one of 400 wood chip hoppers produced by BCR subsidiary Railwest Manufacturing in its Squamish shops.

Andy Barber traces the development of this car type beginning on page 19. Photo courtesy GTC Collectibles.

## The CARIBOO

**PUBLISHER:** Jim Moore

**EDITORS:** Andy Barber  
Paul J. Crozier Smith  
Greg M. Kennelly  
Lawson Little  
Ron Tuff

**CONTRIBUTORS:** Glen Etchells  
Grant Ferguson  
Patrick O. Hind  
Timothy J. Horton  
Gary Oliver  
Jim Pike  
Dan Rowsell  
Bob Turner

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

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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.

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The consist left North Van at 0900, arrived in Squamish at 1042, and departed for Lillooet at 1320. On the run northward, #2860 stopped in Pemberton for water.

Her consist was as follows: #2860, coach *Birken*, coach *Seton*, coach *Exeter*, coach *Sunset Beach*, power car BCOL 76 (*Cheakamus River*), water car, fuel tank PROX 73604, and caboose #1882. (PJCS and POH) □

Billed as the most exciting steam trip event in several years, former SP #4449 is expected to run from Portland to Vancouver in early May. The engine will then be joined by Royal Hudson #2860 for the return trip south.

The event is being co-sponsored by the WCRA as part of RailFair 1996. (WCRA News) □

A BC Rail Ltd. subsidiary has entered into a joint-venture agreement in connection with the planned Willow Creek coal project near Chetwynd. Further details regarding this project were contained on page 3 of Issue 24. (Vancouver Province via Glen Etchells) □

## PGE/BCR RESOURCES

The March/April issue of *N Scale Magazine* contained a how-to article on modeling the BCOL/BCIT 17200 series bulkhead flatcars.

*Railroad Model Craftsman* (February 1996) featured part three of the history of Canada's eight-hatch iced refrigerator cars. This final installment included info regarding PGE's 820-844 series reefers.

The March issue of *Railroad Model Craftsman* had a story by BCRH&TS member Patrick Lawson focusing on the Canadian bathtub gondola. These cars are frequently seen in unit train service carrying coal and sulphur. CP hauls the cars to Westshore Terminals (Roberts Banks), while gondolas bearing Procor markings can be noted on the Tumbler Ridge Sub. Patrick's article includes HO scale drawing of Procor's UNPX car.

*Passenger Train Journal* (February 1996) contains reminiscences of a Dayliner trip made in early 1993. Alas, much change has occurred in the ensuing three years. (JGM) □

## MOTIVE POWER NOTES

Edited by Paul J. Crozier Smith

**M420s Retired:** The four units (640, 684, 686, and 688) damaged in a wreck were finally officially removed from the roster at the end of 1995. (PJCS)

On January 11, the BC Dept. Of Transportation ordered five SD40-2's out of service as lead units due to lack of

adequate crew locker space. BC Rail had installed crew baggage racks, but a government inspector found the units to be out of compliance. This development caused a shortage of lead units capable of working the Fort Nelson runs. (PJCS)

The first B36-7 cab upgrade, ATSF #7493, emerged from the Squamish paintshop as #3610. Due to a full workload preparing the Royal Hudson cars for the upcoming summer tourist season, #3610 received only a shot of blue to cover the cab and the ATSF markings. It was spotted back in revenue service on March 11.

The shop did a real job on her, with split number boards above the cab windows, bell mounted high, horizontal headlight on the nose, tower ditch lights at deck level, and ditch lights below deck level.

Inside the cab can be found a rebuilt control stand, refrigerator, oven, three comfort seats, conductors pull out work station, and toilet. The cab interior is finished in a very pleasing buff colour.

ATSF #7490 was next in line. This loco sustained a seized engine block and will receive a full rebuild and repaint -- in a lightening strip colour scheme designed by BCRH&TS member Jeff Briggs. This unit is expected to return to revenue service in late March or early April as BCR #3607.

The B36-7s were officially purchased on November 3. (Patrick O. Hind and PJCS)

SD40-2 RCL743 was in Squamish backshop for top deck rebuild. This process includes engine removal and housing rebuild, expected back in revenue service in mid-March. (POH)

Dash 9-44CW #4643 was returned to service following repairs sustained in December at Mile 573.0. (POH)

**RDC Update:** BCRH&TS member Pat Hind has graciously supplied the comprehensive status report which appears below. The following Budds were in revenue service at the end of January:

BC-10	RDC-1	serial #6319
BC-14	RDC-1	serial #7003
BC-15	RDC-1	serial #6618
BC-30	RDC-3	serial #6508
BC-33	RDC-3	serial #6601

(Ed Note: By late January, BC-14 and BC-33 were out of service due to damage suffered in a collision with a wayward moose!)

In the Squamish backshop for recent collision damage, but expected to return to revenue service:

BC-31(2) RDC-3 serial #6302

Stored in Squamish for winter. Will operate *Whistler Explorer* starting in May:

BC-11	RDC-1	serial #6320
BC-21	RDC-1	serial #7004

Out of service permanently or pending removal:

BC-12 RDC-1 serial #6321  
(This was the first RDC delivered to the former PGE. Donation to the WCRA is under consideration.)

BC-16 RDC-1 serial #5817  
(VIA unit never used by BC Rail.)

BC-22 RDC-1 serial #7008  
(Wrecked near Pemberton and written off.)

BC-23 RDC-2 serial #6607  
(Destroyed during filming of *X Files*.)

**Helm SD45T's Returned:** The seven Helm Leasing SD45T-2E's were returned off lease in the first week of December. They were shipped to Union Pacific in the third week. (PJCS)

The first Dash 8-40CM (#4602) entered the Squamish rebuild center in early March for an upgrade to Dash 9

specs. Between now and July, the railway hopes to complete six upgrades (installation of new Dash 9 engine blocks). This modification will raise the horsepower from 4000 to 4250.

In mid summer, BCR hopes to have the split cooling system perfected, so that subsequent Dash 9 conversions may receive the full upgrade to 4400 horsepower.

The upgrade program is expected to run into 1998. (POH)

## NEW PRODUCTS

- GTC Collectibles (25930 Dewdney Trunk Road, Maple Ridge, B.C. V4R 1Y4) is a great source for PGE and BCR black and white prints. Among the photographers featured are Gary Oliver and Stan Styles. A comprehensive catalogue listing is available.
- Sylvan Scale Models has announced the release of an HO scale version of PGE's slab-side covered hoppers (2100-series). The announced release date is late spring 1996.

Also scheduled for release later this year are three PGE/BCR caboose variations: plywood, modern wide-vision (w/o conductor's window), and wide-vision (w/ conductor's window).

The cabooses are expected to retail for about thirty dollars Canadian. (Andy Barber)

- Microscale is offering a decal set for the wide-vision caboose recently produced by Overland Models. The HO scale set is 87-931, while the N scale is 69-931. (Andy Barber)
- The former Canadian Prototype Replicas MLW wide cab is now made by Detail Associates as its part #3604. (*Model Railroader*)
- Tiger Valley Models has announced that it is now doing a complete M420 kit made from white metal castings. (*Model Railroader*)

## BCR FREIGHT CARS IN N SCALE

### Part 1: An Introduction

Text by Timothy J. Horton

Photography by Wayne Sutton

In any scale, one of the challenges of modelling the British Columbia Railway is building a carfleet which consists of reasonably accurate models. As most readers are aware, the vast majority of proprietary models originate from manufacturers based in the United States, and represent American prototype cars. The Canadian modeller is usually left to modify whatever models are available so that they resemble Canadian prototypes, or to scratchbuild those cars for which no model comes close.

Assuming you are the owner, or perhaps dreamer, of a BC Rail layout, the goal is to create a carfleet which will permit you to run BC Rail freight trains with prototypical consists. The carfleet should include those cars which are needed to service the industries on your layout, cars for destinations beyond the area represented by your layout, and those cars lettered for other owners which show up on BC Rail from time to time.

You will also want to keep in mind the era in which you wish to model. A PGE freight train in 1971 would have consisted of a substantial number of cars lettered for American railroads and for private lumber companies. If you are modelling the late 1970s or the 1980s, the majority of cars will be those of BC Rail.

In this introductory article I shall list and describe some models currently available in N scale which will be of interest to the BC Rail modeller. These fall into two categories: ready-to-run and those which can be painted and decorated using available lettering sets.

Again, this is by no means intended to be a comprehensive listing, but perhaps there are some cars listed here which you haven't seen, or thought of adding to your roster.

#### Ready-To-Run Cars

##### *Atlas 50-foot Flat Car with 40-foot Trailer - BC Rail*

A 50' standard flat car painted in dark green with the latest BC Rail logogram and numbered BCOL 7037. The 40' trailer is silver and sports the older dogwood logogram. This model provides a reasonable ready-to-run intermodal car which can be easily upgraded with new lettering and more details such as a TOFC hitch and ramps. (See photo one)

##### *Atlas 24-foot "Beer Can" Tank Car - Canadian General Transportation (CGTX)*

This little car comes very nicely lettered for CGTX which operates a large fleet of various tank cars. It provides a very good model of a Canadian tank car which is right at home on a BC Rail layout. Gold Metal Models offers an etched brass upgrade kit for this car. (See photo two)



Photo One: Ready-to-run BC Rail cars include the 50-foot modern combination door boxcar from MDC (pictured with Micro-Trains trucks and couplers), and the 50-foot flatcar with trailer from Atlas. Models are provided courtesy of Ambleside Hobbies, West Vancouver, B.C.

*Photo by Wayne Sutton.*



Photo Two: Ready-to-run cars which are available lettered for other owners include Micro-Trains' TPFX 50-footplug-door boxcar and a 24-foot CGTX chemical tank car from Atlas.

*Photo by Wayne Sutton.*

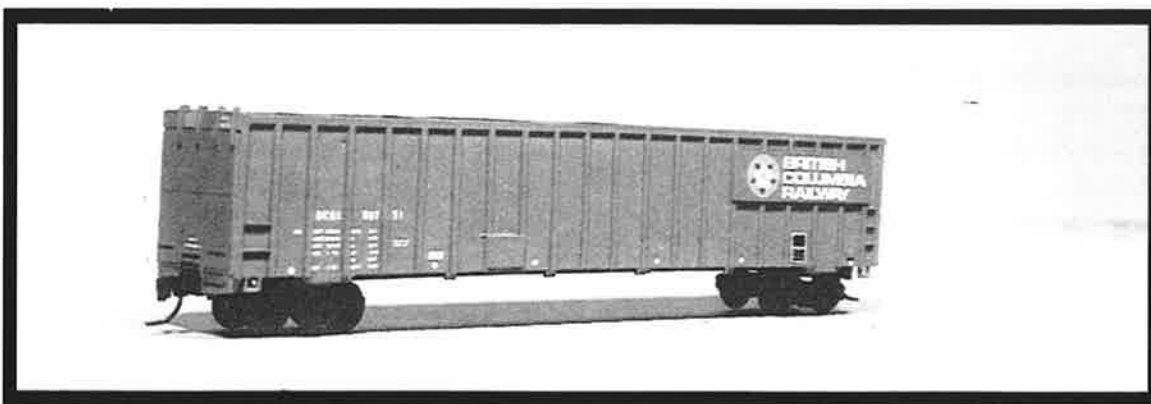


Photo Three: The CS Models woodchip car kit yields an accurate model of the British Columbia Railway 90441-series cars, which were built by Railwest in Squamish during the 1970s.

*Photo by Wayne Sutton.*

*CS Models Cylindrical Hopper Car - Canadian Wheat Board (various schemes)*

A respectable model of the Canadian grain cars which have appeared on BC Rail since the early 1980s. They are available in several different schemes, with more to come. Ensure you obtain cars with CNWX reporting marks for BC Rail. An etched brass upgrade kit for this car is available from Gold Metal Models.

*Deluxe Innovations 61-foot Woodchip Car - CN Rail*

A beautifully molded model of the Gunderson-built hi-cube woodchip car which is offered decorated for Canadian National with seven different road numbers. These cars are often interchanged to BC Rail at North Vancouver for unloading at the Fibreco terminal.

*Life-Like Steel Caboose - British Columbia Railway*

This manufacturer offers a number of ready-to-run models decorated for the British Columbia Railway. These include a standard steel caboose with cupola towards the rear. While BC Rail did not operate any steel cabooses of this type, it does serve as the only decorated BC Rail caboose currently available. A number of freight cars decorated for the British Columbia Railway are also available from Life-Like, but like the caboose, they are not representative of any prototype cars.

*Micro-Trains 40-foot Boxcar, Single Door - British Columbia Railway*

The Micro-Trains 40' standard boxcar was released in light green with the dogwood logogram. While no longer available from Micro-Trains, you might find one or two for sale in a collector's catalogue or at a swap meet. The paint and lettering are up to the usual Micro-Trains standards, although the dogwood is too orange in colour.

*Micro-Trains 50-foot Boxcar, Plug-Door - Mountain Pine (MPLX)*

This offering of the Micro-Trains 50' plug-door car remains available. It is lettered for Mountain Pine with BCOL lease reporting marks, which makes it a very suitable private owner car for your BC Rail layout.

*Micro-Trains 50-foot Boxcar, Plug-Door - Triangle Pacific (TFPX)*

The same car described above is also available in red, lettered for Triangle Pacific with BCOL lease reporting marks. Another very suitable private owner car. (See photo two)

*Model Die Casting 50-foot Modern Boxcar, Combination-Door - British Columbia Railway*

This is a nice model of a modern outside post boxcar with plug and sliding doors, which is available in dark green with a silver roof. The dogwood logogram is applied directly to the car (no letterboard). While BC Rail did not



operate any rib-side cars with this door arrangement, it is the only ready-to-run model of a contemporary BC Rail boxcar. (See photo one)

#### *Model Die Casting 50-foot Modern Tank Car - Procor (PROX)*

A very smart-looking model of a Procor tank car which is often seen on BC Rail. This car is available with two different two road numbers for Procor, as well as a variety of other tank car operators. Gold Metal Models offers an etched brass upgrade kit for this model.

In addition to the above mentioned cars, modern 50-foot outside post boxcars are available from Micro-Trains and Model Die Casting decorated for CN Rail and a variety of U.S. railroads. Many of these are suitable as interchange traffic on your layout, but they should not outnumber the BC Rail boxcars in your fleet.

#### Undecorated Cars and Kits

##### *Arnold 39-foot Tank Car*

Although not available undecorated, the dimensions and rivet detail on this tank car provide a close representation of the older, ex-PGE 39' 6" tank cars still operated by BC Rail in diesel fuel and lube oil (OCS) service. Finding one or two of these models may be difficult, but they sometimes turn up on the second hand table or at a swap meet.

##### *CS Models 61-foot Woodchip Car*

This is a styrene kit of the British Columbia Railway 90441-series 61-foot woodchip cars which were built during the 1970s at the Railwest plant in Squamish. It comes with weight, coupler shims, and letterboards. Construction is relatively simple. To complete the model, you will need trucks, couplers and the CDS dry transfer set for this car (N-238). The result is a highly accurate model of a commonly seen BC Rail freight car. (See photo three)

##### *CS Models Woodchip Car Conversion Kit*

This styrene kit converts a Con-Cor 50-foot gondola into a woodchip car, resembling the conversions undertaken in-house by the Pacific Great Eastern Railway during the 1960s. The parts consist of two side extensions and two ends which are nicely molded. To accommodate the full height dump door, the 'A' end of the gondola must be cut away. Once this is done, completion is simple. The addition of diagonal side braces will yield a respectable model of the BCOL 9900-series cars.

##### *Con-Cor 50-foot Gondola*

This model represents a 50' gondola with riveted fishbelly sides, fixed-ends and a wood floor. It closely represents the BCOL 9036-9175-series cars. Its only shortcoming is its length, which at 50 feet is 2' 6" too short. In a forthcoming article, I will describe how to make these cars even more accurate by lengthening them.



*Con-Cor 50-foot Flat Car*

A nicely molded model of a 50' flat car with riveted fishbelly sides and a vertically mounted brakewheel. It serves as a good representation of the BCOL 1222-series flatcars, or with the addition of a TOFC hitch and end ramps, the 7000-series trailer flatcars. Like the gondola described above, it is 2' 6" too short. In a future article I will describe how to lengthen these cars.

*Delaware Valley 3-bay Cylindrical Hopper Car*

A beautiful model of the ACF-built 3 bay cylindrical hopper which serves as a fairly accurate car for two different series' of the Canpotex potash cars which are often interchanged at Vancouver Wharves by BC Rail. Decals for these cars are available from Microscale. See Issue 21 for related article.

*Intermountain 1937 AAR 40-foot Boxcar, Single Door*

One of the finest N scale freight cars to appear is this exquisite kit of an older style 40' boxcar with a lower profile due to the reduced interior height. It serves as an accurate model of the BCIT/BCOL 3000-series boxcars, many of which were later converted to work-train service. Two such examples are preserved at the West Coast Railway Heritage Park in Squamish.

*Kaslo Shops PGE/BCR Steel Caboose*

Released in October 1995, this is an accurate resin cast kit of the unique wide-vision steel caboose which was operated by the British Columbia Railway in through freight train service until June 1995. A review of this kit appeared in Issue 23.

*Model Die Casting 50-foot Outside Post Boxcar, Double Sliding Doors*

This model offers a reasonable representation of the BCIT 841600-series modern boxcar. While the model lacks the roof eaves and tapered door posts of the prototype, the length of the car and door arrangement are close. This is probably the best bet for modelling a modern BC Rail boxcar at present. The manufacturer also offers the same car with a single 10' plug-door, which could be used to model the BCIT 850000 or BCOL 851000-series cars. Either car could be modified with styrene eaves and tapered door posts, and a letterboard for the CDS 40-inch dogwood logogram, if desired.

*Micro-Trains 61-foot Bulkhead Flat Car*

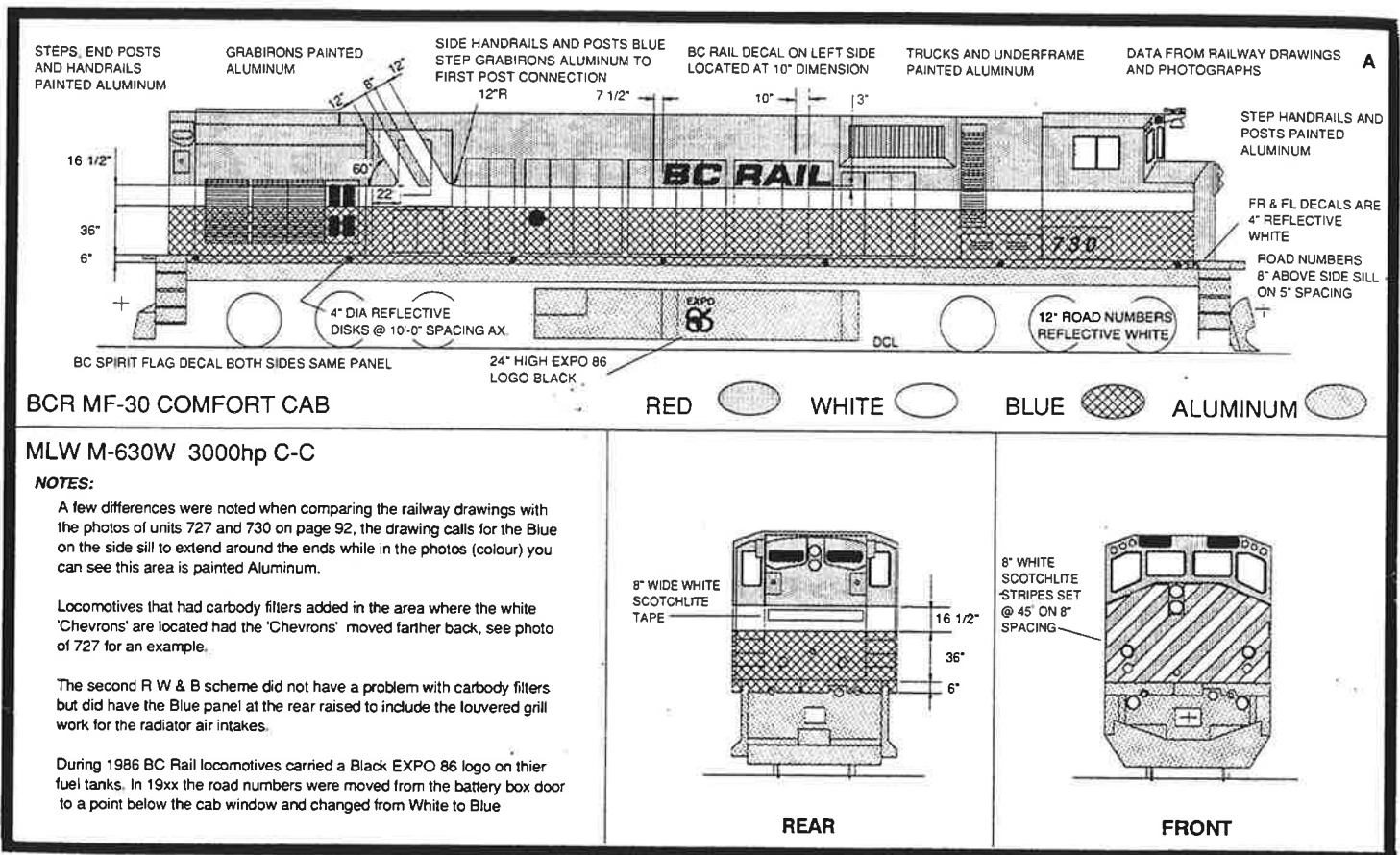
This is a model of a 61' car with tapered bulkheads which resembles the BCOL 866000-series cars in general appearance. The BC Rail cars are actually 71' in length, but in the absence of a more suitable bulkhead flat car model, this may be a respectable compromise. Of course, the Micro-Trains car can be cut in half and lengthened to represent the 71' cars more closely. Micro-Trains also offers an excellent model of the Thrall 60' 8" centrebeam

bulkhead flat car. It can also be lengthened to represent BC Rail's Thrall-built centrebeam cars which are 71 feet in length. Both types of car can be lettered with CDS dry transfers.

As mentioned previously, this is not intended to be a comprehensive listing of what is currently available in N scale. Many of the ready-to-run cars listed above will satisfy the N scale modeller who is just starting out. Modellers with more experience may desire more accurate models of the prototype cars. In future articles I will describe how to create more accurate models by kitbashing some of the cars listed above.

## BC RAIL M630(W)

From the Don Lewis collection



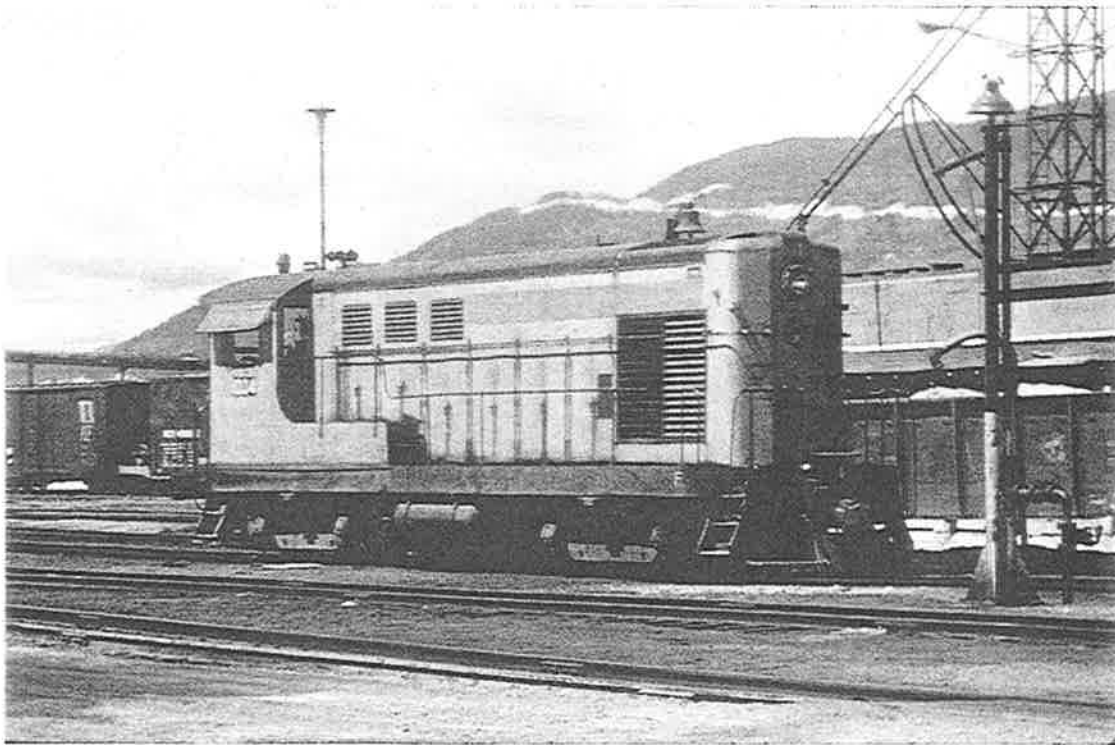
## Leased Motive Power

Jim Pike

Thanks to BCRH&TS members Greg M. Kennelly and Robert D. Turner, I am able to share several photographs of diesel locomotives which were leased by the Pacific Great Eastern and/or British Columbia Railways over the past twenty-five years.

I also wish to acknowledge the four-part Leased Motive Power series, compiled by Paul J. Crozier Smith, which appeared in Issues 2 through 5. See also my comments on this topic which appeared on page 6 of Issue 19.

If other BCRH&TS members have additional photographs of leased motive power units, I will be happy to provide further installments to this feature.



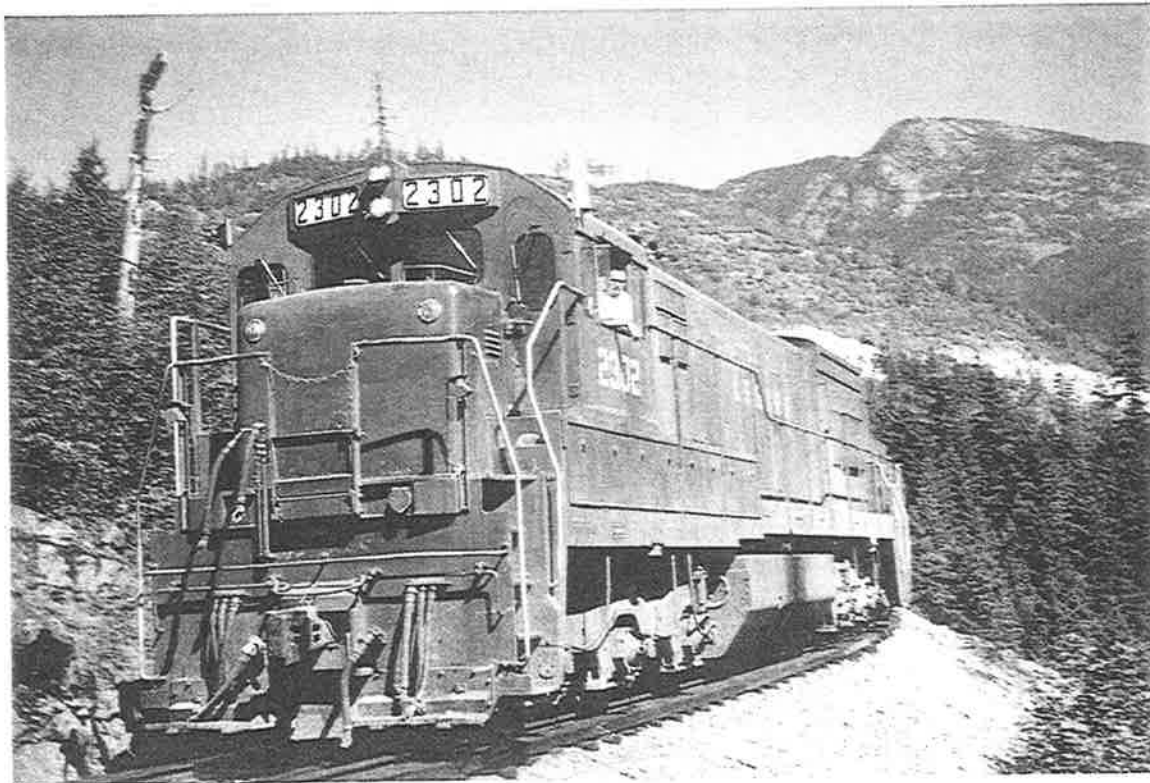
BCR 1004, North Vancouver, B.C., May 1973 (GMK)

This former Columbia & Cowlitz Fairbanks Morse H-10-44 was renumbered from D-1, but still wears the Weyerhaeuser yellow and black livery she would keep for her days on the BCR. Presumably, the horizontal dark (yellow) strip forward of the car body filters, is a paint-out of the former road name. Modellers may note that there are handrails on both the hood and walkway. The FM emblem is just visible as the circular shape below the headlight. The Raymond Loewy styling of early FM production is evident in the slightly sloped ( $\pm 3$  degrees) nose and the lines of the cab.



No.1004, North Vancouver, B.C., February 1973 (RDT)

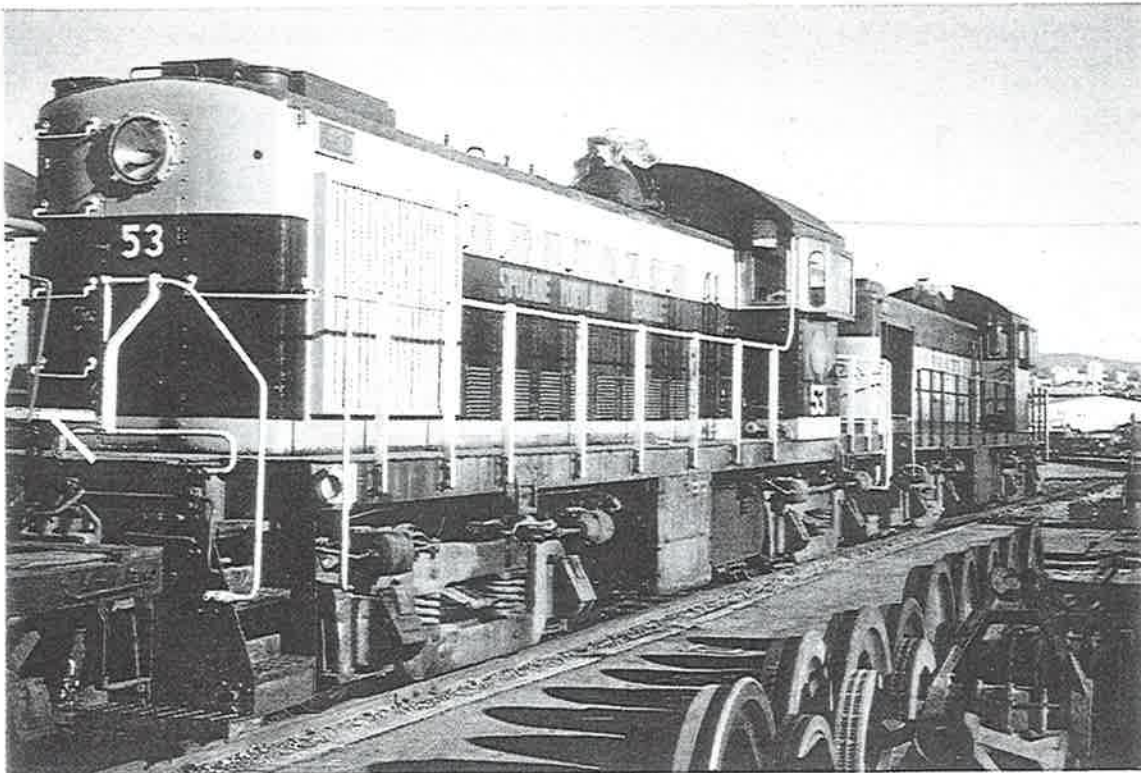
Note the extended cab roof, the underside of which is yellow, and other cab details such as the canvas awnings. There is an object (possibly a beacon?) almost on the rear edge of the cab roof, just behind the Sinclair antenna. The trucks are on 25' 6" centres.



LS&I U23C #2302 near Horseshoe Bay, B.C., September 1, 1972 (RDT)

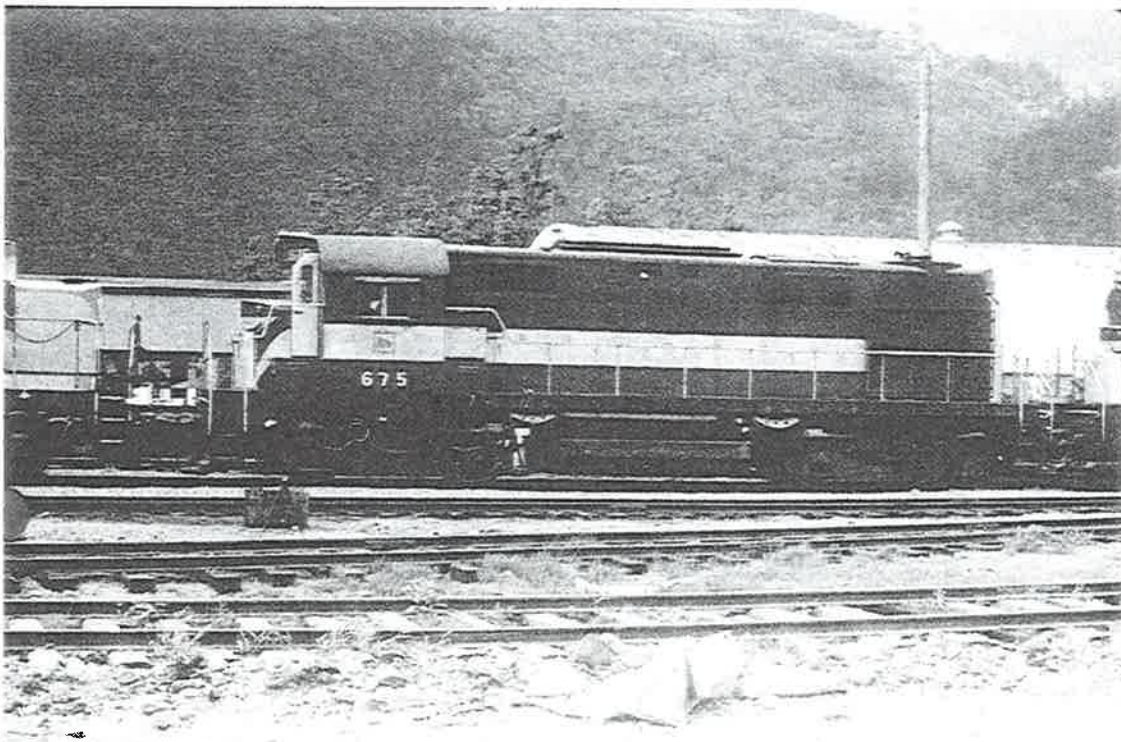
Lake Superior and Ishpeming U23Cs and RS-3s (LS&I 1605 & 1606) were both leased to PGE about the same time in June, 1971. By September 1972, when this photo was taken, the RS-3s had been purchased, renumbered as BCR #559 and #560) and repainted; but the U23Cs were destined to be returned later that year. Under the coating of dust is a very simple deep red-maroon scheme with yellow road name and numbers. Step handrails are yellow, and walkway rails and stanchions appear to be black. A good side view of sister LS&I U23C #2300 is published in McDonald's "Diesel Locomotive Rosters" (Kalmbach).





SP&S RS-1 #53, North Vancouver, B.C., January 1971 (RDT)

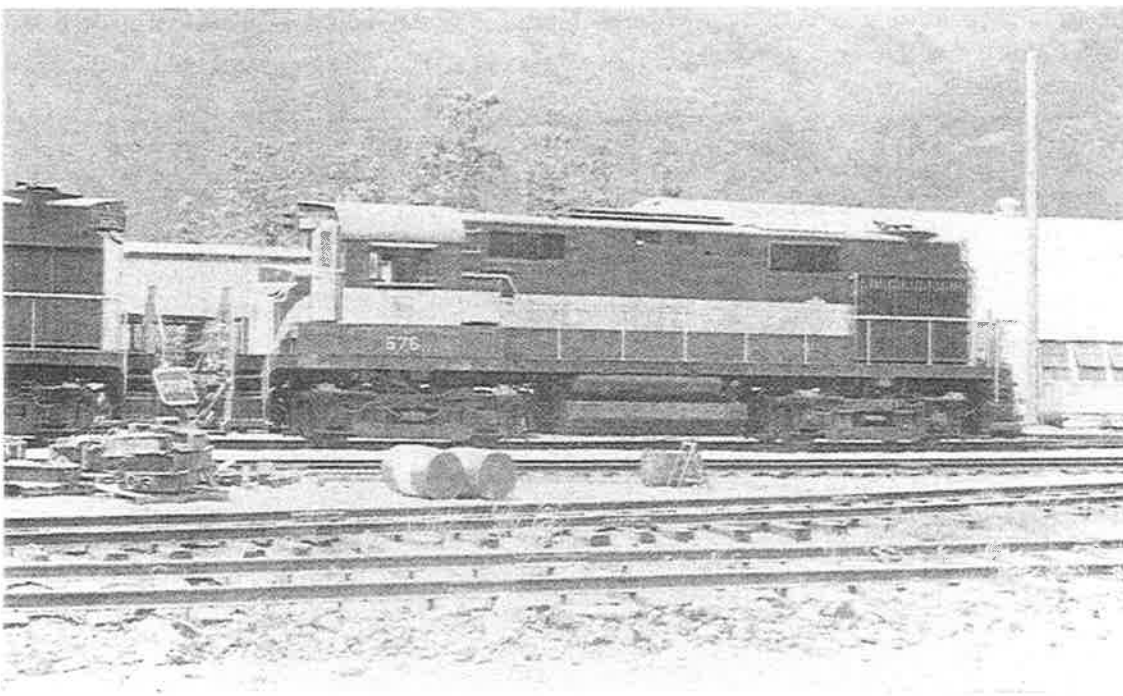
For some reason, SP&S RS-1 and unidentified sister have canvas covers over their exhaust stacks, although the sun was certainly out for this photo. These RS-1s are likely candidates for the "Mannix Construction" units leased to BCR. Note the all-weather cab side windows and the difference in the two paint schemes. The road numbers and handrails on #53 are in white, and the "Spokane Portland Seattle" (note: no ampersand "&") is in red, as is the cab herald. While persons knowledgeable about the SP&S say the paint scheme is (or is supposed to be) yellow and GREEN, the photo suggests otherwise. Before painting these units, the paint shop foreman may have whispered "green" over his barrel of black paint (like the PRR "Brunswick Green"), but the result sure looks like BLACK.





MK #5401, North Vancouver, B.C., October 1970 (RDT)

Morrison-Knudsen's ALCO C-636 was leased while MK used PGE diesels for trackwork. The structural steel supports for the service platform in the foreground almost obscures the red stripe which separates the black and yellow on the long hood, but the stripe is just visible behind the open cab door. The ALCO Hi-Ad trucks are painted silver. Hand rails are yellow except below the frame where they appear to be originally painted red. The first step or step edge is also red. Frame, tanks, and plow are all black. The horns, located on the right front edge of the cab, are silver. The MK logo (white letters on red circle, outlined in white) appears above the radiator shutters and on the nose. The road numbers are black, outlined in red. The "Morrison Knudsen" lettering is black, as is the lettering below which likely reads "Railroad Division".



MLW #676, Squamish B.C., June 1973 (GMK)

The MLW logo is barely visible in the square centered on the grey stripe just below the cab window of this RS-27. The road number and handrails are in yellow, as are the grab-irons on the long hood immediately to the right of the cab. Note the apparent placement of the horns over the radiator fan on the long hood (also visible in the same location on unit 675 to the left of the photo).

MLW #675, Squamish B.C., June 1973 (GMK)

The MLW logo shows more clearly in this photo, as does the treatment of the grey stripe on the short hood. The end of the long hood appears to be grey with the "notches" area treated similarly to the short hood (also see George Harrop's photo of #675 on the top of page 27, *Rail Canada* v. 2, by Don Lewis). The road number is in grey, but other details are similar to #676. Rerailers are visible on either side of the air tank. Does anyone recognize the low short hood (in grey and blue-grey) to the left side of the photo? (*Ed Note: Could this be one of the C-420s leased from Leigh and Hudson River?*)



Montreal Locomotive Works #675, Squamish, B.C., June 1973 (GMK)

A nice shot of the short hood of MLW lease/demo RS-27 (all RS-27s had low short hoods). The main colour is hard to be sure about, but it looks like a faded tuscan brown/maroon and grey. Drop step, M.U. stands and handrails are yellow, frame and pilot are black. Note the "notches" in the hood, a characteristic of (U.S. produced) ALCOs, and generally (always?) lacking in (Canadian produced) MLW versions of similar designs. Makes one think that despite the MLW label, #675 and #676 are ALCO demonstrators. Interestingly, of the original five ALCO RS-27 demo units, four ended up on the Union Pacific as units 675-678.



**BRIDGE RIVER AND THE PACIFIC GREAT EASTERN RAILWAY****Patrick O. Hind**

The name Bridge River is synonymous with electric power in British Columbia; however, the station of Bridge River on the former Pacific Great Eastern Railway, now BC Rail, had a relatively short life.

The public timetable for April 30, 1934 located Bridge River station at Mile 104.2 on the original Squamish Subdivision of the PGE. Today, this same location is known as "South Shalalth", and is shown on BC Rail Condensed Profile No. 5 as Mile 141.4 Squamish Subdivision.

In 1927, the former British Columbia Electric Company commenced a massive hydro project on the shores of Seton Lake. This undertaking would see the waters brought from Carpenter Lake, situated hundreds of feet above Seton Lake, down through huge pipes, to a powerhouse that would be located on the shore of Seton Lake. In turn, electric power would then be generated and transported by overhead power lines to the lower mainland of B.C..

It so happened that the Pacific Great Eastern Railway skirted the western shore of Seton Lake on its way north to the interior of B.C. It was obvious to the BCER that the PGE would be the catalyst needed to bring in supplies required for the huge undertaking. As a result, the PGE constructed a series of sidings at Mile 104.2 (now Mile 141.4).

Between 1927 and late 1929 a considerable amount of material was brought into Bridge River by the railway. Timbers, often cut from mills along the right-of-way, steel work, as well the tremendous amounts of powdered cement necessary for the construction. However the great depression of the late 1920's caused a complete postponement of the project and for the next sixteen years the site lay dormant. The sidings of the PGE lay rusting and decaying.

In 1946, after World War II, BCER was receiving ever increasing demands for electricity in those post-war years. It was decided to once again go ahead with the massive Bridge River project. They called again on the PGE to rebuild or construct new sidings at Mile 104.2 so that more materials could be brought in.

It became quite a sight to see carloads of construction materials being brought into Squamish by barge from Vancouver. Cars were then forwarded to Bridge River either by regular freight, mixed train, or upon occasion a special movement made up of cars for Bridge River alone. Steam locomotives Nos. 57 - 58 --or old Slippery Dick herself, No. 59-- could often be seen on this service, as well the newer diesel locomotives. Gondolas full of heavy pipes made up full trains. This writer can still recall seeing No. 57 struggling up through the Cheakamus Canyon with 15 cars of materials for Bridge River, quite a sight and sound.

By late 1953, the BCER had almost completed one huge powerhouse adjacent to Seton Lake. This was connected to huge spillway pipes that came down the steep mountainside from Carpenter Lake hundreds of feet above. The first powerhouse was completed by 1954 and was immediately brought on line to supply power to the growing demands of the lower mainland.

In 1934, the PGE had introduced gas car service along Seton Lake from Lillooet. They utilised two gas cars which had originally been used on the North Shore Subdivision between North Vancouver and Whytcliff in 1914. Hall-Scott cars 101 (2nd) and 102 were brought to Lillooet to cover this service. Using either one or the other along with two or more flat cars, they commenced a service hauling passengers and automobiles to Shalalth where a road had been constructed to Carpenter Lake and the Bridge River area.

However, Nos. 101 (2nd) and 102 were single-ended cars and required turning before heading back to Lillooet. The railway built a turntable at Mile 103.70. Because of the necessity to turn both cars, it was decided that service would be extended past Shalalth to Bridge River at Mile 104.2.

Traffic was quite light during the 1930's, but when construction commenced again in 1946 it became heavy due to many of the workers who made their way to Lillooet on weekends and those returning on weekdays. In 1949, former CNR gas-electric car No. 15823 entered service on the PGE as No. 107. Being bi-directional, this car did not require turning at Bridge River. However, the turntable remained at Mile 103.70 until track revisions were made in the 1960's. Nos. 101(2nd) and 102 remained as backup though.

By 1960, a second powerhouse had been constructed. This provided the PGE with considerable traffic during the 1950's, both in freight and passenger.

After the formation of the British Columbia Railway in 1972, the company embarked on further heavy track alignment. As a result of these efforts, the present Shalalth tunnel (one-half mile in length, from Mile 140.6 to Mile 141.0) was built. Interestingly, the northern exit of this tunnel is where the original turntable was located in the days of the gas cars.

As late as 1973, there were five sidings at the former Bridge River site. Today the location is known as "South Shalalth" and is still a flagstop for passenger trains. Only one siding remains to serve the powerhouses, off the main at Mile 141.2 and extending 3/10th's of a mile on the east side of the mainline.

Power generated from the Bridge River power grid is still sent to Vancouver, as well as throughout the Pacific Northwest. The BCER no longer exists, having evolved into the British Columbia Hydro and Power Authority.

See accompanying photos on page eighteen.

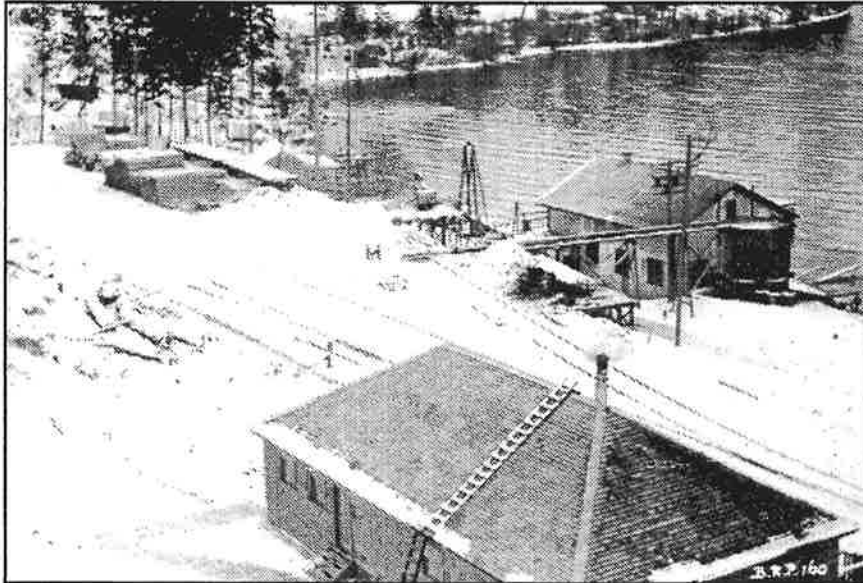
## 1995 Steam Specials

Ron Tuff

A number of steam specials were operated as private charters on BC Rail in 1995. Thanks to the West Coast Railway Association for the following information.

Date	Consist	Destination
Tuesday May 16	2860 plus 8 coaches	North Vancouver - Squamish
Wednesday May 31	2860 plus 10 coaches	North Vancouver - Squamish
Thursday June 22	2860 plus 4 coaches	North Vancouver - Squamish (extra trip)
Thursday July 20	3716 plus 3 coaches	North Vancouver - Whistler
Tuesday August 22	3716 plus 4 coaches	Whistler - Squamish
Monday August 28	2860 plus 6 coaches	North Vancouver - Squamish
Friday September 22	3716 plus 4 coaches	North Vancouver - Squamish
Saturday September 23	3716 plus 5 coaches	North Vancouver - Whistler
Wednesday September 27	3716 plus 6 coaches	Whistler - North Vancouver
Friday September 29	2860 plus 6 coaches	North Vancouver - Squamish

Photos courtesy of Les Burrowes.



Winter scene at Bridge River. The PGE mainline is the closet track in front of near building.



Construction of the grade for the massive water pipes to bring water from the Bridge River to the powerhouse, which can be seen under construction below. PGE mainline is located from upper right corner then between lumber piles to the left centre.

## The History of BCR's Wood Chip Cars

Andy Barber

In June 1961, PGE's corporate newsletter, *The Coupler*, carried this announcement about a potential new source of revenue to the railway:

*"Tests have been made with various types of cars and unloading devices in order to discover the most economical method of handling logs and wood chips. Ground work has been completed on the plans for handling wood chips from interior points to the coast. This service will be implemented as soon as negotiations between producer and pulp companies have been finalized."*

By October 1962, PGE had finalized the design - a gondola modified with extended sides and ends. *The Coupler* reported as follows:

*"The PGE at its Squamish shops has developed a new type of chip carrying car. The new cars are extremely versatile. They may be unloaded by using a rotary dumper, or dumped through a specially designed end gate. Work at the Squamish shops is under the direction of Eric Strathers, Superintendent of Car Equipment. Mr. Strathers is credited with developing these special cars. Capacity of the new cars is 5600 cubic feet, or 28 units of chips."*

### PGE 9901 - 9960

The initial group of sixty cars was placed into service between 1962 and 1964, ten the first year, thirty the second year and twenty in 1964. These cars were converted from PGE #9001-9075 series gondolas originally built by National Steel Car between 1954 and 1956.



BCOR 9929 on display at the Prince George Railway & Forest Museum. Note the brackets which are tack welded so as to permanently close the door, as well as the crude rotary dump circle painted in the center of the side.

Roy Smith photo. Carter Cram Collection.

This first series of cars transported wood chips from mills in the interior to North Vancouver, where they were unloaded via rotary dumper. Next, the chips were placed into barges destined for pulp mills on Vancouver Island. An alternative destination was on-line pulp mills. These mills unloaded the wood chips by opening the car's end door. Then a front-end loader would scoop up the chips, dumping them onto a conveyor belt for transfer to large stockpiles.

Two major problems were soon encountered with at least some of these cars: weak doors and thin decking.

Shunting of the cars could shift the chip load as much as 12 inches. The impact of the chip load on the door would cause it to bulge outward, allowing wood chips to leak out. Further, the thin, 20-gauge car decking could not safely support the weight of a front-end loader. PGE rectified both of these problems on the later cars in the series. The car doors were strengthened and wood planking replaced the steel decking. The cars with either unsatisfactory doors and/or weak decks were assigned to rotary dump service only. Their doors were tack-welded shut, and to indicate this modification, a large white circle was painted on their sides. The strengthened doors worked, but the wood decking led to yet another problem. Water soak led to rot, and in the winter months, the wood chips would freeze to the car decking. Unloading cars in this condition was a nightmare.



PGE 9940 was converted from a gondola in 1963.

Williams Lake, B.C. April 1975.  
Greg M. Kennelly photo.

## PGE 9501 - 9690

By mid-1964, PGE had a rapidly developing business hauling wood chips. This growth soon resulted in a shortage of equipment. Accordingly, the railway placed an order with Vancouver Iron & Engineering to build 190 chip cars, each with a capacity of 6400 cubic feet. PGE engineers had learned from their experiences with the gondola-conversion group, and the new design reflected this. The cars had all-welded end doors featuring 1" thick hinges to handle switching impacts. Their design included 5/16" thick floors of plate steel to support front-end loaders, which also eliminated the wood chip freezing problem. This latest series carried the new Westinghouse ABD brake system. These cars complied with all AAR requirements of the day for interchange, but they were not designed for rotary dump service.

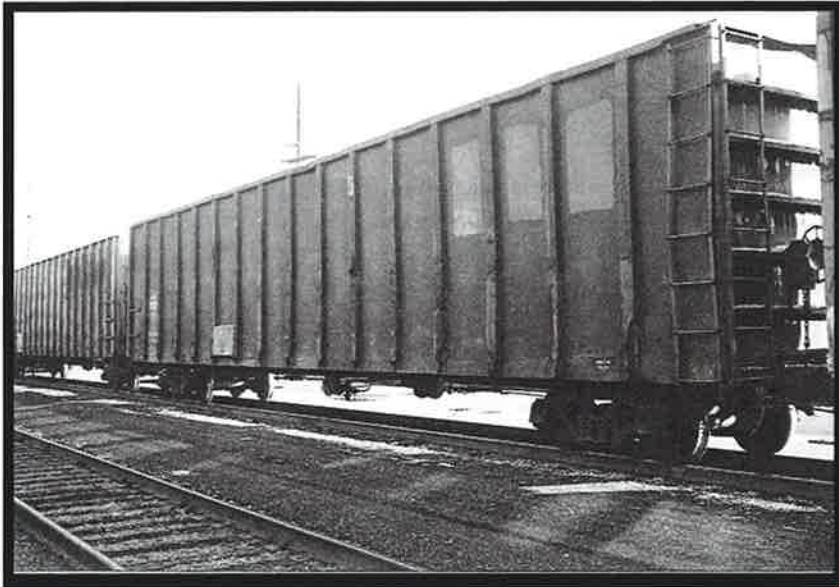
Each car within the 9501-9690 series cost \$11,800 to build and appeared in the familiar boxcar red scheme including the block letter-style PGE initials (with a period after each letter). Ninety cars were received by the end of 1964, and by May 1965 the remaining 100 had been completed.



Despite the best efforts of the railway's engineering staff, the car doors were once again a problem. The three hinge mount plates on each door were made of cast steel. They began to fail due to cracking. The solution was to replace the bolted-on hinges with welded ones.

And then, the cars started to sag! Because of insufficient vertical strength, the 9501-series cars began to "belly down" under load. Trainmen would often spot sparks emerging from a wood chip car's underbelly. Brake rods became stretched to the point where the brakes would be fully applied. In some severe instances, the degree of sag was enough to raise the couplers high enough to cause the cars to uncouple. Salvaging such cars for repair illustrated the typical PGE innovative touch. The chips were removed, and a log was laid along the length of the car's deck. The car's sill was lashed to it, winched tight, and the car proceeded to the shop for repair. Once in Squamish, the bracing log was cut up for firewood!

To remedy the sagging, top bracing was added to each car in this series, in the form of a 4" square x 1/4" thick piece of angle iron. This bracing was welded the full length of each car side, along the top. This solved the problem. Many of the cars from the 9501-series remain in service today.



BCOL 9657.

North Vancouver, B.C. May 1992.  
Andy Barber photo.

Six cars from this series have recently been reassigned to maintenance-of-way service. In their new role, they carry old ties, timbers, etc. to an on-line recycling plant. Because of the creosote residues that may be left in these chip cars, they can no longer haul pulp chips as creosote is a contaminant to pulp.

Work Service Chip Cars					
Car #	New Car #	Date Converted	Car #	New Car #	Date Converted
9514	993805	July 1994	9561	993806	July 1994
9527	993807	July 1994	9588	993809	Sept 1994
9541	993808	Sept 1994	9589	993810	Sept 1994

By January 1966, only eight months after the receipt of the 190 new chip cars, PGE was moving at least twenty chip cars a day, and looking forward to the prospect of both Northwood Pulp and Prince George Pulp and Paper opening at the end of the year. More chip cars were needed!

**PGE 9691 - 9765**

A second order for 75 cars was placed with Vancouver Iron & Engineering Works. Series 9691-9765 were nearly identical in design to the 9501 series, with four minor exceptions. First, the car's door height was increased by 5 1/2 inches to accommodate the newest front-end loaders. Second, additional cross-bracing was added to the top of the cars. Third, the top chords on the car sides were now constructed of full-length 3 1/2" square x 1/2" angle iron. This design element was enhanced, at the car's mid-section, by a 20-foot long flat iron stock welded at 45 degrees across the angle. Finally, the decking was wood, overlaid on steel. The wood decking was a compromise between the lesser of two evils. The tires on front-end loaders didn't spin, and the operators felt wood was sturdier. Even through the problem of chips freezing to the decks would return, the car users wanted wood, so that's what was provided.

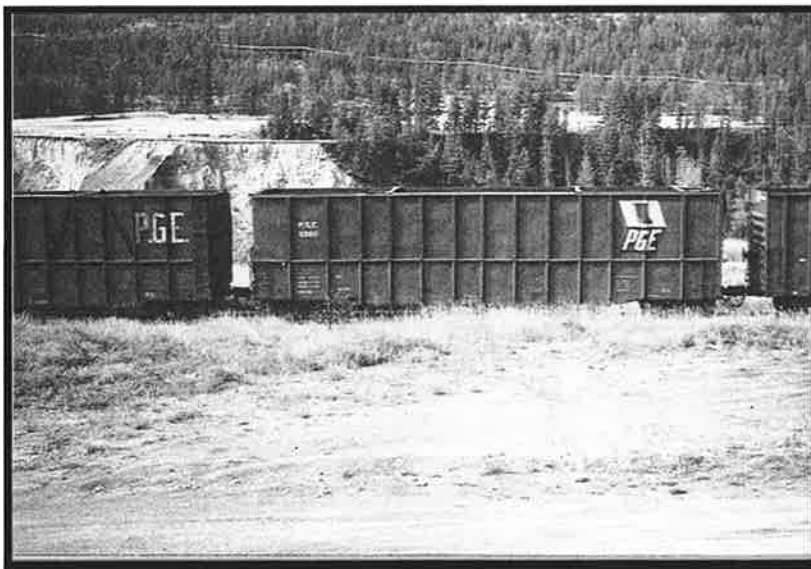
Each car within the 9691-series cost \$14,000 to build, and all were delivered during 1966. This latest group featured the newly introduced PGE map herald. There is an interesting side story associated with the way in which these cars were painted. Vancouver Iron & Engineering did not have a company paint shop, so it arranged to deliver the cars with just a primer coat. It was PGE's responsibility to apply the finish coat using paint supplied by Vancouver Iron. Thus, these chip cars, in primer coat, would roll north to Squamish with a couple of barrels of boxcar red paint inside. As it turned out, PGE could not keep up with the production rate, so the cars eventually were sent off-site to a third party to finish the work.

Unlike the 9501-9690 series, which underwent three major shop modifications, the 9691-series has never been through the shops for a major rebuild. The sagging problem has never developed on these cars. However, they have suffered horizontal side-bending, at the car ends. This was the part of the car that never received extra welded bar stock supports. As this sideways buckle becomes pronounced (6 to 8 inches), the car is withdrawn from service and scrapped.

Despite their durability and operational reliability, these cars were a headache for Vancouver Wharves. Additional cross bracing meant more chip hang-ups and frozen loads. Occasionally, the cross braces even fell off into the screw conveyors. Hauling wood chips was becoming a significant operation for the PGE. From a base of zero in 1962, the chip business rose rapidly with projected car loadings in 1967 of 12,000 cars.

**PGE 9961 - 9980**

By late 1967, wood chip cars were again in demand. A movement cycle took eight and a half days, and PGE first addressed the car availability problem by trying to reduce this period. It succeeded in reducing this figure to six days, which was equivalent to nearly a 30% increase in the fleet size, but the demand persisted. As a stop-gap measure, twenty more 9070-9169 series gondolas built by National Steel Car between 1954-58, were converted to wood chip cars.



PGE 9980.

Williams Lake, B.C. April 1975.  
Greg M. Kennelly photo.



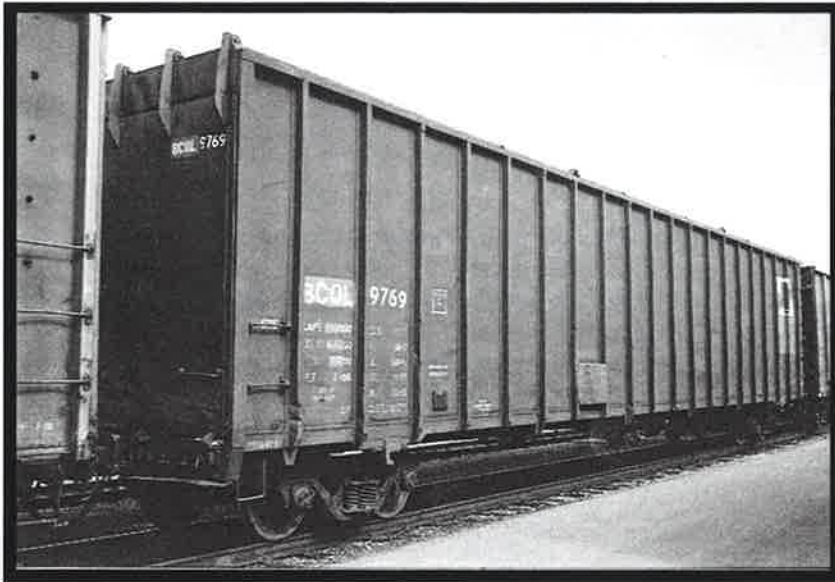
These cars had stronger end doors to resist shunting forces, and stronger hinges to reduce breakage. Their capacity was 5560 cubic feet, down slightly from the 5603 figure of the original gondola conversion series (due to the door design alteration).

This latest conversion was made by using full-length steel panels, 7'-6" high and 52 feet long. The running gear, draft gear, and brakes were refurbished, and since these cars were an in-house design, the metal decking was installed. From PGE's viewpoint, spinning tires were preferable to frozen loads and rotted wooden decking. The cars were painted box car red with the PGE map herald.

### **PGE 9766 - 9825**

To further alleviate the shortage of chip cars, PGE also placed an order with Hawker-Siddeley for sixty chip cars in 1968, series 9766-9825. These turned out to be good cars, and incorporated several design improvements; a full length top chord offered increased strength, an increased number of side ribs, a simplified, cleaner looking B-end (basically just flat steel) was used and thinner, longer, and more door hinges were used to withstand both elevated ramp unloading and vibrator shaking. These changes reduced the overall car weight by 5000 lbs., and boosted capacity to 6600 cubic feet. Hawker-Siddeley completed the order at a cost to PGE of \$16,000 per car. They featured the PGE map herald and box car red paint scheme. The wood decking was retained.

Most of the 9766-series cars remain in service, having undergone two modifications. The first, in 1970, saw the replacement of the wood decking with plate steel. The second included strengthening the floor supporting stringers. The front-end loader operators were wary of the steel floors in chip cars. Instead, they preferred the solid feel and good traction of the wood decks. Sometime in the late 1970s (probably 1977), the railway inspected all chip cars for floor loading. The Hawker-Siddeley 9766-9825 series was found to be deficient, and modifications were made. On either side of the underframe, and centered between the existing two stringers, a third stringer was added. This stringer measured 46 feet long (bolster to bolster), and was made of a three inch I-beam. A second piece, consisting of a 52" long piece (6 inch I-beam) ran from the bolster to the car end.



BCOL 9769.

North Vancouver, B.C. September 1994.  
Andy Barber photo.

### **BCOL 90001 - 90140**

In February 1970, PGE reported a continuing upward growth in chip business, a further 50% increase in just two years! To address this increase, the railway modified its existing fleet of 325 cars to improve turn-around times, and another 140 chip cars were ordered. This order went to National Steel Car of Hamilton, Ontario and became series 90001-90140. The design featured a dreadnaught B-end, and a vertically ribbed A-end, or door end, with four hinges. The car capacity was 6565 cubic feet. With this order, PGE deliberately specified metal decking. Further, the bottom stringers were designed and positioned to afford maximum support for the wheels and weight of a front-end loader.

This particular design also incorporated a new feature: an internal access ladder. This ladder consisted of six rungs riveted in the corner at the car's B-end. Its purpose was to provide a convenient way to get into and out of the car for the front-end loader operator. Unfortunately, the front-end loader frequently "removed" these rungs. They were subsequently taken out, and a portable ladder was used needed.

However, PGE restudied the issue of wood decking versus steel plate. Wood decking offered the front-end loader operators a sense of a firm base and good traction. Operators preferred it, even if it meant frozen chip loads in the winter. PGE didn't like it because wood decks rotted, and it was not uncommon to have sections of the deck fall into the wood chip conveyor system. Related maintenance and increasing customer complaints were adversely affecting car cycle times. The railway's engineering department inspected these cars and made two significant alternations. Those cars with wooden decks were given a steel deck, and all cars had lift rings fitted to their end doors to accommodate a chain which hoisted the door ninety degrees, to allow easier front-end loader access.



BCOL 90027 in North Vancouver in December 1992. This car has an eight rib dreadnaught B-end indicating that a repair has been completed. The 90001-90140 series was manufactured with 3 panel/3 rib dreadnaught ends. The only cars to ever have 8 dreadnaught ribs were PGE's 4501-4600 series boxcars. The height of the 3 panel /3 rib configuration on the wood chip cars' dreadnaught ends was equal to the 2 panel/4 rib end on the 4501-4600 series boxcars. Therefore, the 8 rib end in the photo indicates that the original dreadnaught end has indeed been replaced.

Andy Barber photo.

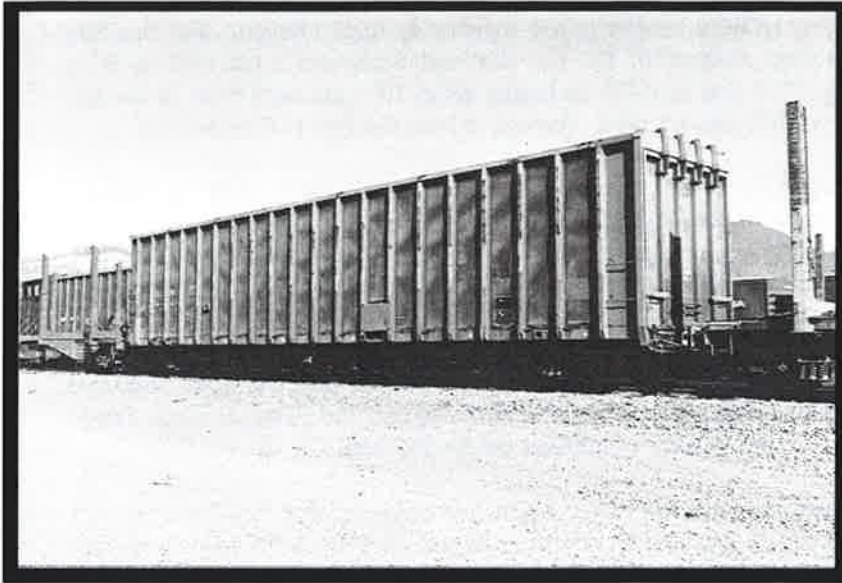
### BCOL 90141 - 90340

In 1972, the British Columbia Railway decided to augment its fleet with a further 200 cars. This series was numbered 90141-90340, and again came from National Steel Car. There were some very minor changes in exterior dimensions, probably to qualify for a Plate C designation. No changes were made to the cars' interior dimensions. These cars were the first equipment to carry the new dogwood herald logo. The May 1973 issue of *The Coupler* reported that these cars, which cost \$16,028 each, were being delivered to the Prince George terminal at the rate of seven to ten cars a day. They were placed in immediate service for the three pulp mills at Prince George, and for the soon-to-be opened mills at Quesnel and Mackenzie.

### BCOL 90341 - 90440

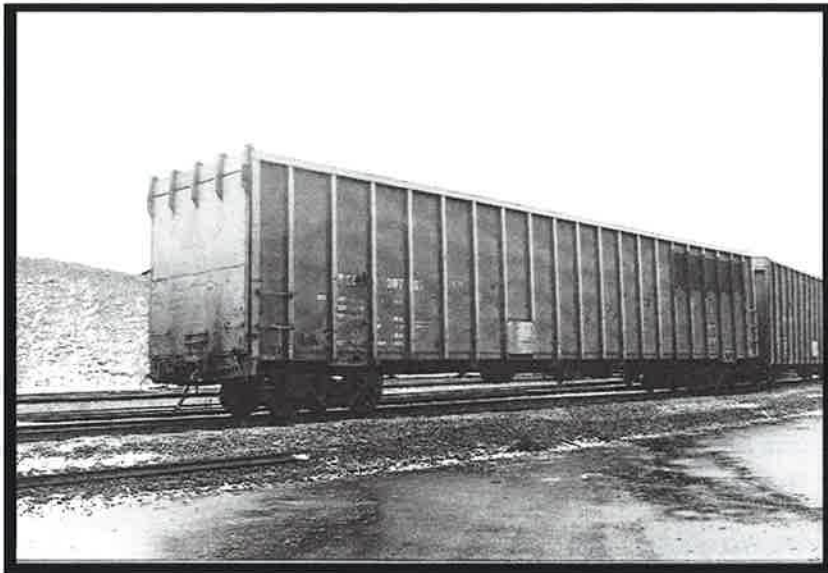
By 1973, the railway was again facing a serious car shortage. All aspects of its freight hauling business were growing rapidly. A short-term solution was to order 100 more chip cars. The order was awarded again to Hawker-Siddeley, and became series 90341-90440. The design was a repeat of Hawker-Siddeley's 9766-9825 series, with only minor changes.

In May 1974, *The Coupler* reported a 25% drop in overall car loadings, at a time when a car shortage existed and business was booming. This drop was caused by a change in the method in which chip car movements were counted. Wood chip shipments remaining within a station area were now re-classified as a "switching movement" and not included in car loading totals.



BCOL 90326 at Squamish in March 1993. This style of door and a dreadnaught B-end is characteristic of National Steel Car 90001-90340 series chip cars.

Andy Barber photo.



BCOL 90787 at Fibreco in North Vancouver in December 1992.

Andy Barber photo.

### **BCOL 90441 - 90840**

The long-term solution was the construction of the railway's own rail car manufacturing plant in Squamish, known as the Railwest Manufacturing Company. It was scheduled to begin production during the summer of 1974, but by mid-year, the plant's construction was behind schedule, due to a construction industry dispute. BCR had planned to begin production on December 2nd 1974, on an order of 400 wood chip cars. It was the Hawker-Siddeley #9766-9825 design which served as the standard. Production actually began on Tuesday, March 25th 1975, on chip car 90441, the first in the series 90441-90840. By the end of 1975, 247 cars had been built, and by April 1976, the remaining 153 had been completed.

### **Fibreco**

British Columbia Railway finally had enough wood chip cars to handle not only its current requirements, but also its projected future needs. The railway believed that if its daily utilization rate could be improved further, the existing chip fleet could handle the business. This proved to be the case. BCR would not order another chip car for 17 years.

In 1977, a consortium of sawmill companies operating in BC's interior joined together to form Fibreco. The mandate was simple: exploit export opportunities to the burgeoning markets of the Far East and Scandinavia (as well as BC's domestic coastal paper mills). Fibreco unloaded nearly 1700 cars in 1977, including about 100 cars each week in the last few months of the year. The projections for 1978 were 85-100 cars per week, through at least the first half of the year.

In 1979, Fibreco constructed one of the world's largest wood chip storage and shipping terminals in North Vancouver adjacent to BC Rail's yard. The railway was able to speed up its chip car turnaround times, thus keeping pace with the demands of increasing business. This higher car utilization was made possible due to a variety of reasons. The railway handled all switching at the Fibreco plant, the cars were emptied in a manner of minutes by rotary dump, and Fibreco's ability to stockpile and store chips on site meant cars could be emptied and recycled very quickly.

Wood chips had become a significant part of BCR's revenue stream. The railway's wood chip fleet had gone from zero cars in 1961 to 1,335 in 1976. Nearly every southbound freight now contained a string of cars for Fibreco, while almost every northbound hauled back empties. The wood chip car had become a signature car for BC Rail.

From 1977 to 1993, the fleet was maintained, upgraded, and in a few cases, assigned to restricted (e.g. captive customer) service. By 1993, the original gondola conversion cars had all been retired or scrapped, and the 9691-9765 series were also headed for retirement.

## BCOL 91001 - 91150

A replacement fleet of 150 cars was ordered from National Steel Car, which became series 91001-91150. The early NSC design characteristics live on in the latest car series. The dreadnaught B-ends were modernized to horizontal ribs, yet the A-end door was still a vertically ribbed, four hinge style. The most significant design improvement was a car without top cross bracing. Fibreco loves these cars!

The cars were delivered in a dark green paint scheme with no herald. A yellow vertical painted stripe indicates which end has the door. A container box was attached to the B-end for net storage. There isn't a net in the storage bin - yet.

## The Future

It will be interesting to observe what challenges the future will hold. Pulp mills in BC are already feeling a supply shortage of chips. At least one mill has recently shut down for a few weeks in order to stockpile chips. Some mills are rumoured to be looking at chip sources from as far away as Alaska and Chile.

Who knows? Maybe we'll see imported wood chips being unloaded at Fibreco, with loads heading north!

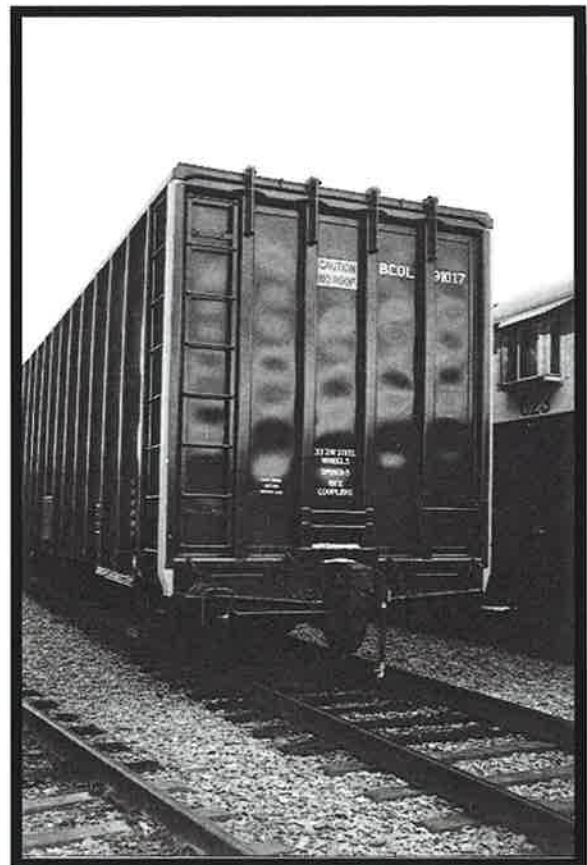
Car Series	# Built	Builder	Year	Cu. Ft.	As Built Paint Scheme
PGE 9901-9910	10	PGE	1962	5603	Box Car Red, "P.G.E." logo
PGE 9911-9940	30	PGE	1963	5603	Box Car Red, "P.G.E." logo
PGE 9941-9960	20	PGE	1964	5603	Box Car Red, "P.G.E." logo
PGE 9501-9590	90	Vancouver Iron	1964	6400	Box Car Red, Map Herald logo
PGE 9591-9690	100	Vancouver Iron	1965	6400	Box Car Red, Map Herald logo
PGE 9691-9765	75	Vancouver Iron	1966	6400	Box Car Red, Map Herald logo
PGE 9961-9980	20	PGE	1968	5560	Box Car Red, Map herald logo
PGE 9766-9825	60	Hawker-Siddeley	1968	6600	Box Car Red, Map Herald logo
BCOL 90001-90140	140	National Steel Car	1970	6565	Box Car Red, Map Herald logo
BCOL 90141-90340	200	National Steel Car	1972	6619	Light Green, Dogwood Herald logo
BCOL 90341-90440	100	Hawker-Siddeley	1973	6660	Light Green, Dogwood Herald logo
BCOL 90441-90687	247	Railwest	1975	6550	Light Green, Dogwood Herald logo
BCOL 90688-90840	153	Railwest	1976	6550	Light Green, Dogwood Herald logo
BCOL 91001-91150	150	National Steel Car	1993	6575	Dark Green, no logo

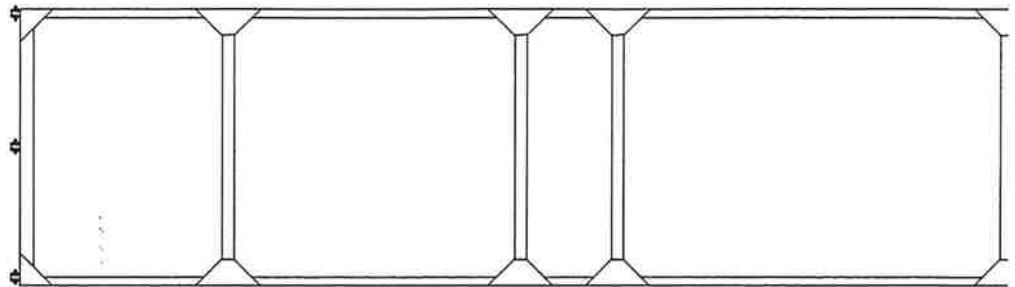
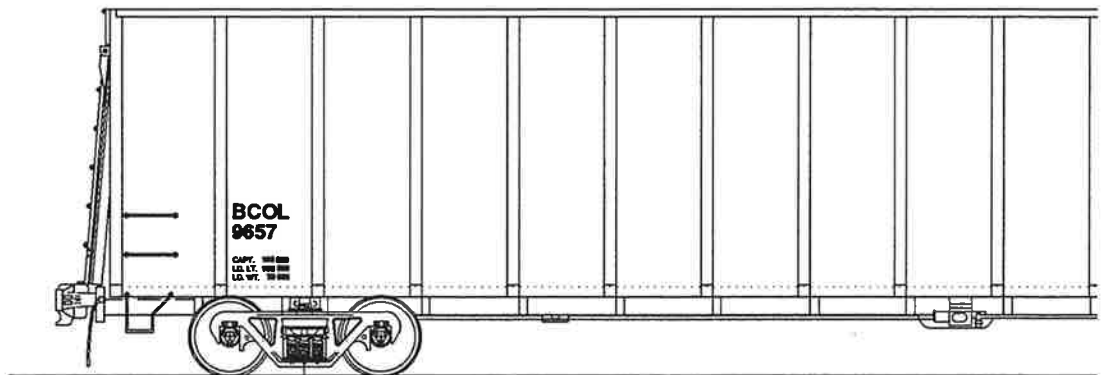
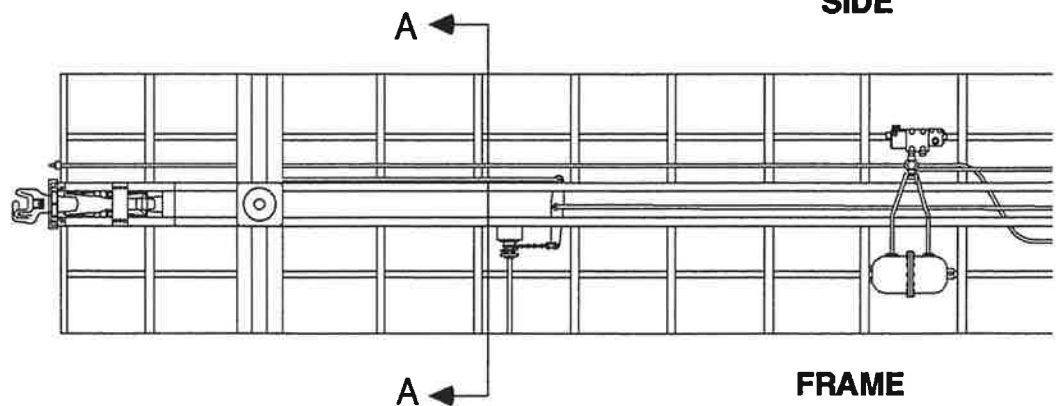




BCOL 91017 at North Vancouver,  
March 1994. Photo by Andy Barber.

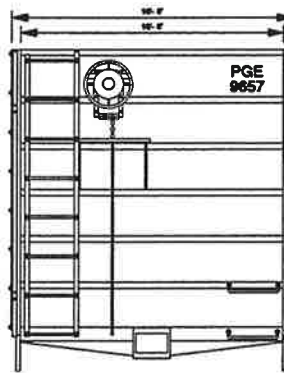
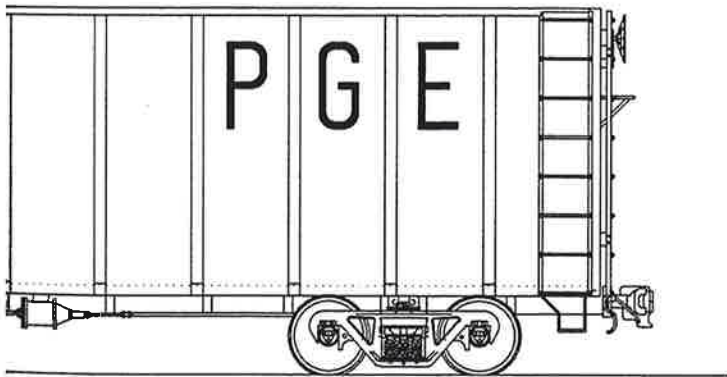
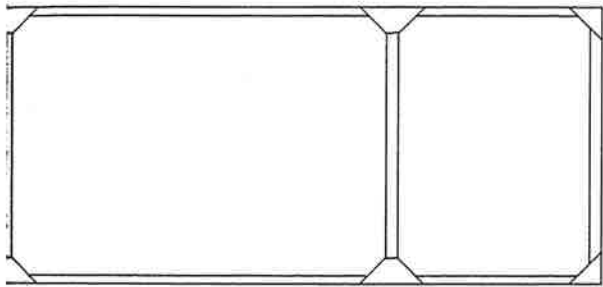
BCOL 91017's hinged door with  
yellow vertical stripes indicating  
the A-end. Andy Barber photo.



**TOP****SIDE****FRAME**

Note: Due to space restrictions, we were unable to include a scale drawing of the 9901-9960 series car. A drawing of the car will appear in our next issue.

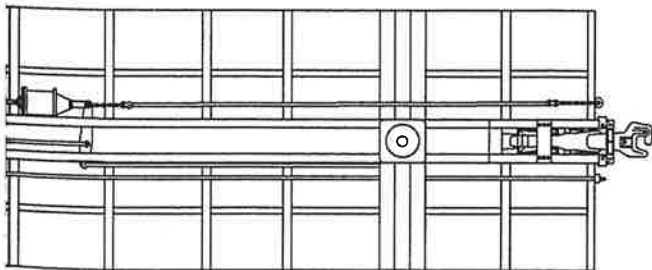
All scale drawings copyright 1996,  
Patrick Lawson. All rights reserved.



SECTION A/A

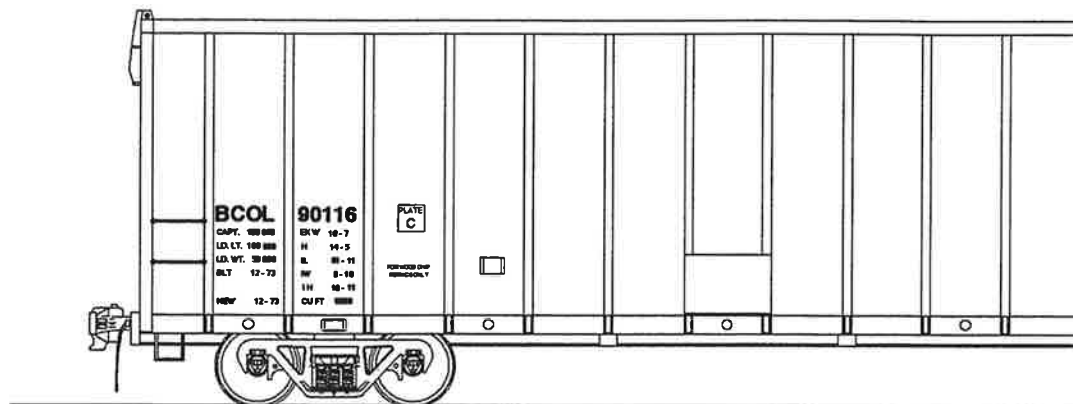
**BC RAIL 70 TON CHIP CAR  
NUMBERS 9501- 9690**

"HO" SCALE

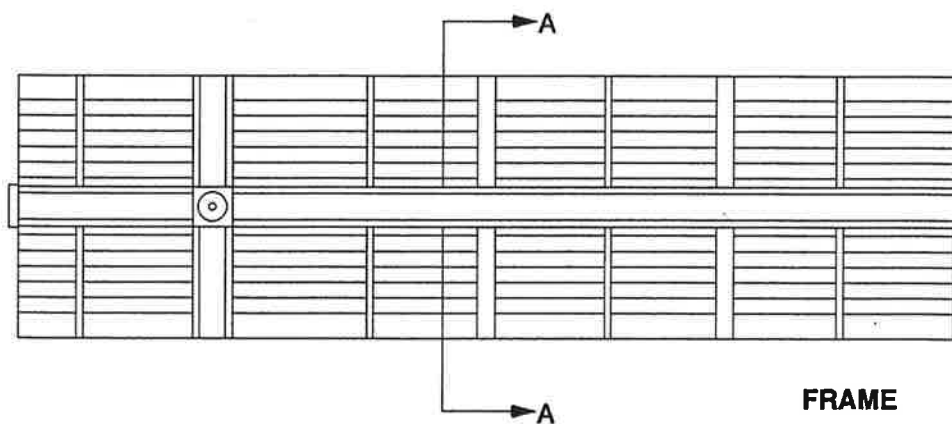


DRAWN BY: PATRICK LAWSON  
JANUARY 1994

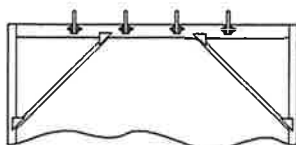




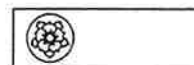
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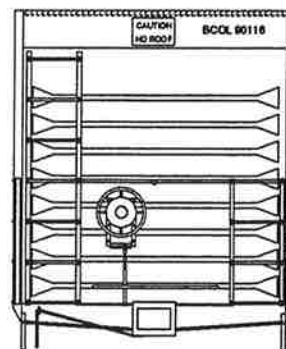
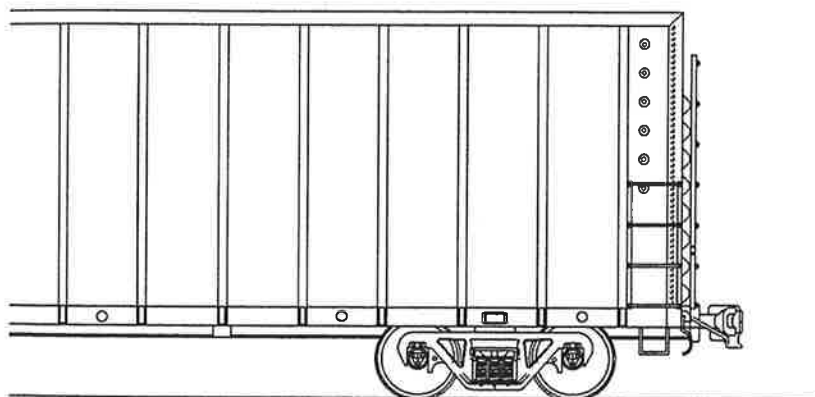
FRAME



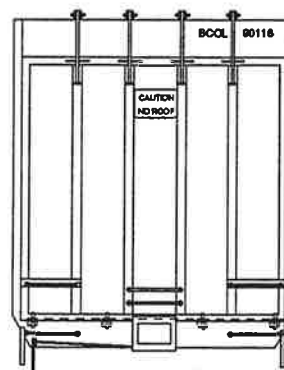
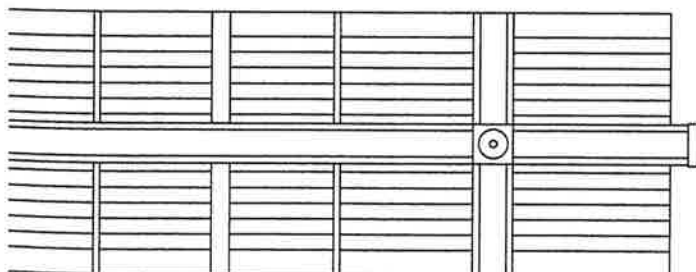
TOP BRACING "A" END  
(INTERIOR CROSS BRACES AT MAIN POSTS)



E



"B" END



"A" END

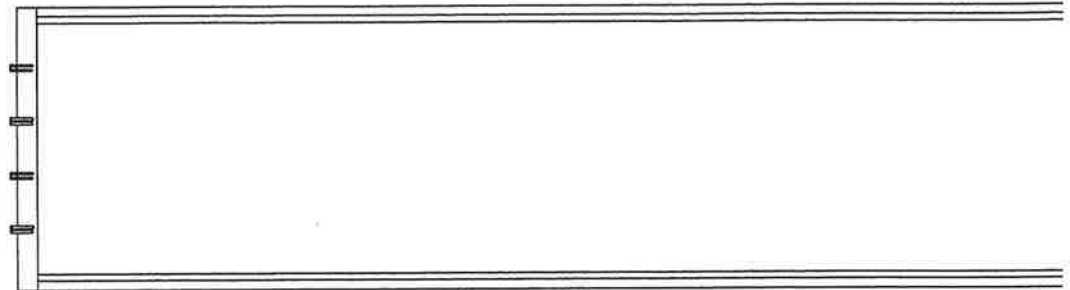


SECTION A/A

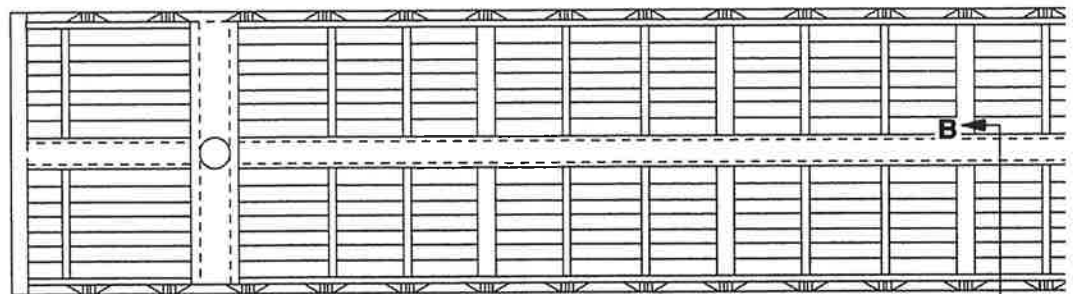
**RAIL 70 TON CHIP CAR  
NUMBERS 90001- 90140**

\*HO\* SCALE

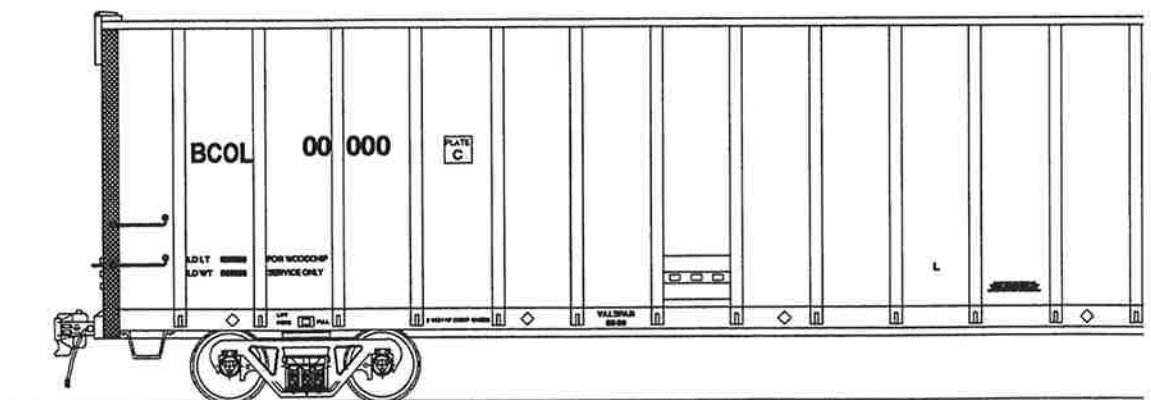
DRAWN BY: PATRICK LAWSON  
JANUARY 1994



TOP



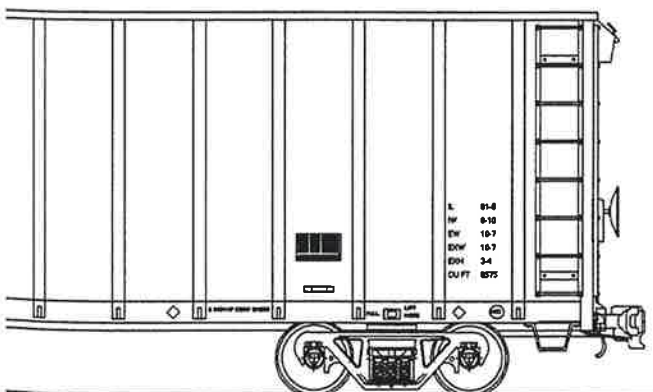
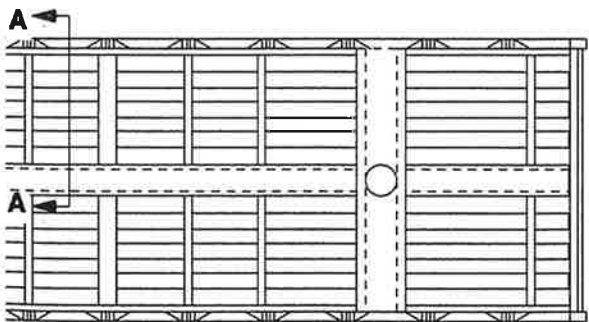
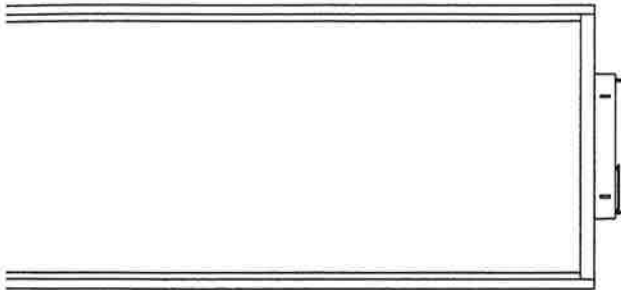
FRAME B



"A" END

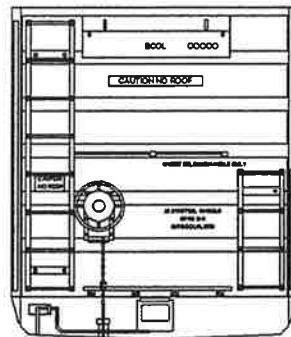
**BC RAIL 70 TON CHIP CAR**  
**NUMBERS 91000 SERIES**  
 BUILT BY NATIONAL STEEL CAR LIMITED

SIDE

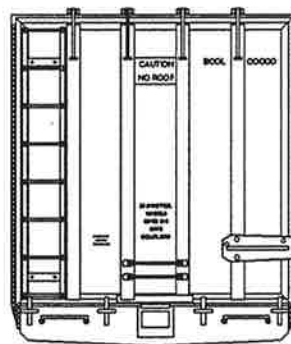


"B" END

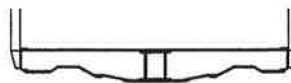
Drawn By: Patrick Lawson  
March 1994



"B" END



"A" END

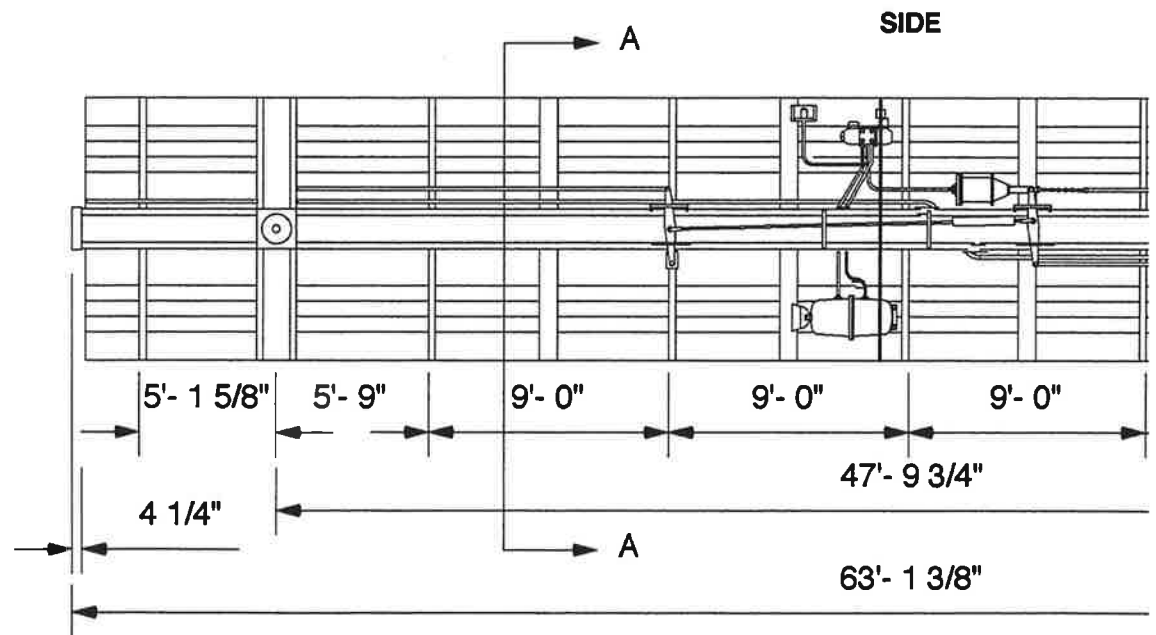
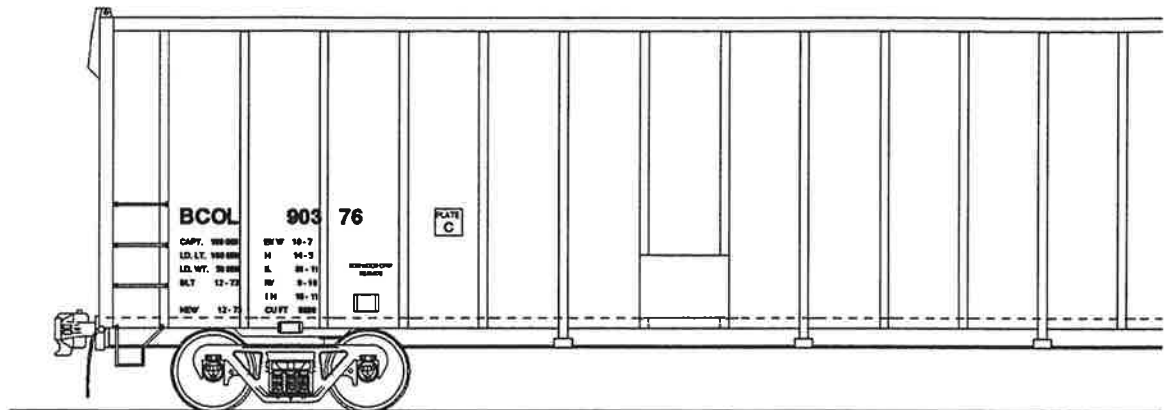


SECTION AT BOLSTER



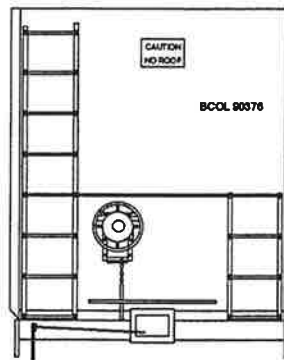
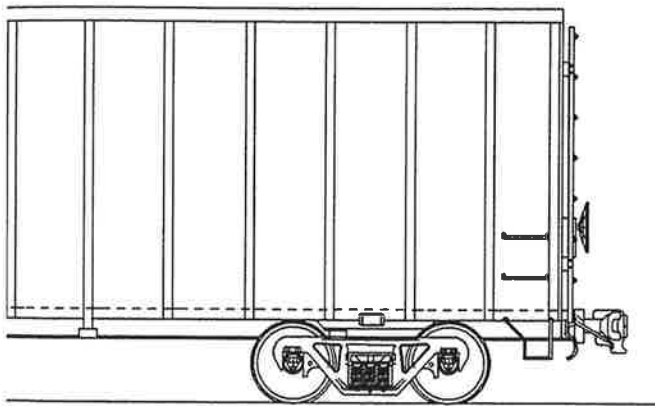
SECTION A-A

SECTION B-B

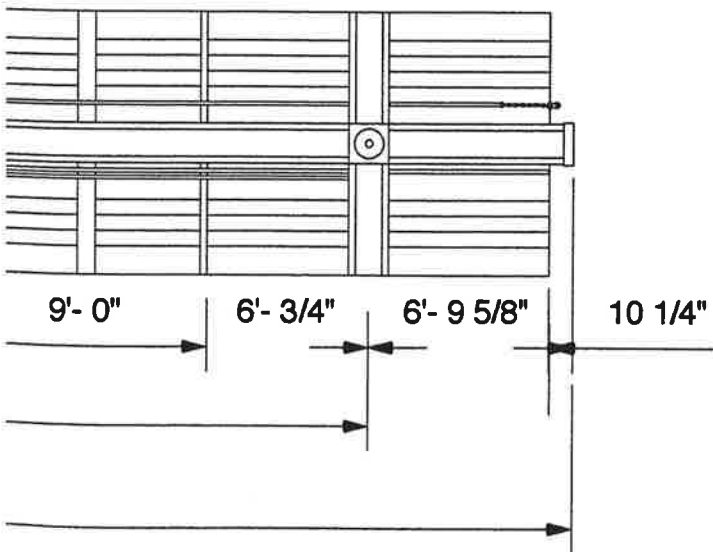


SECTION A/A

FRAME

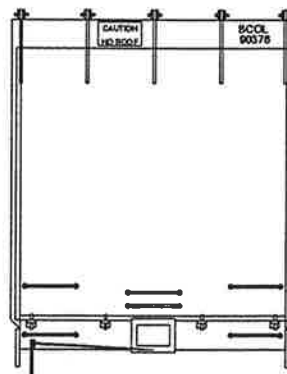


"B" END

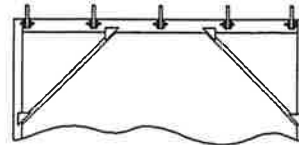


**BC RAIL 70 TON CHIP CAR  
NUMBERS 90341- 90440**

"HO" SCALE



"A" END



**TOP BRACING "A" END**  
(INTERIOR CROSS BRACES AT MAIN POSTS)

DRAWN BY: PATRICK LAWSON  
JANUARY 1994

## INTERCHANGE

**SOUTHERN EXTENSION INFORMATION SOLICITED.** Gary Oliver (25920 Dewdney Trunk Road, Maple Ridge, B.C. V4R 1Y4) is seeking info relating to inaugural trains (June 11, 1956) from North Vancouver to Squamish.

**TANK CARS:** Tim Horton (1201-2016 Fullerton Avenue, North Vancouver, B.C. V7P 3E6) would like to hear from anyone with photographs and/or information on British Columbia Railway tankcars (including those in fuel and lube oil service, water service, etc.) A roster is being compiled for use in an upcoming article.

**BRASS FOR SALE:** Rick Popp (4402 South Wayne Avenue, Ft. Wayne, IN 46807) has the following Overland Models brass diesels (HO scale) for sale: OMI 5275/5276 M420W/M420B (BCR 640-47 and 681-88) for \$320 each, OMI 5281 M630 (BCR 705-722) for \$325, OMI 5282 M630W (BCR 723-30) for \$395, two OMI 5354 Dash 8-40CW's (BCR 4601-22) at \$430 each, OMI 5049 SD50F (CN5400-59) at \$290, OMI 5155 SD40-2F (CP 9000-14) for \$360, OMI 5846.1 SD60MAC (BN 9500) at \$510, and five OMI 5421 Dash 8-40C power chassis at \$78 each. All are either new or in excellent/mint condition. Payment in US funds, please.

**HISTORICAL RESEARCH SERVICE** is now being offered by BCRH&TS member Patrick O. Hind. Will perform research on any past or present railway within British Columbia. Contact him at POB 837, Squamish, B.C. V0N 3G0.

**HOPPER PROJECT:** As noted in Issue 24, Jim Moore is preparing a feature spotlighting the various series open-top hoppers operated by the PGE and/or BCR. Thanks to everyone who has submitted info thus far.

Still need details concerning the 230-244 series and 251-258 series. How about those hoppers that made it into M-O-W service (e.g., 99xxxx cars)? All material will be returned in original condition. Postage will be reimbursed or credited to subscription account. Jim Moore, 25852 McBean Parkway, Suite 187, Valencia, CA 91355.

**VANCOUVER WHARVES:** BCRH&TS member Ron Tuff is completing a story regarding this BCR subsidiary operation. If you have info concerning VW's early history (1960s), drop Ron a line at 115 Athenia Drive, Stoney Creek ON L8J 1S4.

**WILLIAMS LAKE PROFILE:** Several members are working jointly on a feature that will trace PGE/BCR's history and operations in Williams Lake. Scale drawings of several structures have been completed, and we've obtained track profiles for the last 20 years or so. Still need info concerning industries and railway operations prior to 1975. Can you help?

**VOLUNTEERS NEEDED** to help with BCRH&TS convention. Assistance is needed for display set up and break down, registration, event judging, etc. If you can lend a hand, please contact Tim Horton (Convention Co-Chair), 15440 99A Avenue, Surrey, B.C. V3R 9H4.

**CRANE PHOTOS:** Lawson Little has prepared a feature spotlighting the various cranes/derricks operated by both the PGE and BCR. Please share your photos, roster details, and modeling information. Still need photos of Burro cranes (6077-78 and 6079), 6-ton Unicranes, Northwestern Model 47's, Korning Model 2054's and Marion steam ditchers. Thank you to everyone who has assisted with this project so far. Please send all material to Lawson in care of *The Cariboo*. All photos will be returned promptly.

**CARTER CRAM** (3145 Valentine, Redding, CA 96001) is interested in locating a source for a prototypically correct plug-door to model an HO scale version of BCR's 50-6 (IL) freight car (e.g., 4650 or 850001 series).

**BCR ALCOS IN MEXICO:** Does anyone have a complete listing of which locos were sold in Mexico, as well as their current status? Photographic evidence confirms that, in addition to 705 which GE rebuilt to demonstrator GECX 5000, the following units definitely went south of the border: 712/713/714 (two-tone green) and 709/716/718/722/722/728 (red/white/blue). Please contact Lawson Little (15 Highfields Drive, Old Bilsthorpe, Newark, Notts. NG22 8SN, England).

**BEAUTIFUL BC AUTUMN TOUR:** The West Coast Railway Association will sponsor its classic nine day tour of the entire BC Rail system, all the way to Fort Nelson.

As in years past, this delightful program will include one-way bus/one-way train option or round trip train.

This is the unique way to see much of beautiful British Columbia as you have never seen it before. Spectacular fall colours, wildlife, photo stops, friendly northern communities and more. This is the trip that everyone talks about, offered fully escorted by those who know the territory.

An all inclusive package. Saturday, September 7 through Sunday, September 15. Contact the WCRA travel office at (800) 722-1233.