

# The CARIBOO

A PUBLICATION OF THE PGE/BCR SPECIAL INTEREST GROUP SOCIETY

Issue 43

Summer 2004



***Inside This Issue:***  
**Remembering the PGE**  
**BC Rail's Slug Program**  
**N Scale Freight Cars (Part 6)**

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### Cover Photo

BC Rail passed into history at midnight on July 14, 2004. This double exposure of M-630 No.710 at Alexandria on May 29, 1988 seemed to be a logical choice for the cover of this issue.

*Photo by Brian Elchlepp*

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## President's Message

Now that the election of directors has taken place, and we have had our first meeting (January 30, 2004), I can now make my report. The directors elected were Dave Barone, Graham Bennett, Paul Crozier Smith, and Bob Storey. Acting upon our bylaws the four elected directors appointed a fifth director, Scott Duffus.

At the first meeting, the following people were elected/appointed to their positions:

President - Paul Crozier Smith

Secretary- Bob Storey

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Registrar - Graham Bennett

Associate Editor - Tim Horton

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Editor - Dave Barone

Advertising & Website - Scott Duffus

Assistant Editor - Trevor Mills

Back Issues - Ray Konrath

We are going to make every effort to produce three issues of the Cariboo this year. We are very low on material and would ask anyone with material for contribution to contact Dave Barone.

Thank You, Paul Crozier Smith

## Submissions

*The Cariboo* is a publication of the PGE/BCR Special Interest Group, and is designed to provide a forum for the exchange of information relating to BC Rail and its predecessors. The publication relies heavily on material contributed by the membership. There is a constant need for articles and photographs that feature both prototype and models of the Pacific Great Eastern and British Columbia Railway.

All contributions are welcome. It is helpful if submissions are provided on a PC compatible disk in Microsoft Word. Typewritten submissions are also acceptable.

Authors are responsible for all original statements in their work. Submissions are accepted with the understanding that they are not under consideration elsewhere. All submissions are subject to editing by the editorial board as a condition of publication. Material including photographs will be retained in the society's files unless other arrangements are made prior to publication. Photographs, text, diskettes and other material will be returned if requested. Proper credit will be given to contributors and photographers when the material is published.

Your editors encourage submission of photographs and other illustrations which serve to reinforce the content of the material submitted. Appropriate captions including dates, locations and photographer should be included wherever possible. Photographs may be submitted as B&W or color prints (and negs) as well as slides.

All submissions including photographs should be sent to David Barone at 660 Summerlyn Dr. Antioch, IL 60002, USA. Files can also be sent electronically to [editor@pge-bcr-sig.bc.ca](mailto:editor@pge-bcr-sig.bc.ca).

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# IN THE NEWS

*By Paul Crozier-Smith*

Because of the CN derailment and fire on the bridge on their north line CN has been running detours on BC Rail. These detours will run until repairs are made to the CN trestle.

The Request For Proposal went out and apparently CN, CP, BNSF, UP and OmniTrax have made their interest known. An internal BC Rail memo suggests that if CN takes over that 1200 BC Rail employees will lose their jobs. Stay tuned!

Four bidders have been short listed by the British Columbia government for further talks in the privatization of BC Rail. The bidders include Canada's two largest railroads; CNR, CPR, short line operator RailAmerica and partnership of OmniTrax and BNSF. A fifth proposal was not pursued. The BC government said the bidders would conduct due diligence, including railway inspections and facility tours. The privatization process foresees BC Rail's right-of-way, rail bed and tracks remaining publicly owned. The winning bidder would assume operations and management of the freight service. BC Rail is Canada's third largest railway, with a network of 2,315 kilometers.

Selling BC Rail to Americans would preserve BC's control over the operation of the Canada's third largest railway.

Confidential briefs from BC Rail's corporate development section suggest that OmniTRAX could strike an alliance with Burlington and become BC Rail's operator on behalf of its older, larger partner.

OmniTRAX already has status as a provincially regulated railway, and a deal with Burlington would preserve that status. This would buffer the partnership from higher federal switchyard costs and offers shippers a perception of an independent, third party owner for BC Rail.

The province would continue regulatory control over BC Rail, as opposed to other scenarios where the railway would become subject to federal regulatory authority. There would also be less layoffs if BNSF/ OmniTrak were to takeover. OmniTRAX is a subsidiary of Denver-based Broe Cos., and, like its parent company, specializes in nine-figure deals for distressed assets it can turn into moneymakers.

Broe has a wide variety of real estate holdings in the U.S. and Canada.

Burlington has 50,000 kilometres of rail line across North America and would provide shippers in this province with a cheap, direct connection to the re-source-hungry U.S. South west.

OmniTRAX is expected to keep BC Rail intact by establishing a headquarters in Vancouver, lacking enough management infrastructure to absorb all functions instead of eliminating nearly all BC operations as CN is expected to do. Meanwhile the Unions are fighting the sale as are many of the interior BC towns and cities.

CN detoured one train each direction between North Vancouver and Prince George for a few days at the Beginning of August due to the forest fire situation in the Kamloops area. The northbound was scheduled for 1700 departure from North Vancouver. The American Orient Express was supposed to divert over BC Rail but due to the lack of crew went south from Edmonton instead. BC Rail had a problem with the CN units running out of fuel on a number of the detours which tended to make things rather congested. The CN southbound detour number 1 (CNS1) with SD75I 5666, SD60F 5563 and Dash 8-40CM 2408 was ordered Lillooet 2215 departed at 2255 made it to Mile 111 Squamish Subdivision when two lead units shutdown. After an hour of troubleshooting with CN Mechanical services and still no luck, the engineer checked the fuel sight glasses. OOPS! The first two units were bone dry, and the third 4 inches full. The crew managed to get train over to Pemberton (mile 95) where all CN power received 1300 gals each. The train finally left Pemberton at 0525. Meanwhile, the CN Mechanical Services called back to tell us the second southbound detour train had not been fueled since Edmonton, same as first, and we might want to fuel it online. CNS2 with Dash 8-40CM 2532, Dash 9-44CW s 2664 and 2645 arrived Williams Lake at 0410, and also required fuel. BC Rail sold four of its SD40-2's to GECX. The units sold were 749, 753, 756 and 757, and are going apparently to MPI in Texas for repairs before entering service.

CN Instrument/Power boxcar (CN 15007) and CN Test Coach (CN 15008) arrived at North Vancouver CNR/BCR interchange by 23:30 Wednesday, August 13th for interchange to BC Rail. The two cars are hard-wired together and cannot be separated. Following interchange to BC Rail, the North Vancouver yard crew marshalled the train for northbound departure the following morning.

The train consist was marshalled north to south as follows: BC Rail B36-7 3607, CN 15007 Instrument/Power boxcar, and CN 15008 Test Coach (Rear of train). The train ran north to Fort St. John and out to Fort St. James over the next few days returning to CN at Prince George on August 18th.

September 10th the Starlight Dinner Train cars were sold. BC Rail would not reveal who the purchaser was but the rumour has it that the buyer was COE Rail. Time will tell.

Passenger service may return to BC Rail next year. The America Orient Express has planned for August 4 to 16 2004 a Vancouver to Vancouver via BC Rail to Prince George, CN to Jasper and back to Vancouver. Also there may be a side trip on CP, Kamloops to Banff. Tour is five nights accommodation on train and six days on rails and touring. The details are still being worked out by American Orient Express and they should have a schedule up on the web when the final routing is complete. Also there continues to be talk of a service from North Vancouver to Whistler starting in 2005 with Colorado Rail Car DMUs.

The date of September 30th passed with no word about the sale of BC Rail. Things have been quiet on the government side but there have been rallies and protests over the proposed sale.

It was announced on October 23, 2003 that BC Rail had reached a tentative agreement for a new contract and that it would be a few weeks before the voting by the employees would be completed and the results known.

Communities along the BC Rail line continued to complain Wednesday, November 5, 2003 about being left out of the provincial government's plans to lease the rails to a private operator. The provincial government is expected to make its choice by the end of the year between CN, CP and a joint venture between OmniTRAX and Burlington Northern Santa Fe.

Williams Lake city council voted last week not to support the deal until its concerns about consultation were met. It was followed this week by Prince George city council, which voted on Monday to ask the government for a two-year moratorium on the deal. Transportation Minister Judith Reid indicated that no moratorium would be forthcoming. Critics of the deal displayed a leaked internal BCR document this week which shows BC Rail's financial performance outpaced every regional railway in North America in the third quarter. BCR representative Alan Dever did not dispute

the figures, noting that operating income for the year-to-date is \$70.5 million.

November 6th the BC Provincial government announced the "Request For Proposals" for the purchase of BC Rail's Port Subdivision. The 34.3 km (23.3 mile) branch is being offered separately from the rest of BC Rail. The line runs between Pratt and Roberts Bank to serve Westshore Terminals and Deltaport. Similar conditions of sale will prevail as with the sale of BC Rail. Rumour has it that CP, BNSF and Southern of BC are interested.

Union officials at BC Rail stated November 16th that they are bracing for major cutbacks as the British Columbia government appears poised to table legislation that would allow for the sale of the Crown-owned corporation. B.C. Transportation Minister Judith Reid refused yesterday to say exactly when the legislation will be introduced or confirm reports that Canadian National Railway Co. has emerged as the front-runner in the bid to buy BC Rail. It is widely believed that the legislation will be in place as early as next week to allow the sale to proceed, and that CN has outmaneuvered CP and a consortium of OmniTrax/BNSF. BC Rail is Canada's third largest railway with annual revenue of more than \$310-million, 1,600 employees and valuable real estate assets including its North Vancouver head office.

The sale of BC Rail to CN is not a done deal. In an November 18th article in the *Vancouver Sun* which covers some of the stumbling blocks and there are several and they are major. One is the federal government would have to rule on this deal for the competition factor or lack thereof. Secondly, a big stumbling block is apparently the tax situation and how that would play out. It is very complicated and in the end would require a ruling from the federal tax people.

Ontario Northland has bought the entire dinner train. Their plan is to use the train between Cochrane and Moosonee. The 10 cars left behind the Canadian on April 18 and arrived at the Ontario Northland on April 22 2004.

Northwind crew sleeper BCOL 1711 is to be leased to CPR.

BC Rail was 92 years old on February 27th. Its predecessor, the Pacific Great Eastern Railway, was founded on Feb 27 1912.

BCOL 6001 has been preserved and is now at the Prince George Forrest Museum.

# BCR SLUG PROJECT: AN INTRODUCTION

by  
**Dan Rowsell**

A "Slug" is a weighted rail vehicle with traction motors that receive electrical power from an adjoining "Master" locomotive. Slugs are often referred to as an Electric Trailer or a Booster Unit. The slug does not have a diesel engine, generator, air compressor, cab or controls. In most cases the slug resembles the original locomotive below deck level only. Above the deck level, the electrical and air brake control equipment, traction motor blowers, sand tanks and ballast compartments are housed in a low profile body.

The slug is semi-permanently coupled to the master locomotive and matches the master locomotive in weight, number of traction motors and traction motor gearing. When the slug is in operation, the traction motors of the slug and master unit are connected in series with the master locomotive's main generator. In this configuration, the available horsepower of the master locomotive's generator is distributed to the traction motors of the mother as well as the slug. This increase in traction is extremely helpful during low speed movement of a train such as in yard service. It is important to remember that the slug is not a horsepower source; it boosts the tractive effort utilizing the available horsepower of the master locomotive. The slug is useful when starting a train and at speeds up to approximately 15 miles per hour, when the available horsepower of the master locomotive would not be fully utilized due to adhesion limitations. At higher speeds the slug is turned off and the master used alone to accelerate the train.

The slug is controlled from the master locomotive in the same manner as a conventional trailing locomotive. The master is equipped with switches and relays necessary to control the slug, and with cables to supply electrical power to the slug's traction motors. The master/slug combination operates most efficiently alone but may be used with other locomotives. In a consist, the master will operate as a leading or trailing unit but the slug will only operate with the master locomotive set up as leading.

Other features of the slug include: wheel slip alarm and control to master locomotive, automatic and manual

sanding, air reservoirs to supplement the master locomotive's main reservoir capacity, fuel storage (S-401 only), headlight, walkway and step lights.

Equipped with schedule 26-L locomotive air brakes, the slug has the additional advantage as a braking trailer. Set up as a trailing locomotive, the slug air brakes are controlled from the master, or other leading locomotives in a consist. Also the brakes are independent of the power system and will operate if the slug is not being used as a tractive effort booster.

In low speed service, the use of a master/slug combination has several advantages over using two locomotives. The major economic advantage is reduced fuel costs and less maintenance expense on repairs and inspection because the slug lacks an engine, main generator and other associated equipment. Operationally it performs like a trailing unit without sacrificing a locomotive for the same purpose.

## Slug S-401

The development of a slug unit for the BCR had been considered several times since 1967, but by the end of the 1970's the slug became a viable alternative to re-building the railways lower horsepower units with the outdated 244 engine. Late in 1980, slug development was again considered for two reasons. RS-3 locomotive #564 was out of service because of fire damage in the generator area and C-420 locomotive #632, a candidate for the master unit was in the Locomotive Rebuild Centre being back shopped. Locomotives #631 and 632 were rated at 1800 HP and ideal for master units because they were not equipped with dynamic brakes and were undesirable for mainline service.

In late December 1980, a Slug Project Team was set up with C.V. Pedersen as project leader, and R.F. Deno, K.A. Anderson, M.E. Lloyd and J.S. Biln as team members. Just before Christmas and after New Years, Mr. Biln and Mr. Lloyd were sent to visit several

US Railroads on a fact-finding trip. After the trip to Southern California to visit the AT&SF and Southern Pacific Railroads, the team visited the Louisville and Nashville and the Chicago and North Western Railroads. The L&N and C&NW Railroads were chosen because both had four axle slugs converted from Alco locomotives, namely the RS-3 and RS-2 respectively. The C&NW used Alco C-425 locomotives equipped with the GE 598 generator and the L&N used Alco C-420 locomotives equipped with the GE 581 generator for their master locomotives.

## **British Columbia Railway**

By January 15 1981, the team had reached a final decision based on the railway's design criteria and the information obtained from the American railroads. A paper titled, "Recommended Slug Design" was introduced. In this report the lessons learned when inspecting the L&N and the C&NW slugs was itemized. As a cost cutting measure, the C&NW design utilized a standard RS-2 car body including the cab. All of the openings were either welded shut or covered over with sheet metal. The trade off of this design is visibility, especially if the unit is ever intended to be used with the low, short hood of the master locomotive.

The L&N design featured a one piece 4 foot high "coffin" style car body cut down from the original RS-3 body and retaining the rounded corners and edges. The resulting BCR slug looks a lot like the L&N units. Both the L&N and C&NW slugs had a raised platform on the end adjacent to the master locomotive. This platform provided a level crossover between the master and slug, and also allowed electric cabling to be routed below it. Traction motor cooling was also a big item in this report. It seems that traction motor cooling was not as critical as the team had previously believed. The L&N slugs had an RS-3 #1 traction blower motor for each truck powered by a 1 HP motor.

The cooling system on many of the L&N slugs was bad ordered because of neglect and lack of maintenance, but the L&N maintenance personnel maintained that the traction motors had not been adversely affected by lack of cooling. The C&NW units had the same blowers powered by 5 HP motors. These slugs were put into service without the cooling system while awaiting the arrival of the motors for several months. Again, no traction motor damage could be attributed to the lack of cooling. The C&NW had older 6-SL and 6-DS air brakes and the newer L&N units had upgraded to 26-L equipment. Both railroads ballasted their slugs with scrap steel (axles, rails) embedded in concrete.

A meeting was held on January 26 1981 to inform Operation and Mechanical Dept. Management of the current status of the Slug project and to present a recommended slug design.

### Recommended Design Features

- Single ended control allowing the slug to be semi-permanently coupled to one master locomotive only. Uncoupling levers between master and slug fitted with locking pins to ensure that the master and slug are not inadvertently uncoupled.
- The four GE-752 traction motors with the 74:18 gear ratios to be retained to match the master locomotive. A low profile body cut down from the existing car body to about four-foot height for optimum visibility.
- The slug to be weighted to approximately 130 tons to match the master locomotive.
- The slug to be equipped with traction motor blowers operated by electric motors.
- The slug to be equipped with 26-L schedule locomotive air brakes providing the additional advantage of a braking sled.
- The slug will be painted dark green with black under frame and a flat black roof. Stencilling will include the British Columbia Railway logogram and reflective yellow striping along the side sills.

### Slug Specifications

#### Slug, Mechanical & Structural

The existing mainframe, draft gear, couplers and trucks complete with traction motors will be overhauled and re-used. The following features to be retained or provided:

- Existing RS-3 body cut down to a uniform four-foot height with new section to replace the cab, and access doors and hatches fitted as required. The body should be made in sections to prevent cracks in the body that may result from pliable twisting of the frame.
- Full-length walkways with handrails. Crossover provided at both ends of the slug.
- Sanding on all four corners of slug.
- Handbrake at master end of slug.

- Pilot and footboards at front end of slug only.
- Steps in all four corners.
- Stock RS-3 front TM blower for each truck to be belt driven by an electric motor. This will supply traction motor cooling air and will pressurize the electrical compartment to prevent road dust and dirt from entering the traction motor.
- Approximately 40 tons of concrete and/or steel ballast will be installed above deck in three locations as shown in figure 1.

### Electrical

In addition to standard overhaul of re-usable components, the slug will require complete re-wiring and replacement of control equipment because of fire damage to locomotive 564. The slug electrical equipment will have the following features:

- Slug traction motors will be connected in series with the master locomotive motors.
- Field shunting, manually controlled from the master, will be provided.
- Wheel slip control to the master will be provided.
- Isolation relay controlled from the master will allow slug to be controlled from the master only.
- MU receptacle and hoses will be provided at trailing end of slug.
- Twin sealed-beam (32 VDC – 200 W) headlights will be provided at the front end of slug.
- Crossover lights will be provided at both ends.
- Switches for headlight set up and crossover lights will be accessible from walkway.
- Each blower to be powered by a 1.5 HP, 3600 RPM electric motor.
- All electrical control equipment to be located in the electrical panel, accessible from the slug control cabinet.
- Power cabling between master and slug will consist of hard wired supply and return lines from the main generator, as well as heavy duty 74 VDC (#8) plug and receptacle for supply to traction motor blower motors.

### Air Brake

The air brake equipment will be upgraded to 26-L schedule for improved service and reliability. The main reservoirs will be retained for added air capacity and to expedite train line charging. The MU piping end connections will be lowered in accordance with current practice.

The internal equipment will be rack mounted in the control compartment for accessibility, and will be arranged to provide the following features:

- Independent and automatic brake functions as a trailing unit only.
- Bail-off of an automatic application.
- Dead engine feature, permitting the unit to be handled dead in a train with brakes operative.

### Options

There was some money saving and operational options listed. The committee stated that the RS-3 body could be retained virtually intact with all un-used doors and hatches sealed and the fuel tanks retained for fuel storage or fuel transfer to master locomotive. The decision was made to cut down the car body and the fuel option was applied to S-401 only, not to the following slugs.

Construction of slug S-401 commenced in the Locomotive Rebuild Centre at Squamish on February 10th 1981 basically following the above specifications.

Construction was completed on the second week in April and the first tests were conducted in Squamish yard commencing April 15th 1981 with C-420 #632 and S-401. The Master/Slug combination was then put into North Vancouver yard service following the Easter weekend. Soon after being put in service, the S-401 and 632 were regularly shunting trains weighing over 10,000 tons, which was a task that would normally require two 1800 HP locomotives or even greater horsepower.

On October 13 1981 the S-401 and #632 were sent to Prince George yard to work. During operations there were a few minor complaints with the slug/master units. Most of the complaints seem to be mostly about the C-420 master locomotive.

### Complaints

- When switching backward, sitting in the master locomotive with the seat turned around, controls are awkward to operate
- Steps and handrails of the master locomotive are unsafe for boarding on the move. They are too narrow and straight up and were not wide enough making it difficult for the crew to turn around or pivot. Headlight on slug not very bright on full brilliance.

- Slug operation too slow to kick cars, loads slowly in throttle setting 1-2-3. It was suggested that a different governor be put on the engine which would increase throttle response
- An extension loop to be fitted to the cut lever so the lever could be operated from steps of the slug.

With the exception of a few minor complaints, the slug program was a complete success.

The resulting fuel savings and the availability of additional units for the slug program led to the decision to build more. The lessons learned in building and operating S-401 were incorporated into the later series of slugs. As S-401 was a prototype there are a few spotting features that are different from the later units, notably that the S-401 has the ALCO style of body louvres and the later slugs have the EMD style of louvres. The design of the access doors is also different to the other slugs and the sand filler pipes are square on S-401 and round on the later units.

When originally converted # 632 was fitted with electrical connections for slug use at the rear of the loco only and that was why S-401 was always at the rear of the loco.

Electrical connections were later fitted to the front of the loco and that became pretty well standard for the slug to be at the front. With the slug at the front of the locomotive, the low profile of the slug provides better visibility than a freight car, typically a boxcar, when pushing or pulling with the nose of the locomotive.

In early 1984 S-401 returned to the Locomotive Rebuild Centre for maintenance. When the unit was put back in service on February 14 1984 it sported safety stripes, which wrapped around the front of the car body. S-401 has since been painted blue and Silver with the BC Rail logo.

The next instalment will look at S-402 to S-410 and will touch briefly on the conversion of all slugs to AC power in the early 90's. There will also be scale drawings.

Note:

I would like to thank Mr. J.S. (Singh) Biln for generously allowing me to use his extensive notes and files in researching this article.

Dan Rowsell  
Victoria, B.C.



The A end of S 401 in the original paint scheme with sealed headlights, August 1981.

*Gary Oliver photo - Dan Rowsell Collection*



S 401 at work in the North Vancouver yard, August 1981.

*Photo: Gary Oliver*



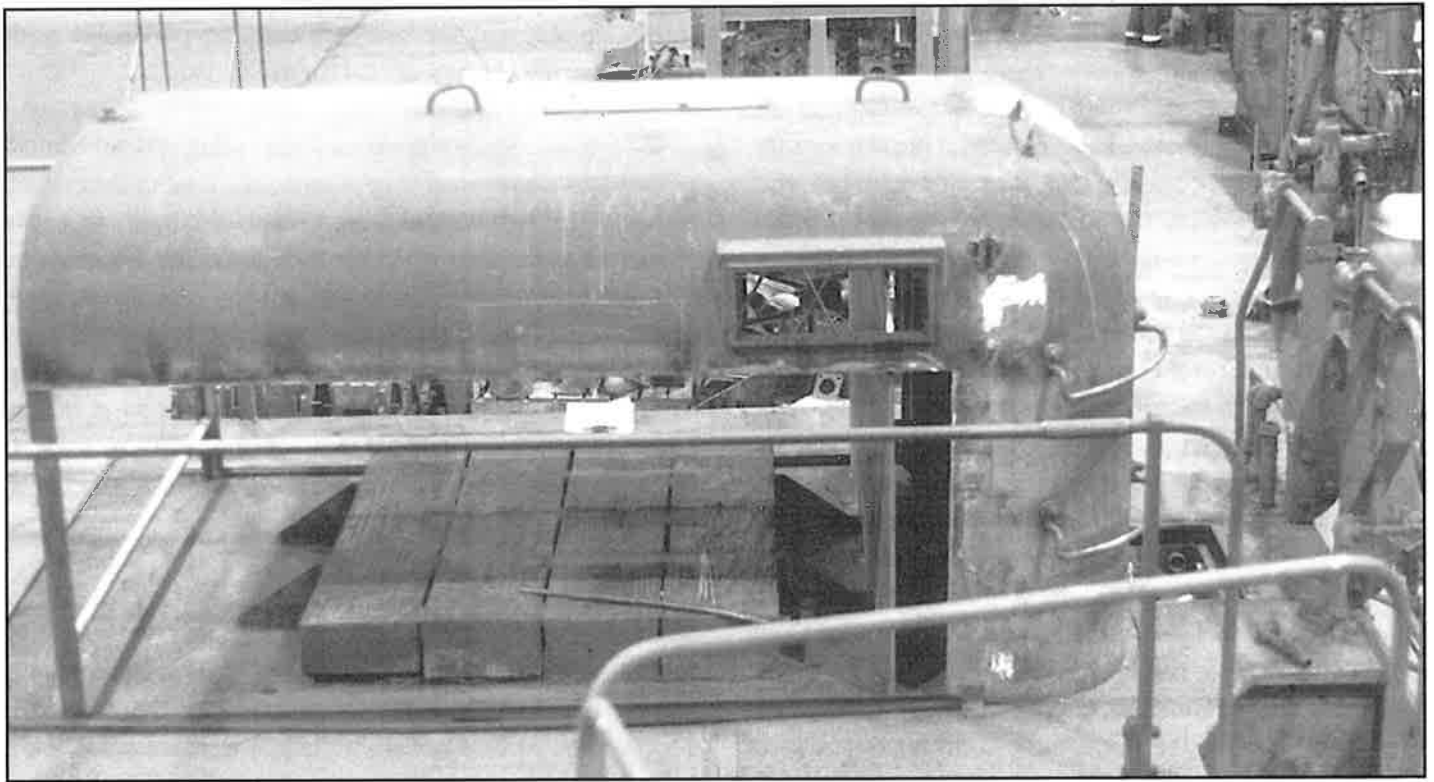
By 2001, S 401 had received the then current Blue BC Rail paint scheme.

*Photo: Dan Rowsell*



S 401 and C 420, 632 fresh from the paint shop, Squamish April 1981.

*Photo: BC Rail*



A detail shot of S 401 under construction. Note the extra ballast over the truck.

*Photo: BC Rail*

# THINGS REMEMBERED

by  
**John Phipps**

The Pacific Great Eastern or "Please Go Easy" to some, was a marvelous feat of engineering and perseverance. The mainline made its way into the Cariboo region of British Columbia's interior on a route that cut through ancient coastal forests, snaked along rushing streams and clung high to mountain ledges. Tracks for the PGE were laid around 1915 between Squamish and Chasm, and between North Vancouver to Horseshoe Bay. Both of my parents travelled to their summer cottages at Garrow Bay on the PGE from North Vancouver prior to the removal of the tract in 1928. The right of way from North Vancouver to Horseshoe Bay was reopened in 1956 and the rail line was extended to Squamish in the same year.

In 1955, I travelled by boat and train from Vancouver to Lone Butte. Union Steamship vessels provided the boat portion of the trip from Vancouver Harbour to the docks at Squamish. Union Steamships operated a fleet of ships that serviced many coastal communities on regular scheduled runs. Passengers destined for the train were picked up right on the Squamish dock as they detrained. Most of the railway cars in use in 1955 were from the 1920's or earlier and contained among other amenities, a pot bellied stove and a supply of coal or wood to burn. There were windows that opened to let in not only the fresh air, but mosquitos and smoke from the locomotive as well as to let the smoke from the pot bellied stoves out. Some of the trains operated with an open top observation car for those looking for the added thrill.

The scenery along the route out of Squamish was and still is breath-taking. For the part of the trip from just beyond Squamish through to Lillooet, the railway was the only means of access. The road to Alta Lake, Whistler and beyond had not yet been constructed. The power line roads were the first means of vehicle access in the area. Mail, supplies and passengers could be dropped off at any location, station or not. Usually a group of inhabitants, including Indians and other interested people, would gather along the track to receive papers, mail, food, supplies etc.. At times these items would be thrown from the baggage car doors as the train rolled through the communities such as D'arcy, Seton Portage or Shalalth.

In the summer of 1959, I worked as a labourer on the construction of the Carpenter Dam which was being built by Northern Construction of Vancouver. The dam site was on the Bridge River to the north and over the mountain from Shalalth. I rode to and from North Vancouver several times during this summer project, enjoying the scenery and the stories of traveling companions. One such story involved an elderly prospector who eventually got off at a non-scheduled stop along the line. This fellow offered the prediction that the price of gold, then pegged by the government at a fixed price of \$35.00 per ounce, would soon rise to over \$60.00 per ounce, and I should buy as much gold as I could. Since then the price of gold has been as high as \$800.00!!

From Shalalth the train continues to Lillooet where the line meets up with the Fraser River. Following the river, the line clings to a ledge high above the turbulent muddy water below. At a point just beyond Pavilion Mountain the line heads inland away from the Fraser River Valley and into the Cariboo. At Kelly Lake, a few miles west of Clinton, the railway would obtain ice for their passenger dining cars and for box cars carrying perishable goods. Railway ice sheds were still in use in 1955.

On one of my trips, the train I was riding was scheduled to arrive in Lone Butte at approximately 2:30 in the morning. My father and mother were to meet the train but had not arrived at the Butt when the train pulled in. We could hear a car approaching but it was not my parents. It being a frosty September night, the conductor held the departure of the train until my folks arrived some twenty minutes later. The rule of the railway was that if a passenger was not met at the station when temperatures were freezing, the conductor would have to light the stations wood or coal stove.

In 1964, my wife Colleen and our infant daughter Karleen, traveled from Lone Butte to Prince George to visit Colleen's sister Marg. By now the modern Budd cars had replaced the old wooden equipment used on previous trips. When we arrived in Prince George we were again left out in the cold. The railway had just built a new station at Prince George and Marg and Bert went to the old Station. An eventful taxi ride ensued as Colleen did not have the address for Marg and Bert.

At long last we arrived on Ospika Drive thanks to the good graces of the taxi driver and the use of the cab radio system.

In June 1992, I rode the Budd cars and travelled Cariboo Class, complete with meals and comfortable seats and the offer of a ride with the engineer for part of the trip. During an outing to Squamish in 1996, I acquired a small chinaware plate made in Medicine Hat, Alberta by Medalta Potteries for the Pacific Great Eastern Railway. The plate now resides in the cabin along with several PGE and BCR timetables and other memorabilia.

On October 4, 2002, I was able to share the magic of rail travel with two of my five grandchildren, Kelsey and Chase, age 7 and 5. Our journey from North Vancouver to Lone Butte was their first ever train trip. Filled with excitement and new experiences, the breath-taking

scenery unfolded as they peered out of the windows, spawning salmon, deer, mountain sheep and bears!

Within the train, the kids enjoyed walking up and down the aisles and between the rocking cars as we rolled along. The friendly crew and interested travelling companions helped make the time fly by. We were met at Lone Butte, no longer a station stop but a flag stop, by the children's parents, on time as was the train.

The memories from this trip, as well as those of past trips, will remain with this grandpa for the rest of his years. And the joy and pleasure of experiencing a first train ride is bound to last a lifetime for two young children.

BC Rail discontinued all passenger service as of October 31, 2002 leaving behind a legion of history, stories and many rail fans both young and old.



PGE RSC-3 No. 562 with a northbound passenger train at Squamish Dock in 1955.

*Both photos provided by John D.S. Phipps*

A northbound train at the Squamish town station on August 6, 1954.





PGE RS-10S with a  
northbound train at  
North Vancouver on  
September 1, 1956

*Both photos provided by John  
D.S. Phipps*

During the last month of  
operation, the BC Rail  
Budd RDC cars stop at  
Lone Butte on October 4,  
2002.



## PRODUCTS OF INTEREST

By Timothy J. Horton

As this issue goes to press, many of us are eagerly awaiting the M-420 locomotive kits from Kaslo Shops in HO and N scale, which will provide modellers of the British Columbia Railway with a distinctive BCR locomotive. Red Caboose continues to provide N scale freight cars suitable for the railway, and more RS-18s are on the way from Hobbycraft Canada.

I encourage you to contact me at [thorton@telus.net](mailto:thorton@telus.net) in the event that you are aware of product releases which should be documented in this column, or if you are willing to undertake the review of a particular product for our readers.

### N Scale

**Atlas Model Railroad Co.** (603 Florence Avenue, Hillside, New Jersey, U.S.A. 07205 Website: [www.atlasrr.com](http://www.atlasrr.com)) has announced an Alco C-630 in N scale, which is scheduled for release in July 2004. This model may be of interest to those modellers wishing to represent the PGE/BCR C-603Ms (Nos. 701-704). The Atlas model will have differences in carbody detail and the incorrect trucks (Canadian C-630Ms had the Dofasco truck with short wheelbase and even axle spacing). It will be offered in the Canadian National noodle scheme with two road numbers, which will be of interest to BCR modellers as several of the CN units were leased to the BCR during the 1970s and early 1980s. MSRP is \$104.95 USD.

**Canadian Hobbycraft** (140 Applewood Crescent, Concord, Ontario, Canada, L4K 4E2 Website: [www.hobbycraft.com/life-like.html](http://www.hobbycraft.com/life-like.html)) has yet to release their Proto 1000 model of the RS-10 and RS-18 in N scale. Item #008-800061 will be decorated as PGE No. 587 in orange with the green stripe. MSRP is unknown at this time.

Canadian Hobbycraft has released the chop nose GP9s for CN, which will be of interest to those modelling BC Rail in the North Vancouver or Prince George areas. Item #801008 is the yard version in red, orange and black with the large noodle and road number #7001.

Next year Canadian Hobbycraft will release a second run of its Canadian C-424 locomotives with revised tooling. This time the CN version will have the correct notched rear end. These locomotives are of interest to BCR modellers as 22 of them were leased to the British Columbia Railway during the late 1970s/early 1980s. Estimated delivery date is January 2004.

**Kaslo Shops Distributing** (2516 Quartz Place, Coquitlam, B.C. V3E 3K9 Website: [vvv.com/~jwhitmore/](http://vvv.com/~jwhitmore/)) The BCR combination door boxcar (NK-15) and the BCNE/Procor/Sultran 100 Ton gondola (NK-16 & NK-17) are now in stores.

Soon to be released are the Kaslo Shops body shell kits for the BCR MLW M-420 and M-420B locomotives. These kits will include a one piece cast resin body shell, fuel tank, MLW ZWT truck sideframes, and etched metal handrails. They will be designed to fit onto the Atlas B30-7/B36-7 chassis.

**Micro-Trains Line Co., Inc.** (351 Rogue River Parkway, P.O. Box 1200, Talent, Oregon U.S.A. 97540 Website: [www.micro-trains.com](http://www.micro-trains.com)) has released two cars which will be of interest to PGE/BCR modellers. Item #75120 is a double plug door boxcar decorated in the British Columbia Railway international service scheme with dogwood logogram. The road number is BCIT 800516 and the car sells for \$21.65 USD.

Item #20970 is a reprint of their forty foot boxcar with sliding door in the PGE Cariboo herald scheme. It is decorated as PGE 4015 and retails for \$11.70 USD.

**Red Caboose** (P.O. Box 250, Mead, Colorado, U.S.A. 80542 Website: [www.red-caboose.com](http://www.red-caboose.com)) has released yet another BC Rail version of their Thrall 73 foot truss centrebeam car, with a die-cast underframe and Micro-trains trucks and couplers. The new model is the opera window version with the BC Rail italicized logo spelled out. It is sold as item #RN-16633 (single cars for \$20.95 USD) and Item #RN-16634 (three-pack for \$62.85 USD). This car is a close match for series BCIT 871300-871425 which BC Rail received new from Thrall in 1986. (The prototype cars are 71' whereas the model is 73' in length.) Twelve different road numbers are available.

Also on the way from Red Caboose are two more versions of their popular Thrall all-door boxcar. The red Triangle Pacific cars will be offered in February 2004 as single cars (item #17429 for \$18.95 USD) or in three-packs (item #17529 for \$56.85 USD). Six road numbers will be offered. The diagonal red and yellow Canfor scheme will be released in March 2004 as single cars (item #17434 for \$22.95 USD) or in three-packs (item #17534 for \$68.85 USD). Twelve road numbers will be offered. This promises to be a stunning car.

### HO Scale

**Canadian Hobbycraft** (140 Applewood Crescent, Concord, Ontario, Canada, L4K 4E2 Website: [www.hobbycraft.com/life-like.html](http://www.hobbycraft.com/life-like.html)) has released their special run Atlas C-425 locomotives decorated for the British Columbia Railway.

**Kaslo Shops Distributing** (2516 Quartz Place, Coquitlam, B.C. V3E 3K9 Website: [vvv.com/~jwhitmore/](http://vvv.com/~jwhitmore/)) will soon release their body shell kits for the BCR MLW M-420 and M-420B locomotives. These kits will include a one piece cast resin body shell, correct MLW ZWT truck sideframes, and etched metal handrails. They will be designed to fit onto the Atlas U23B chassis. For those who desire a more accurate fuel tank, Kaslo will also offer a separate chassis and fuel tank kit, which will accommodate Athearn drive components.

**Point 1 Models** (distributed by Kaslo Shops Distributing) has released their kit for the MLW S-13 switchers operated by BC Rail. Item P1HK-12 sells for \$250.00 CAD. This kit includes a cast bronze frame, motor and drive components, resin body, etched metal and resin detail parts. Athearn switcher trucks (not included) are required to complete the model.

# PRODUCT REVIEW:

## Marine Industries 66ft Bulkhead Flat

by  
**Andy Barber**

Manufacturer: Fraser Valley Railway  
47 Taylor Drive  
Toronto, Ontario, M4C 3B4  
Phone: (416) 421-3155

BC Rail, CN and CP all rostered 66ft bulkhead flats. The instructions that accompany this kit give the details for acquisition date, paint scheme and several numbers for which this kit is suitable. Here is a summary for modellers who are interested in a specific series.

Line	Series	Kit No.
BCIT	818000-119	IIV
BCOL	866000-404	IIV
BCOL	866500-799	IIV
BCOL	866-800-899	IIV
CN	622000-119	IIV
CN	621000-074	IIV
CNIS	621100-299	IIIH
CPI	317000-199	IIV
CPI	317350-409	IIV

V= Vertically braced bulkheads.  
H= Horizontally braced bulkheads.

This is a review of the vertically braced version. The comments are equally valid for the horizontally braced kit.

A lot of thought has gone into the casting of this resin kit. It consists of 4 main parts: bulkheads, frame, sill, and deck. Since the sill is the part to which everything else must be attached, I will discuss this part first.

The sill is a hollow rectangle, consisting of the side sills and end sills. It is a one-piece casting, but braced by interior stringers which form part of the casting, and which have to be removed. They are there to give strength and rigidity to the casting. Preparing the sill is a two step process.

**Step 1:** Cut away the temporary bracing. That's everything inside the rectangle. Be sure to cut out the remaining "bumps" that remain once the stringers are cut out. They lie in the sills interior L-channel and will seriously interfere with the frame-sill fit if they are not cleared out.

**Step 2:** The sill rectangle has 8 wheel pockets cast into it at the wheel locations. As cast these are not deep enough to provide turn room for the 36in wheels. The instructions explain that the shallow depth was needed to preserve sill integrity and strength while the resin cured. The option for deepening these wheel pockets can be done, according to the instructions, now or when the model is fully assembled. The instructions also suggest using a reamer on your dremel in lieu of hand chisel work.

I recommend that you deepen the pockets now. Once the frame is inserted into the sill rectangle and the deck has been added, the elbow room to do this work is drastically reduced. Further, use the Dremel-reamer option. It took me 20 minutes to do only one of the 8 pockets when I used a chisel blade. I did all 8 pockets in 20 minutes with the reamer technique. The instructions recommend that you cover the sill edges with heavy-duty tape if you use the reamer method. That's good advice. Duct tape is better than masking tape because when (not if) the chuck hits the tape you know it pretty quickly.

The frame comes next. The main frame channel is hollow, and the modeller is expected to insert a 5/32 inch square hollow brass shape for rigidity. The brass shape has to be notched to fit over the bolsters. (Note: subsequent kits have thicker/stronger flanges.)

I recommend not glueing on the thin channel over the brass tube just yet. Do this as a last step. Much holding and positioning of the model is required, and the natural tendency is to hold it as on the frame channel. The cover creates a small thin overlap and is fragile to repeat handling.

I filled my brass rod with lead pellets, glued in place. It doesn't bring the car up to NMRA recommended weight of 170g, but it helps. If you are planning to install a lumber load, then adding lead pellets isn't necessary. More about this weight shortfall later.

Drill and tap the bolster holes at this point. The hole is not very deep. If you wait until the assembly is complete, you run the real risk of punching in and through the base of the bulkhead.

Preparation of the deck is next, and it is straightforward. Clean the flashing and clean the groves.

The mating of the frame, sill, and deck is very creative. You insert the frame into the sill. You do not glue it you then apply the deck into the sill channels making certain of a good flat contact along its entire length. Carefully spot glue the deck to the sill. Once this is completed, turn the assembly right side up. The frame is now trapped in the deck-sill assembly, and is loose.

One now pulled the frame tight against the sill, and away from the deck. The assembly goes back to being upside down for this operation. Glue the frame to the sill. This will give correct bolster height above track level. A slight now-visible space now exists between the deck and the frame. This space is deliberately built into the design to allow for thickness variations in the deck-smoothing that often happens on ling, thin castings.

What if you miscue and the frame is too high due to glueing problems? I did this (strictly to anticipate this problem of course) and had 2 choices: use a No.49 coupler with a bottom shank, or cut height off the truck and bolster. I did the latter and it worked out, but in retrospect a No.49 coupler would have been the better choice. More attention to the glueing instructions would have been even better.

This is a good time to fit (but not glue) the bulk heads. Once the fit is satisfactory, set the bulkheads aside. Add the grab irons, then glue the bulkheads to the car, as directed by the instructions. Be sure to use a set square to ensure a 90 degree fit to the deck. Be aware that once the bulkheads are on, the car becomes tippy. It will roll every chance it gets, especially if you have added lead pellets.

There exists two choices for adding the end ladders. The early kits contain instructions for using brass wire, whereas the current kit provides a stainless steel fret that offer etched ladders, a brake wheel, and brake platforms. Owners of the early kit can obtain the etched parts for Fraser Valley for CDN \$11 and US \$8.

The fret option is by far the better route to go. The instructions explain how to remove the ladder from the fret sprues, and how to glue 2" by 2" stiffeners to it. I had some problems with the step, because the ladders tend to bend and curl during the fret removal process.

Here's what I did to get satisfactory ladder assemblies.

- I) Remove the ladders from the fret exactly as instructed.
- II) Do all the subsequent glueing with 5 minute epoxy. It gives lots of positioning time.
- III) Exact lengths of 2" by 2" styrene are specified to produce a good fit to the frame and the bulkhead. I by-passed these instructions temporarily. What I did was to glue 2" by 2" styrene strips to the ladder sites, using long pieces of 2" by 2". Once I got a straight alignment, I let the glue set. After this, I returned to the exact length specifications and cut 2" by 2" styrene that was firmly glued on. The small unwanted pieces came off cleanly.
- IV) I then glued the trimmed ladder-styrene assembly to the car in stages, which means one side of the ladder at a time. Get that one side straight and the remaining sides can be manipulated with ease and glued in place. If one of the rungs goes missing, replace it with .012" brass rod.

Now it is time to address the car weight issue. A lumber load will add about 150g, which is plenty of weight. An empty car even with the lead pellets, will still about another 100g. Glueing weights into the underframe pockets will help. But you've got to really pack it in. Be sure to avoid adding weights to the pockets where the wheels nestle!

The instructions don't explicitly state that you should be glueing on the noticeboards (which are provided) onto the side sills. You can do this anytime prior to painting.

The instructions offer two options for coupler installation. You can insert the coupler through the coupler exterior casing prior to glueing the casing to the car, or you can glue the casing on first and then cut a bottom groove in it to allow the coupler shank to fit. Cutting the groove is, in my opinion, the better way. It allows coupler pocket access at any time, and if the correct coupler height is a problem, it allows testing and coupler changes for the right height. As mentioned earlier, I did it the other way and I'm sorry that I did.

You have to make your own cut levers for this car. The photos that accompany this article illustrate their shape. Nobody that I know of makes these commercially.

Decals for this car are available from Fraser Valley. The set will do the original bulkhead flat car for BCR as well as the subsequent centrebeam conversions this car underwent. The price per set is CDN \$10, \$8 US, postage and tax included.

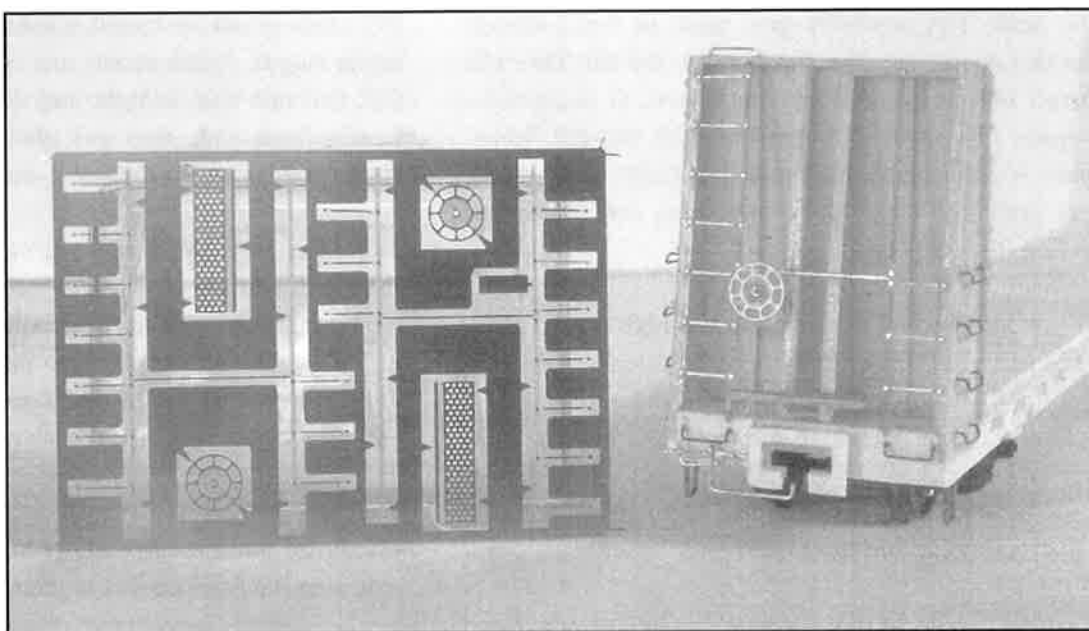
I recommend a glosscoat enamel over the painted car prior to applying decals and particularly so if you are applying the large WARNING! decals to the inner bulkheads. Doing so will eliminate the “silvering” of a decal that has trapped air bubbles under it.

Atlas 100 ton, 36 in wheelsets go beautifully with this kit.

Fraser Valley plans to offer the centrebeam variants of this car in the near future. The construction sheet suggests that kit 11b-a BCR log bunk car, is currently available, but that production work has been postponed, and not likely to be reinstated.

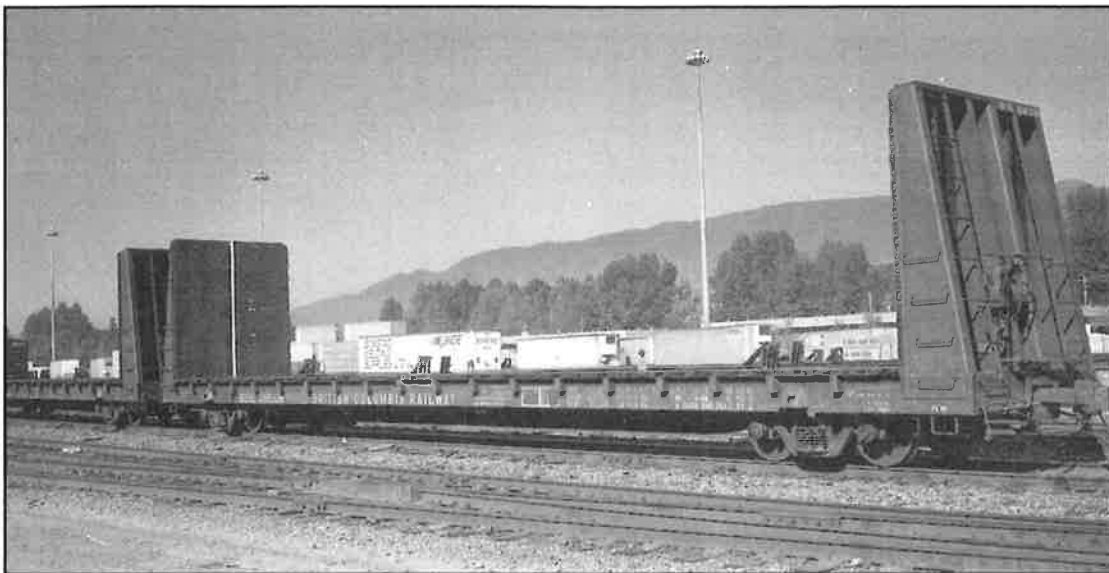
This kit is truly prototypical, and is a wonderful addition to any layout.

Fraser Valley  
Railway bulkhead  
flatcar and end fret.



The completed  
model on Andy  
Barber's layout.





BCOL 866306 at North Vancouver

## PRODUCT REVIEW

by  
Andy Barber

Kit: Procor Sulphur Car

Manufacturer: Fraser Valley Railway  
47 Taylor Drive  
Toronto, ON M4C 3B4  
Phone: (416) 421-3115

Prices:

Car Body, End Frets, Decals	CDN \$40 US \$30
postage not included	
End Frets only	CDN \$13 US \$10

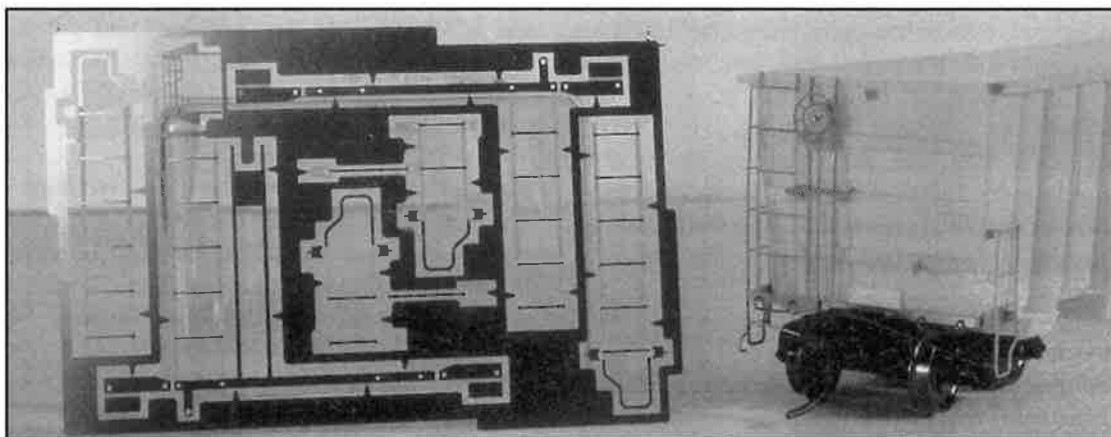
About a year ago, one of our SIG members elected to change scales. He offered a sizeable partly constructed fleet of HO sulphur gons for sale. Fraser Valley Railway now has these cars for sale and is offering them for re-sale, but with a major improvement.

Probably the single biggest problem with these types of cars has been the work on assembling the end details.

This hurdle has been overcome by Fraser Valley Railway by means of a stainless steel end fret designed by Fraser Valley Railway and produced by Plano. The result is a very good looking model.

Detailed instructions are supplied by Fraser Valley Railway for assembling the frets. Very basic decals are also included (the Procor) logo and 2-colour ellipse -P plate, plus some key wording and numbers, but no capacity data.

Kaslo Shops Distributing also sells these cars, and they too come with an end fret, which is modestly different from the Fraser Valley one. It is a one-piece body casting, but comes without couplers or decals.



Fraser Valley Railway sulphur Gon and end fret



## BCR FREIGHT CARS IN N SCALE

### PART 6: AN UPDATE ON AVAILABLE MODELS

by

**Timothy J. Horton**

*Digital Model Photography by Wayne Sutton*

The first article in this series served as an introduction to modelling the British Columbia Railway in N scale. Since publication of the article in Issue 25 (July 1996), many additional suitable models have been brought to market. Part 6 of this series will describe some of the recently issued N scale models of BCR freight cars and private owner cars which ran on the railway. These models are divided into three categories: ready-to-run cars, undecorated cars and kits, and possible kitbashing projects. This article concludes with a table summarizing the current options for modelling BCR freight cars in N scale.

#### Ready-To-Run Cars

##### **Atlas 50' Evans Double Plug Door Boxcar – British Columbia Railway**

This model has been offered in four different road numbers to date. It is an accurate representation of the BCIT 800200-800349 and BCIT 800400-800649 series boxcars which were used for international lumber service by the railway from 1973 to 1980. The paint and lettering are well done. [see lead photo]

##### **Atlas 50' Evans Double Plug Door Boxcar – Mountain Pine Lumber Ltd.**

This model has been offered in two different road numbers to date. It is an accurate representation of the MRCX 100-145 series boxcars which served lumber mills on the railway from the 1970s to the early 1990s. The paint and lettering are well done. [see fig. 1]

##### **Atlas 17,360 Gal. Tank Car – Hooker Chemicals**

These orange and black tank cars were seen on the British Columbia Railway during the 1970s and 1980s. These are attractive models, well detailed and nicely decorated. Four road numbers have been issued.

[see fig. 2]

##### **Atlas 33,000 Gal. Tank Car – ACFX (black)**

These large tank cars with top walkway have been seen on BC Rail since the early 1990s. This is also a very attractive model which has been offered in three road numbers to date. [see fig. 3]

##### **Intermountain Cylindrical 4 Bay Hopper Car - Canpotex**

This is an accurate model of the Canpotex 4 bay cylindrical hopper cars with round hatches. They are seen regularly in North Vancouver. This model has been available in both kit and ready-to-run versions, and twelve road numbers have been offered to date.

##### **Micro-Trains 50' Plug/Sliding Door Boxcar – British Columbia Railway**

This is a recent release of the Micro-Trains 50' plug/sliding door boxcar decorated as a BCOL 5400 series car. The model does not have the correct doors, but the ends and roof are similar. It is nicely decorated and offers the BCR modeller another ready-to-run boxcar.

##### **Micro-Trains 50' Double Plug Door Boxcar – British Columbia Railway**

This is a recent release of the Micro-Trains 50' plug/sliding door boxcar decorated as a BCOL 800200-800349 series car. The model is nicely decorated and offers the BCR modeller another ready-to-run boxcar, but the same car is available from Atlas with the correct body style and in four different numbers.

**Pacific Western Rail Systems 4 Bay Cylindrical Hopper – CNWX** These are special run versions of the Intermountain 4 bay cylindrical hopper cars decorated in the various Government of Canada schemes. Their releases have included the original salmon and yellow scheme, the aluminium and yellow scheme, the red Canada scheme, and the Canadian Wheat Board scheme. The cars with CNWX reporting marks are suitable for use on a BC Rail layout. [see fig. 4]

##### **Red Caboose 73' Centrebeam Car – BC Rail**

This new model from Red Caboose is offered in two BC Rail versions. The truss centrebeam version is correct for the BCIT 873000-873099 series received from Thrall Car in 1988. The BRITISH COLUMBIA RAILWAY opera window version is a close match for the BCIT 871000-871149 and 871200-871259 series received from Thrall in 1984, and the BC RAIL opera window version is a close match for the BCIT 871300-871425 series received from Thrall in 1986. Twelve road numbers of each version exist. [see fig. 5]

### **Red Caboose Thrall Boxcar - British Columbia Railway**

This is a model of the Thrall all-door boxcar decorated for the British Columbia Railway. The BCR all-door cars were actually built to the SIECO design which differed in the ends and roof, but this model still captures the flavour of those cars quite well. A total of twelve road numbers have been offered so far. This model comes with Micro-Trains trucks and couplers.

### **Red Caboose Thrall Boxcar - Canadian Forest Products (Canfor)**

The Thrall design is correct for these cars, which ran on the railway during the 1970s. This model has offered in Canfor's gold scheme, the red and white scheme (which includes a transverse roof logo), and most recently the diagonal red and yellow scheme. Six road numbers in each scheme have been offered. [see fig. 6]

### **Red Caboose Thrall Boxcar - Triangle Pacific**

The Thrall design is also correct for these cars, which ran on the railway during the 1970s. Six road numbers in each scheme have been offered.

### **Undecorated Cars and Kits**

#### **Intermountain Modified AAR 40' Boxcar - Undecorated**

This relatively new injection-moulded kit yields a 40' boxcar with 6' sliding doors which is very close in appearance to the PGE/BCR's 4001-4075 series cars. There are subtle differences in the end ribs, and minor modifications must be made along the bottom side sill. The 4001-4075 series were delivered in 1947 and served the railway until 1986. At least twelve cars from this series received light green paint and the dogwood logogram.

#### **Kaslo Shops BCR Wide Vision Caboose**

This model is a flat cast resin kit of the PGE/BCR wide vision caboose. The kit is offered in several versions, enabling the modeller to build a caboose with round cupola windows, square cupola windows, or one with the additional conductor's window. Brass wire, Miniatures by Eric smokejacks, Atlas caboose trucks and Micro-Trains couplers are required to complete the kit. Both Microscale and CDS offer lettering sets for the PGE/BCR wide vision caboose. [see fig. 7]

#### **Kaslo Shops BCR Bulkhead Flatcar**

This kit yields an accurate model of the bulkhead flatcars built for the PGE in 1971 by Hawker Siddeley. They were numbered in the PGE 1000-1149 and PGER 16000-16149 series and had an inside length of 55'-0". The kit consists of resin parts for the underframe, side sills, deck, and bulkheads. To complete this kit you will require brass wire, ladders, end platforms, brake wheel, trucks and couplers. Construction is relatively quick and easy. Dry transfer sets for these cars are available from CDS. [see fig. 8]

#### **Kaslo Shops BCR Skeleton Log Car**

This resin kit contains parts for two 62'9" stake cars. These were built for the PGE by National Steel Car in 1968. The parts include the underframe assembly, bolsters, and log bunks. You must add trucks and couplers. No lettering is available at present. [see fig. 9]

### **Kaslo Shops 50' Combination Door Boxcar**

This long awaited kit is an accurate model of the BCOL 5400-5599 and BCIT 40400-40785 series boxcars. They were built for the BCR in 1972 by National Steel Car and feature an 8' sliding door and a 6' plug door. The kit includes an alternate part for the free rolling main doors which were retrofitted to these cars in the 1990s, enabling a modeler to finish a car in the 80000 series. The parts include an underframe, carbody, doors, and etched metal parts for the door details and safety fittings. You must add trucks and couplers. Dry transfer sets for these cars are available from CDS. [see fig. 10]

### **Kaslo Shops 100 Ton Gondola**

This kit is an accurate model of the 100 ton gondolas seen in coal and sulphur service. The version operated by Procor and Sultran have been seen in sulphur service on the railway since the 1970s, and the BCNE/CN version has been seen on the Tumbler Ridge unit coal trains since 1983. The parts for this kit include a one piece resin carbody and etched metal detail parts. You will have to add trucks and couplers.

### **Model Die Casting Thrall Gondola**

BC Rail leased a batch of these cars for concentrate service in 1998. They are painted black with white lettering and are numbered in the BCOL 830001-830097 series. The fibreglass covers required for these cars are available in N scale from Carlos Brass Works. No suitable lettering is available at present.

### **Sidney Models HSC Gondola**

This is a one piece resin model of the welded gondolas built for the railway by Hawker Siddeley in 1972. They are numbered in the PGE 9321-9370 and BCOL 9251-9300 series. Some of these cars were fitted with Ecofab fibreglass covers for copper concentrate service, and these are also available from Sidney Model Works. You must add details such as brake wheel, ladders, grab irons and stirrups. The model also requires a Model Die Casting gondola underframe, trucks and couplers. [see fig. 11]

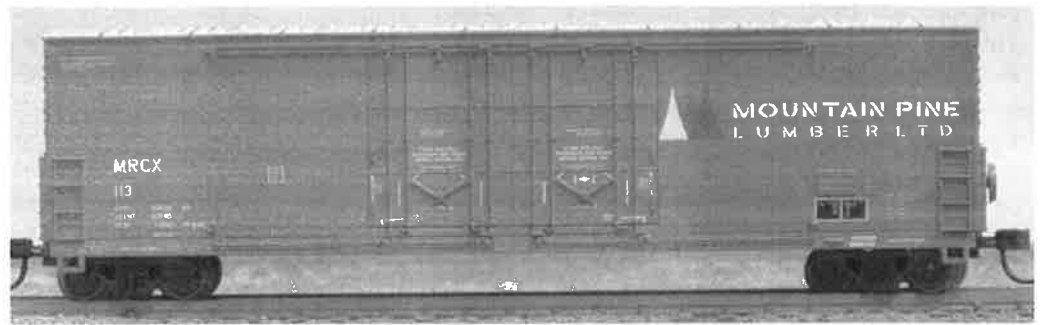
### **Sidney Models VIW Woodchip Car**

The railway's first purpose-built woodchip cars came from Vancouver Iron Works during 1964-1966. They are numbered in the PGE 9501-9690 and 9691-9765 series and many are still in service. The model is a one piece body with separate castings for the door hinges and top braces. It is necessary to add ladders; grab irons, sill steps, trucks and couplers to complete the kit. [see fig. 12]

### **Sidney Models NSC Woodchip Car**

This model represents the PGE 90001-90140 and BCOL 90141-90340 series woodchip cars which were delivered in 1970 and 1972 respectively. Most remain in service today. These cars are distinguished by the door with vertical ribs and the NSC-3 'B' end. The one piece body requires the addition of ladders, grab irons, sill steps, trucks and couplers.

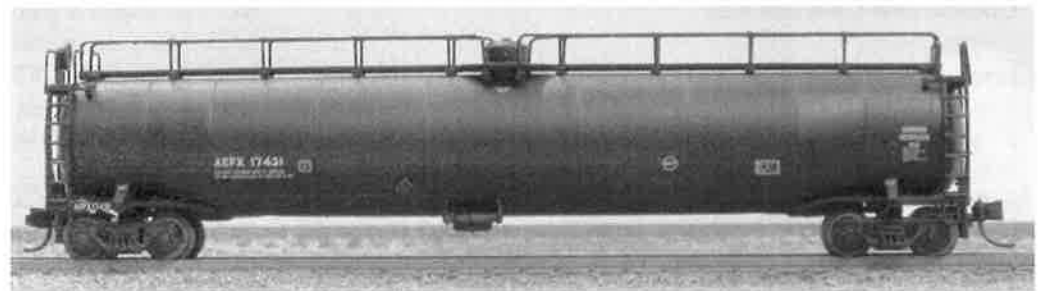
**Fig. 1** The MRCX 100-145 series boxcars served lumber mills on the British Columbia Railway from the 1970s to the early 1990s.



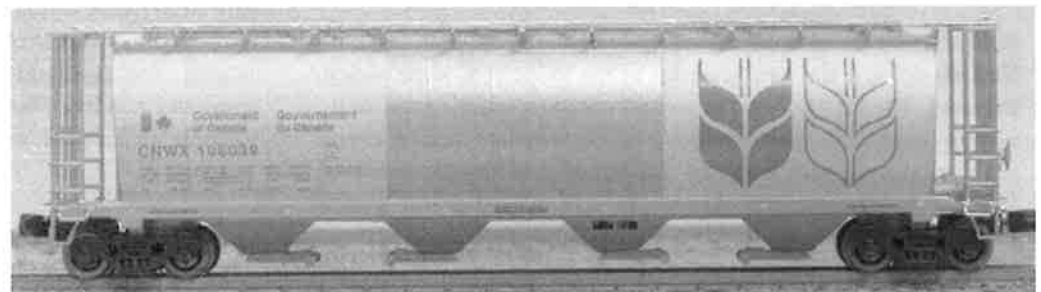
**Fig. 2** This Atlas model depicts a tank car which was seen on the British Columbia Railway during the 1970s and 1980s.



**Fig. 3** Also available from Atlas, these large ACFX tank car with top walkway have been seen on BC Rail since the early 1990s.



**Fig. 4** This is one of several Government of Canada cylindrical grain hopper schemes which have been issued by Intermountain and Pacific Western Rail Systems.

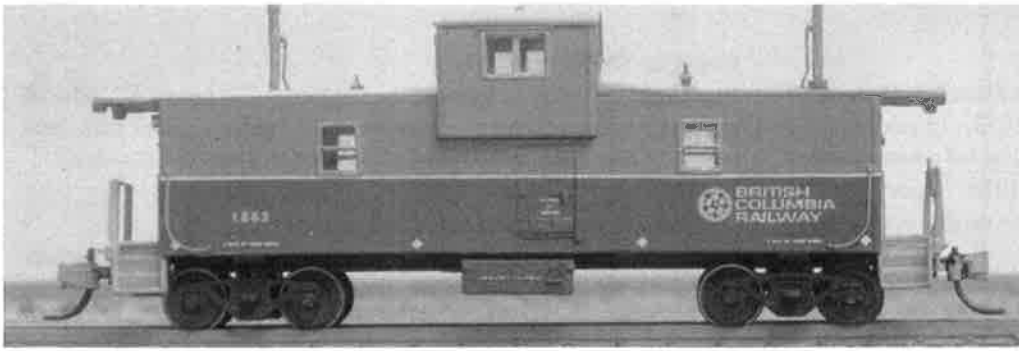


**Fig. 5** Red Caboose offers several versions of 73' centrebeam cars which are correct for BC Rail, including this opera window version.

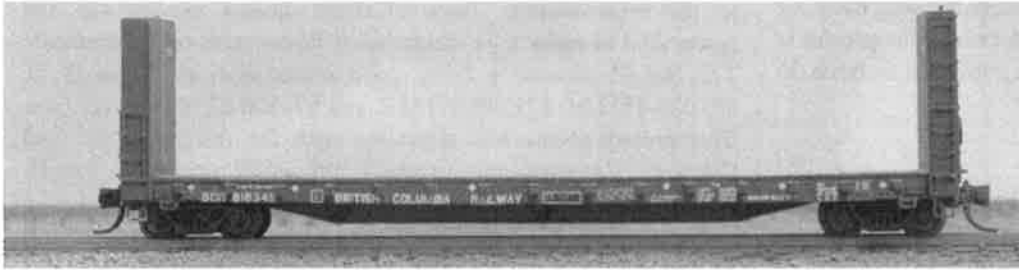


**Fig. 6** Red Caboose has offered several versions of its Thrall all-door car, including three different paint schemes for Canadian Forest Products (Canfor). This attractive scheme includes a roof logo.

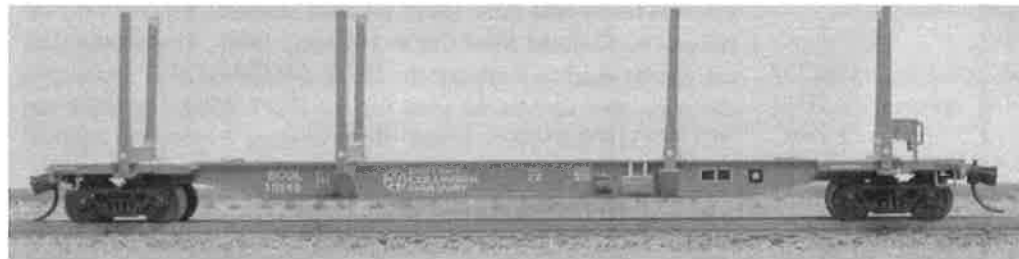




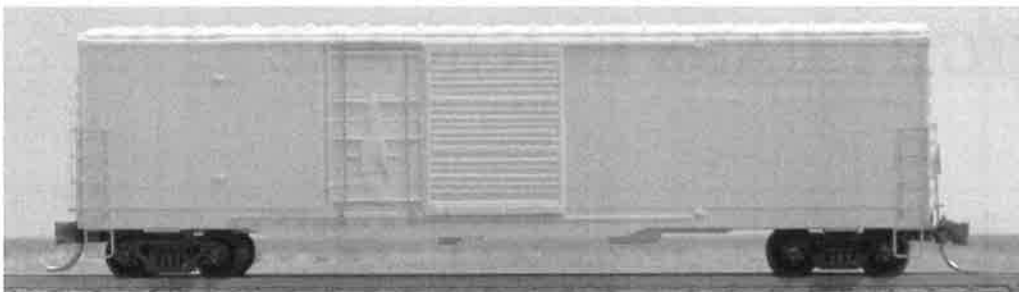
**Fig. 7** This Kaslo Shops model is a flat cast resin kit of the PGE/BCR wide vision caboose which is available in three different versions.



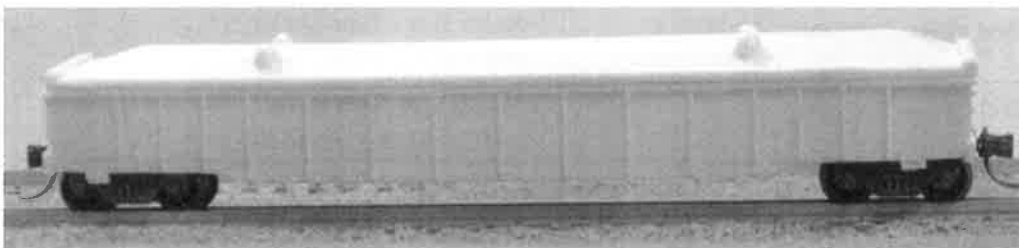
**Fig. 8** This kit yields an accurate model of the bulkhead flatcars built for the PGE in 1971 by Hawker Siddeley. They were numbered in the PGE 1000-1149 and PGER 16000-16149 series.



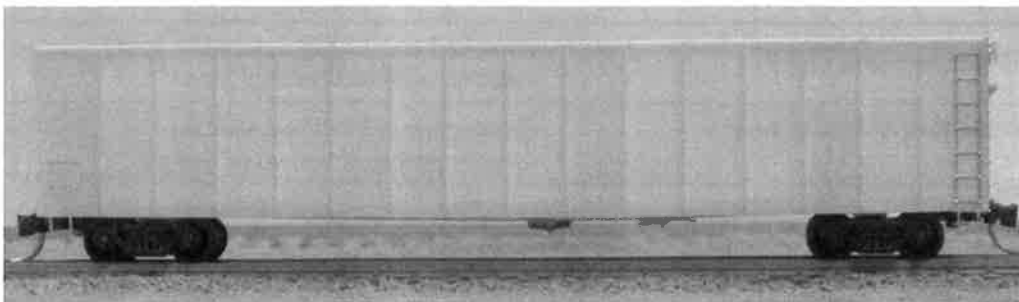
**Fig. 9** Also available from Kaslo Shops is this resin kit which contains parts for two 62'9" stake cars. These were built for the PGE by National Steel Car in 1968.



**Fig. 10** The newest kit from Kaslo Shops is an accurate model of the BCOL 5400-5599 and BCIT 40400-40785 series combination door boxcars. They were built for the BCR in 1972 by National Steel Car.



**Fig. 11** Sidney Models offers a resin kit for the welded gondolas which are numbered in the PGE 9321-9370 and BCOL 9251-9300 series. The Ecofab fibreglass covers are a separate item.



**Fig. 12** Also available from Sidney Models are three versions of PGE/BCR woodchip cars. The model illustrated here represents the PGE 9501-9765 series built by Vancouver Iron Works during 1964-1966.

### Sidney Models HSC Woodchip Car

The Hawker Siddeley woodchip cars were delivered as PGE 9766-9825 in 1968 and BCOL 90341-90440 in 1973. In addition, the design was adopted by Railwest Manufacturing for construction of the BCOL 90441-90840 series in 1975 and 1976. These cars have flat ends. Again, ladders, grab irons, sill steps, trucks and couplers are required to complete the kit.

### Kitbashing Projects

#### Arnold 39' Tank Car

If you can find them, the Arnold tank car offers the best body for kitbashing the older BCOL 1900 series tank cars. This project is described in Part 4 of this series which was published in Issue 35 (Spring 1999) of *The Cariboo*.

#### Con-Cor 50' Steel Flatcar

The Con-Cor steel flatcar resembles the railway's 52'-6" standard flatcars in general appearance, but is too short. Part 3 of this series describes how to lengthen these cars for a better representation of the 1220-1473 series flatcars. It was published in Issue 31 (January 1998) of *The Cariboo*.

In the same manner that the railway converted some these cars for TOFC service, the model can also be detailed to represent the 7000 series trailer flatcars with the addition of an ACF hitch, side rails, and end ramps. This project was described in Issue 41 of *The Cariboo*.

### Con-Cor 50' Steel Gondola

The Con-Cor gondola can also be lengthened to create a model of the 9000 series riveted gondolas built by National Steel Car. See Part 2 of this series in Issue 27 (January 1997) of *The Cariboo*.

### Micro-Trains 61' Bulkhead Flatcar

This model can be lengthened to represent the 71' bulkhead flatcars in the BCIT 818000-818119 series or the BCOL 866000-899 series. Three cars can be utilized to make two longer cars.

### Micro-Trains 61' Centrebeam Flatcar

In the same manner, three of these models can be cut and rearranged to make a 71' centrebeam flatcar with opera windows. This would provide a fairly good representation of the BCIT 871000-871149, 871200-871529, and 871300-871425 series cars. This project seems less appealing with the release of the Red Caboose 73' centrebeam cars which, although 2' too long, are available decorated for BC Rail.

### Model Die Casting 50' Outside Post Boxcar

This model is available with double sliding doors or with a 10' external frame plug door. Both versions resemble cars built for the railway by National Steel Car in 1979 and 1980. The double door car can be used to represent the BCIT 841600-842099 series, and the plug door car can be used for the BCIT 850001-850022 and BCOL 851001-851028 series. Both versions require the addition of roof eaves, tapered door posts, and herald plates.

## BC FREIGHT CARS IN N SCALE

BCR Car Series	Description of Prototype	Description of Model, Changes Required
BCOL 1222-1473	70 Ton Standard Flatcar	- Con-Cor 50' Steel Flatcar, - stretch by one stake pocket
BCOL 1851-1885	Wide Vision Caboose	- Kaslo Shops flat resin kit - add details , trucks, couplers
BCOL 1903-1950	8500 Gallon Tank Car	- Arnold tank, M-T frame - add Gold Medal detail kit
BCOL 1960-1963	17,236 Gallon Tank Car	- MDC Modern Tank Car - add Gold Medal detail kit
BCOL 1964-1968	17,236 Gallon Tank Car	- MDC Modern Tank Car - stretch, add Gold Medal detail kit
BCOL 2301-2320	100 Ton Covered Hopper	- Red Caboose 16 Rib Covered Hopper - shorten, add JnJ discharge gates
BCOL 4001-4075	50 Ton Box, 6' Sliding Door	-Intermountain Modified AAR Boxcar -Modify profile of bottom of side sill

BCR Car Series	Description of Prototype	Description of Model, Changes Required
BCOL 7000-7030	70 Ton Trailer Flatcar	-Con-Cor 50' Steel Flatcar (stretched) -add ACF hitch, side rails, end ramps
BCOL 5100-5399	70 Ton Box, Comb. Door	-Kaslo Shops resin kit w/etched parts -change door stops, add end vents
BCOL 5400-5599	70 Ton Box, Com. Door	-Kaslo Shops resin kit w/etched parts -assemble, paint and letter
PGE 8000-8011	50 Ton Insulated Boxcar	-Micro-Trains 40' Boxcar, Plug Door -ready-to-run as PGE 8027
PGE 8021-8030	70 Ton Insulated Boxcar	-Micro-Trains 50' Outside Post Boxcar - Read- to-run as PGE 8027
BCOL 9036-9175	70 Ton Standard Gondola	-Con-Cor 50' Steel Gondola -Stretch by one panel
BCOL 9251-9300 BCOL 9321-9370	70 Ton Welded Gondola (Note: some were covered)	- Sidney Model Works resin kit - add MDC underframe, trucks, couplers - can add Sidney Model Works cover
BCOL 9501-9690 BCOL 9691-9765	70 Ton Woodchip Car	-Sidney Model Works resin kit -add body details, trucks,couplers
BCOL 9766-9825	70 Ton Woodchip Car	-Sidney Model Works resin kit -add body details, trucks, couplers
BCOL 10001-10150 BCOL 10151-10300	70 Ton Stake Car	-Kaslo Shops resin kit -add details, trucks, couplers
BCOL 1000-1149 BCOL 16000-16149	70 Ton Bulkhead Flatcar	-Kaslo Shops resin kit -add details, trucks, couplers
PGER 40000-40399	70 Ton Box, Comb. Door	-Kaslo Shops resin kit w/etched parts -change door stops
BCIT 40400-40784	70 Ton Box, Comb. Door	-Kaslo Shops resin kit w/etched parts -assemble, paint and letter
BCOL 80000-80826	80 Ton Box, w/ Comb. Door	-Kaslo Shops resin kit w/etched parts -assemble, paint and letter - use alternate part for free rolling door
BCOL 90001-90140 BCOL 90141-90340	70 Ton Woodchip Car	-Sidney Model Works resin kit -add body details, trucks, couplers
BCOL 90341-90840	70 Ton Woodchip Car	-Sidney Model Works resin kit -add body details, trucks, couplers
BCIT 800100-800119	70 Ton All-Door Boxcar	-Red Caboose Thrall All-Door Boxcar -ready-to-run, twelve road numbers
BCIT 800200-800349 BCIT 800400-800649	70 Ton Boxcar, Double Door	-Atlas Evans Double Plug Door Boxcar -ready-to-run, two road numbers
BCOL 830001-830097	100 Ton Covered Gondola	-MDC Thrall Gondola -add Carlos Brass Works cover
BCIT 841600-842099	70 Ton Boxcar, Double Door	-MDC Boxcar, Double sliding door -add tapered door posts, eaves, herald plates
BCIT 850001-850022 BCOL 851001-851028	100 Ton Boxcar, Plug Door	-MDC Boxcar, Large Plug Door -add tapered door posts, eaves, herald plates
BCIT 818000-818119 BCOL 866000-866415	100 Ton Bulkhead Flatcar	-Micro-Trains 61' Bulkhead Flatcar -lengthen from 61' to 71'
BCIT 871000-871149 BCIT 871200-871259	100Ton Centrebeam Flatcar	-Red Caboose 71' Centrebeam Flatcar -ready-to-run (twelve road numbers)
BCIT 871300-871425	100Ton Centrebeam Flatcar	-Red Caboose 71' Centrebeam Flatcar -ready-to-run (twelve road numbers)
BCIT 873000-873099	100Ton Centrebeam Flatcar	-Red Caboose 71' Centrebeam Flatcar -ready-to-run (twelve road numbers)

# Membership Update

As the SIG's registrar for the last two years, I've had the pleasure of chasing down missing addresses and trying to keep the membership records accurate. With our publication schedule slippage there was enough time between issues that some member's mail forwarding even expired, which presented additional challenges.

The infrequent publication schedule does affect us as it has other organizations. We are keeping your membership fees the same and have changed them from an annual basis to number of issues to ensure that you get your full value.

We are working on getting the Cariboo out on a regular basis. We have changed our production process and it now really depends upon how much you supply the editorial staff with articles. If there is a shortage of articles then the size of the publication may be reduced to maintain the frequency. A reduction in the size hurts your value and may cause our membership to decline further. So, get busy and send in your articles!

Well, how does the membership look? Not as good as it could be, better than it could have been. We are losing some of our long term, core membership and picking up some new members from all over. This is a table of the number of members for each of the recent issues of *The Cariboo* so that you can see where we are. The number of non-renewing members is based upon renewals received by January 26 2004, just before shipping Issue #42. Hopefully our organizational changes will improve our publication and be reflected in an increase in membership, both new and renewals from past members.

The Cariboo	Date Shipped	# Members	Not Renewed
Issue # 38	Apr 01	134	4
Issue # 39	Feb 02	147	9
Issue # 40	Nov 02	140	16
Issue # 41	Apr 03	134	18
Issue # 42	Feb 04	128	Expiring :22

Our membership is distributed globally. The majority of members are in Canada and the USA, with additional interest spread from Great Britain and Europe to Australia and New Zealand.

We have some readers who support their local shops by picking up copies there. This retail distribution doubles our distribution of *The Cariboo* to about 300 per issue.

I'd like to personally thank all of you who have been patient and stuck with us as we work through some of the problems we have faced recently with burning out our people. Your continued interest and support, in both membership and time, is the only thing that will keep this volunteer effort alive.

Your registrar, director, etc. Graham Bennett.

## Interchange

Richard Yaremko and photo dealer Helmut Ostermann are offering a collection of photos taken by Terry Ridlands. Most of the material was shot between 1968 and 1975 and heavily features equipment, buildings and facilities along with period locos mostly in the map scheme. There are 242 PGE/BCR and 41 NAR negatives. There are some real gems, including the rare ex CPR mini boxes in revenue service, veneer boxcars, PGE pressure flow cars and reams of work equipment. All have been printed on contact sheets which form a 16 page catalog available for US \$12.00 or CDN\$15.00. The Catalog can be ordered from Richard Yaremko, 3625 Panorama Ridge, Cobble Hill, BC Canada VOR 1L1

For sale: Two Overland Models 73' Thrall center beams. US \$110.00 each. David Barone 660 Summerlyn Dr, Antioch, IL 60002 bcr560@earthlink.net

Wanted: Slides or photos of BCR operations during the late 1970's early 1980's. I am looking for color shots of Quesnel and Williams Lake especially. David Barone 660 Summerlyn Dr., Antioch, IL 60002 bcr560@earthlink.net

## Helper Service

I would appreciate help locating any rail fans who shoot original color slides of the smaller western Canadian railroads and industrial locomotives. Looking for good quality roster views in good light, etc. Dick Vartabedian, 5470 Chanton Dr., Clarkston, MI 48346 dvston@yahoo.com



S 406 is seen outside the Squamish diesel shop on March 16, 1985.

It was the first slug unit to receive the blue paint scheme.

*Photograph by Don Brown*

## MOTIVE POWER NEWS

BC Rail sold four of its SD40-2's to GECX. The units sold were 749, 753, 756, and 757, and are going to MPI in Texas for repairs before entering service.

Units that are stored serviceable as the end of September were: C30-7u 3623 at Squamish and B36-7 3604 and B39-8 3905 at Prince George. Those stored unserviceable were: RS-18u 627, 628, SD40-2 743, B36-7 3613, 3616, C30-7u 3621, 3625, 3626 at Squamish and SD40-2 752, 759, 762, B36-7 3604 at Prince George. Those off the count and waiting disposal are SD40-2's 744, 745, 748, 761, B36-7's 3602, 3603, 3610, 7488, 7489, 7498 at Squamish and GF6C's 6001, 6002, 6003, 6004, 6005, 6006, 6007 at Prince George.

BC Rail sold B36-7's to 3602, 3603, 3610, 7488, 7489 (still in ATSF paint) and 7498 (still in Rocky Mountaineer paint) to National Rail Equipment on September 8, 2003.

On Wednesday, October 15, 2003, SD40-2 758 blew her governor. The 758 went south dead and drained to Prince George on Friday. SD40-2 747 failed on the same train as 758 but was repaired.

Units that are stored unserviceable as the end of October were: RS-18u 613, SD40-2's 752, 762, B36-7 3616, C30-7u's 3621 and 3625 all at Squamish except the two SD40-2's at Prince George. Those off the count and waiting disposal are GF6C's 6001, 6002, 6003, 6004, 6005, 6006, 6007 at Prince George.

As of December 6, 2003 Dash 8-40CMs 4615 and 4616 are on CN to equalize horsepower hours due to the detours in October.

BC Rail BC-21 and BC-33 have been donated to the West Coast Railway Association in Squamish.

### Modelling Night

Going to be visiting Victoria? The PGE/BCR Sig members on the lower Vancouver Island meet once a month in Victoria for modeling on usually the third Friday night of the month. Only prerequisite is that you bring a project to work on. For more information on location and time contact Paul Crozier Smith at 250-389-0584 for specifics.



C-420, 632 mated with S-401 working in North Vancouver, August 1981.

*Gary Oliver photo - Dan Rowsell Collection*



S-401 now mated with RS-18 601 shows off the new high visibility end stripes. Notice the modification to the headlight.  
North Vancouver, May 1981.

*Dan Rowsell Photo*