The CARIBOO

Published by the BC Rail Historical & Technical Society

Issue 14 **October 1993**

BCR Library Closes; Strike Ends

It is with great concern that we report the closing of the BC Rail Corporate Library. According to "Cariboo" editor Greg Kennelly, the surprise closing occurred in early August. Some elements of the collection have been distributed to various departments within the company, while much else has been placed in storage. Noel van Sandwyk, Public Affairs Officer, will serve as the collection's interim custodian. Our best wishes to librarian Kathryn Boegel who has assisted both this publication and its many subscribers on countless occasions. We pledge to keep our readership informed as further details concerning this development become known.

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BC Rail unions began job action on June 21 after a 72-hour strike notice allowed the seven rail unions to legally strike. A union memo reportedly advised members to refuse overtime work and to only work their regular jobs and assignments.

According to the president of one of the unions involved, the action was taken in an attempt to get the company to begin bargaining realistically. According to media reports, the two main issues are the unions' demand for cost of living wage increases and BC Rail's desire to establish a contract shop arrangement at the Squamish maintenance center.

BC Rail spokesman Barrie Wall said full-scale strike action could cost the carrier between $700,000 and $800,000 per day. The last strike at BC Rail was in 1990 and lasted 25 days before a provincially-appointed mediator was called in to settle the dispute.

The BC Rail unions have been without a contract since December 31, 1992. The Budd cars and the Royal Hudson operations were affected by the work stoppage. ("Squamish Chief")

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UPDATE: BC Rail's 1600 unionized workers went on strike effective July 19. Because negotiations collapsed for an extended period, BC Labour Minister Moe Sihota ordered the workers back effective August 25, for a 90 day cooling- off period. The minister took this action after one of the seven striking unions refused to vote on a tentative settlement proposed by the province- appointed mediator. So trains will be running again until November 22, unless a contract agreement is inked during the interim period. (Paul J. Crozier Smith)

***

BC Rail's 1992 financial results helped the company make the "Financial Post"'s top 500 companies. The railway ranked 10th in profitability, 44th in profit earned, 105th in asset holdings, and 280th in revenues. It also ranked 7th out of Canada's top ten transportation companies.

PGE's "Clinton" Returns Home

On May 9, 1993, well known railfan and preservationist Maynard W. Laing of Bellevue, Washington passed away at this home.

Maynard was born in 1925 in Dayton, Washington. He served in the Army during WWII and spent his working life in the trucking business. He is survived by his wife Maria, of Bellevue, an uncle Gene, of Dayton, as well as several nieces and nephews.

Maynard had strong feelings about railway preservation, and he put them into action when he purchased Rayonier #70, a 2-8-2 logging locomotive retired when Rayonier's Olympic peninsula operation converted to diesel. Another piece he purchased for preservation was the last PGE ex-interurban sleeping car "Clinton". The car was purchased in 1965 and shipped to Snoqualamie. Both the #70 and the Clinton were kept protected from the elements over the years.

continued on page 3

Inside...

The Cheakamus' three tunnels shouldn't need any major repairs for about 50 years. The rock gang increased the clearance on the tunnels. Later, each was shotcreted and bolted to improve stability.

The gang sprayed over 150 yards of Silica Fume Super Stick Shotcrete onto the tunnel walls. The shotcrete strengthens the walls and prevents loose rocks from falling onto the tracks or passing trains. It is sprayed on between 50 and 100 mm thick throughout the tunnels.

The Cheakamus tunnel project cost about $300,000. Next, the rock gang moves to Azouzetta to work on the tunnels there. ("Coupler")

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Spotting Report --- Chetwynd, 29 June 93, 0900: a 110-car train bound for Septimus and Fort St. John was head-ended by ten locomotives. These were newly serviced engines which were met at Septimus by an eleven locomotive train southbound from Fort St. John for servicing. The northbound engines were 646, 683, 644, 640, 754. 757, 615, 631, 628, and 605. The two SD-40-2s were on idle, but all others were pulling. Only 628 was dressed in green. (Eric L. Johnson)

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The BC forest industry jumped out of the red and firmly into the black during the first quarter of 1993. The very strong lumber performance more than offset the continuing weak pulp and paper prices. ("The Province")

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Intermodal's major hauling contract in Williams Lake has drawn fire from the trucking industry. The five year pact with N.W. Energy Corp. to haul hog fuel wood chips to its plant in Williams Lake is part of BCR's plan to expand into related transportation fields such as warehousing and trucking. BC Rail's bid was chosen over a dozen other truckers'.

But truckers who competed for the contract, as well as the BC Trucking Association, say the railway is invading their territory. They believe that BCR should haul by truck only if it's part of a rail movement.

Frank Trotter, BCR's VP of Strategic Planning & Business Development say the company's entry into non-rail trucking isn't new. BCR was authorized by the Motor Carrier Commission in 1988 to compete in the direct trucking market. "For several years now, there have been two to four trucks on the highway every night between Vancouver and Prince George hauling foodstuffs and forests products." Franks adds that the truckers who have complained are currently hauling products such as wood chips, which used to be hauled by rail. "Trucks have taken business from us. We're just trying to get it back." ("Briefly")

***

BC Rail Engineering is playing the role of watchdog as sulphur fumes eat away at rail in the Wolverine Tunnel near Tumbler Ridge. The sulphur is being picked up by outside water which then runs through the tunnel ground and walls. The sulphur fumes are destroying track, tie plates, and rail spikes. While the corrosion problem has been evident since the tunnel's construction, the pace of destruction has jumped dramatically during the past year. About two miles of track in the tunnel will be

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Closing date for our next issue is December 1, 1993.

All contributions are welcome. It is helpful if submissions are on a 3.5" diskette in IBM Wordperfect 5.1, as a "flat" ASCII file, or typewritten.

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

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

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

replaced at a cost of between $500,000 and $700,000. ("Briefly")

***

BCR Properties is taking a consultative approach with the community of West Vancouver to consider possibilities for 27 acres of unused right-of-way around the Gleneagles area.

The land was originally bought by the PGE, and runs from the entrance to the Nelson Creek tunnel west around Fisherman's Cove through to the north side of Horseshoe Bay. In 1978, BC Rail leased 22 acres of the unused land to the city of West Vancouver for ten years at $40/year. Since 1988 the lease has been renewed on a year-to-year basis. Some of the land is currently being used as the Seaview Walk, a public amenity. ("Coupler")

***

The old makes way for the new as the floor of the old North Vancouver Car Shop gives up to the jackhammer. The cement is up to three feet thick with rebar and rails embedded in it. It is slowly being cleared for new yard tracks A13, A14, and A15. ("Coupler")

***

The flatcar that carrier a 240,000 lb. shunt reactor from VanTerm to Cheekye siding was depressed--but BC Hydro engineers and quality assurance staff were anything but.

The 60 mile haul from dockside to site was the last leg of a 7,000 mile trip that began by barge in Nuremburg, Germany. The journey continued by deep-sea vessel from Antwerp, Belgium to Vancouver, and then by rail to Cheekye. Because of its enormous weight, the reactor was off-loaded from ship to dockside flatcar by a floating crane. The flatcar was transferred to BC Rail in North Vancouver by CNR.

The reactor was installed at BC Hydro's Cheekye substation, about 500 yards from the BC Rail siding, and will help transmit power to Dunsmuir station near Qualicum, Vancouver Island. (BCR "Carrier")

***

By the time this issue of "The Cariboo" reaches our readers, BC Rail's car cleaning and conditioning program will include all boxcars, rather than just the pulp and paper cars at which the program was initially aimed.
Car cleaning and conditioning is a crucial goal supporting the railway's continuous quality improvement strategy. The pulp car cleaning program was begun in May 1992, and this recent expansion has been phased in since last spring. Conditioning tracks are located at Quesnel, Prince George, and North Vancouver. The railway's quality improvement team is working on plans to include flatcars in 1994. (BCR "Carrier")

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Former PGE Baldwin 2-6-2ST #2 was moved on April 19 to the West Coast Railway Museum facility in Squamish. The engine was formerly on display in a park on Cleveland Avenue in Squamish. (WCRA"News")

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Last issue we reported on BCR's leasing of four ex VIA cars for the Royal Hudson service. We now understand that railway officials, while in Montreal, evaluated up to nine other surplus VIA (ex CNR) coaches with a view to possibly replacing the entire Royal Hudson train set.

***

Maynard Laing's passing left the WCRA with a most significant donation and legacy of this great rail preservationist -- the "Clinton". After due consideration, Mrs. Laing decided to donate the "Clinton" to the WCRA and thus carry out her late husband's wishes.

The "Clinton" will fill a very important slot in the WCRA collection plan, the final piece of a representative PGE mixed-passenger train. The other pieces of the set are diesel locomotive #561, baggage car #722, coach #623, and caboose #1817. The set will be unique to the West Coast Railway Museum and will interpret an important part of PGE/BCR history. (Reprinted from WCRA "News")

***

"Cariboo" editor and PGE historian Greg Kennelly offers this history of former Pacific Great Eastern sleeping cars "Barkerville", "Clinton", and "Pavilion":

In February 1935, the PGE added to its sleeping car roster by purchasing the two former Interstate Public Service Railway of Indiana cars, the "Indianapolis" #166 and "Louisville" #168 from Iron & Steel Products Inc. (Chicago IL) for a total of $5926.77 and $5918.78, respectively. In order, these two were renamed "Barkerville" and "Pavilion". These were two of three all steel 10-section sleepers built by American Car & Foundry in 1924, the third being the "Scottsburg" #167. The PGE purchased the "Scottsburg" in 1937, and renamed it the

Rustad Bros. & Co. Ltd. has the distinction of having pioneered BC Rails' electronic data interchange (EDI) system when they transmitted their first electronic bill-of- lading five years ago. On May 11 of this year, the Prince George-based sawmillers scored a double when they transmitted the system's 100,000th.

BC Rail's EDI program was introduced to shippers early in 1988. PC-based, it improves efficiency by cutting out duplication and the exchange of repetitive documentation. BC Rail offers the system free of charge to interested customers for bills-of-lading, waybills, purchase orders, and payment advices. (BCR "Carrier")

***

Thanks to TOMAS, passengers and station staff handling bookings for the Cariboo Dayliner and Royal Hudson are now getting a smoother rider than anytime since the PGE initiated passenger service back in 1914.

TOMAS (Tour Operator Management and Accounting System) is a Unix-based software package, custom-modified for BC Rail's passenger needs. It replaces a laborious and sometimes frustrating manual system and is already paying off in terms of better, faster, and more efficient customer service. (BCR "Carrier")

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Squamish Terminals recently completed an upgrade of their rail trackage, replacing 85 lb. rail with 100 lb. rail to handle heavier car weights. (WCRA "News")

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The West Coast Railway Association is sponsoring a Cariboo Overnighter, October 15-16. For additional information concerning this or other WCRA excursions, call the WCRA reservation line at (604) 524-1011.

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As we go to press, BC Rail is being hit with a series of rotating strikes. As a result, passengers are being disrupted, tours cancelled, and freight volumes are reduced. The reduced levels of business are hurting too, as many employees are receiving layoff notices.

Among the disruptions, Lillooet was out Friday, July 2. As a result, passengers had to be bussed to their destinations as there was no passenger train. Earlier, a one day stoppage at Squamish annulled the Royal Hudson train along with passenger service between North Vancouver and Lillooet. The WCRA cancelled its scheduled Williams Lake Stampede tour.

The Council of Trade Unions representing 1600 BC Rail employees has been without a contract since 1992. Talks broke off on June 18, and no talks are currently scheduled. (WCRA "News")

***

"Clinton". These cars had a vestibule at one end only, were 62' over end beams, were equipped with radial couplers, and rode on Baldwin trucks with a 7' wheelbase. Being former interurban cars, they were narrower than the standard railroad sleeping car. PGE records seem to indicate the "Barkerville" and the "Clinton" were converted into 8-section, 1-compartment cars.

Following the cessation of conventional equipment passenger service, "Barkerville" was converted into a nine-man bunk car and numbered X-223. It was involved in a derailment in November 1967 and was lost in Seton Lake. The "Clinton" was sold to Maynard Laing in 1965 and went to the Puget Sound Railway Historical Association in Washington state. "Pavilion" became a ten-man bunk car numbered X-224, being renumbered 990224 in 1970, and later BCR 990224 in 1972. She was scrapped circa 1975.

MOTIVE POWER NEWS

Edited by Paul J. Crozier Smith

C425s 802 and 811 have been sold to Mohawk, Adirondack & Northern to join their sister. They were sold in July, but got stuck behind the picket lines. They were expected to depart sometime after August 25, as BC Rail workers returned for a 90 cooling off period.

The CARIBOO *is published quarterly for enthusiasts and modelers of the* ***Pacific Great Eastern Railway*** *and its successor lines. Sample issues may be obtained for $3.00 U.S. funds (posted to North American addresses). All editorial contributions are welcome. Send all correspondence to: Jim Moore, 25729 Floral Court, Valencia, California 91355-2139, U.S.A.*

THE NOKL CARS History by Andy Barber
Modeling by Laszlo Dora

History

BC Rail railfans often see the continuous streams of green rolling stock interrupted by the bright livery of blue, yellow, dull red, and off-green specialty boxcars. These cars all carry NOKL reporting marks, which identify their owner as the Northwestern Oklahoma Railroad Company --headquartered in Bloomington, Illinois!

This shortline owns 8.8 miles of trackage, and has, at last report, a lone diesel for its motive power. The line interchanges with the AT&SF at Woodward, Oklahoma.

BC Rail leases several NOKL cars for specialty service with specific customers. Cars 1995 to 2199 are exclusively for waferboard service with Lupack, a subsidiary of Louisiana Pacific. One point of origin for these cars is Dawson Creek, B.C.

The 1995-2199 series are Evans-built, and supply B.C. and the western U.S.A. with waferboard., The actual car owner is General Electric, and BCR has in turn sub-leased them from NOKL. Most cars in this series are the dull red-oxide colour. (Ed Note: At least two other series of NOKL cars are presently on-line. Those within the 1991-94 series are marked for "Newsprint Service", and are assigned to mills within the Prince George area. Cars within the series 1080-1099 are assigned to mills within the Williams Lake and Quesnel areas.)

BC Rail also leases NOKL cars from the 88150-88249 series, and the 88250-88307 series. These cars are more colourful, and are used "For Newsprint Only" service. The assigned shipper is Finley Forest Industries in Mackenzie, which supplies the entire west coast with newsprint. An occasional carload travels east.

Modeling the cars

When I first saw photographs of NOKL cars, and was told that they were being leased to BC Rail, I wished to obtain some models. Naturally, no model or decal was available. Thus the intent of this project was to produce some fairly accurate models with a minimal investment in time and money.

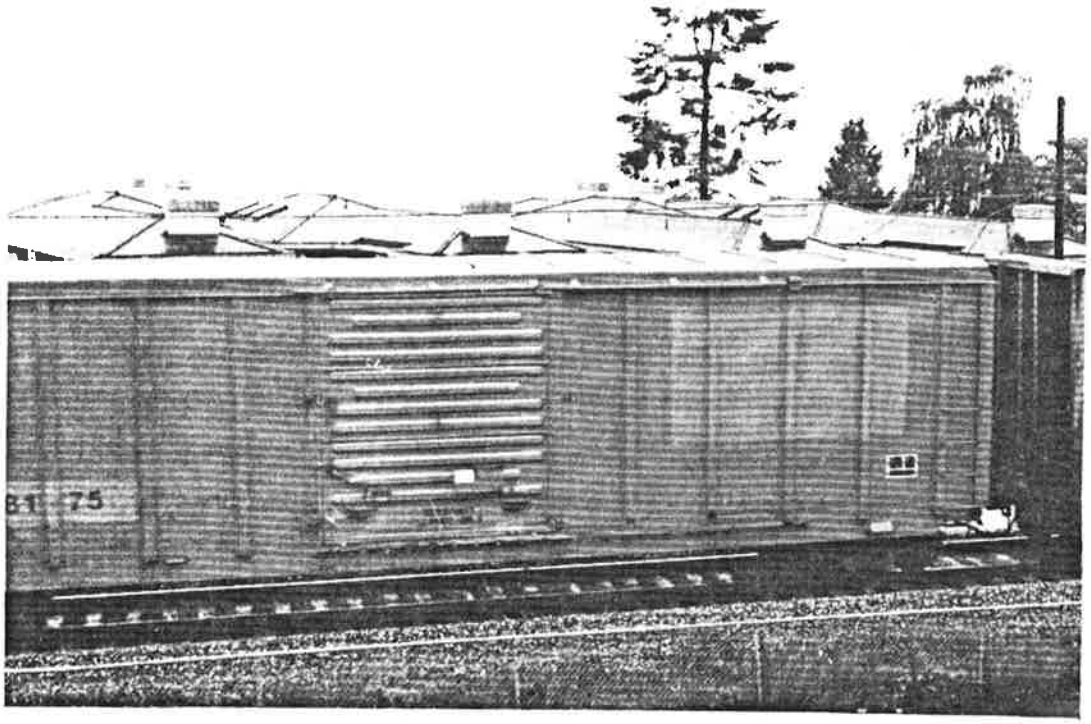
In this article, I will outline the steps taken for the conversion of 3 Model Die Casting kits to produce models of the NOKL cars shown in photographs 1, 4, and 7. Since many, if not all, of the leased NOKL cars have had previous users, it is recommended that the prototype or photographs of it be used as a reference, since variation does exist.

NOKL 88175 (refer to photographs 1, 2, and 3)

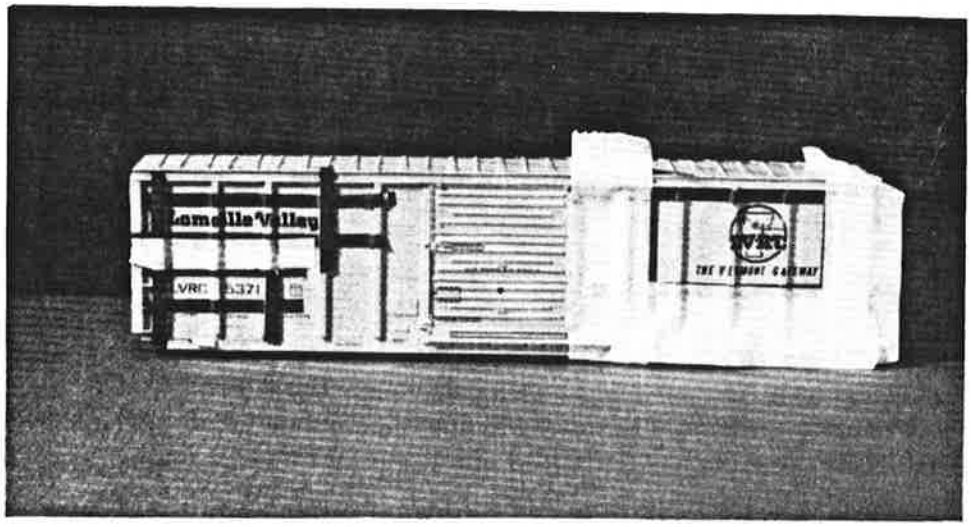
NOKL 88175 is a Pullman-Standard car, and as the patched repainting suggests, it had a previous owner. The car is painted reefer yellow and has a galvanized metal roof. The previous user's herald and car number has been painted over with lighter shades of yellow, though the original data in green lettering remains.

Model Die Casting's 50' Pullman- Standard car is similar to the NOKL car, and kit 1913 "Lamoille Valley" is painted yellow and has green lettering, most of which is in a suitable location for our purpose.

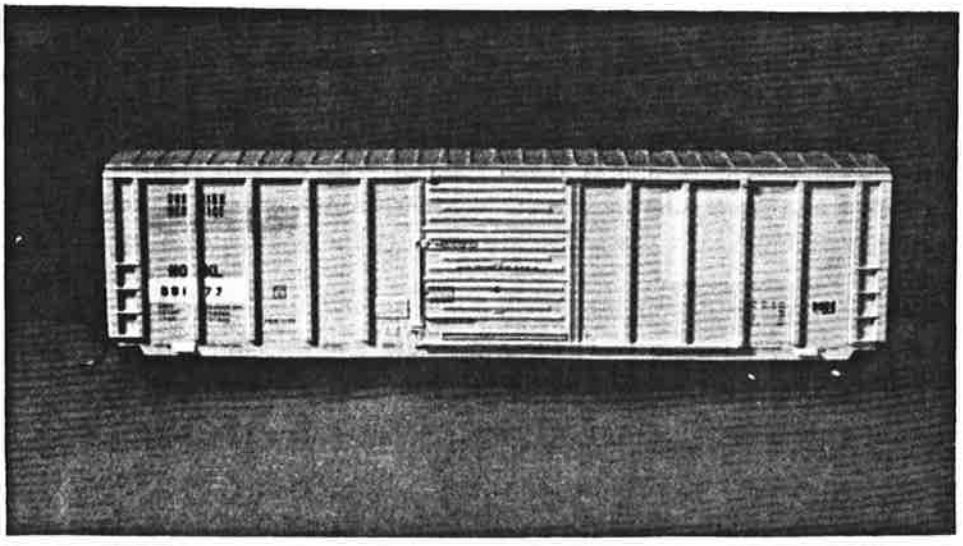
On the prototype, each side of the car has two repainted patches covering the previous user's herald and number. On the model, three patches had to be applied as shown in photograph 2. The patch



Photograph 1
NOKL 88175
Andy Barber



Photograph 2
Partially masked model
Laszlo Dora



Photograph 3
Finished model
Laszlo Dora

covering the words "Lamoille Valley" was painted with Floquil reefer yellow 110031. The large patch over the herald was painted with a mixture of yellow and reefer white 110011 so as to be lighter than the surrounding yellow. And the small patch over the car number was painted with an even lighter mixture. The roof was painted aluminum to simulate the galvanized metal. For the patches, two coats of paint were required. When the masking was removed, and the paint had completely dried, the "crisp" paint edge was gently scraped so as to make it less pronounced.

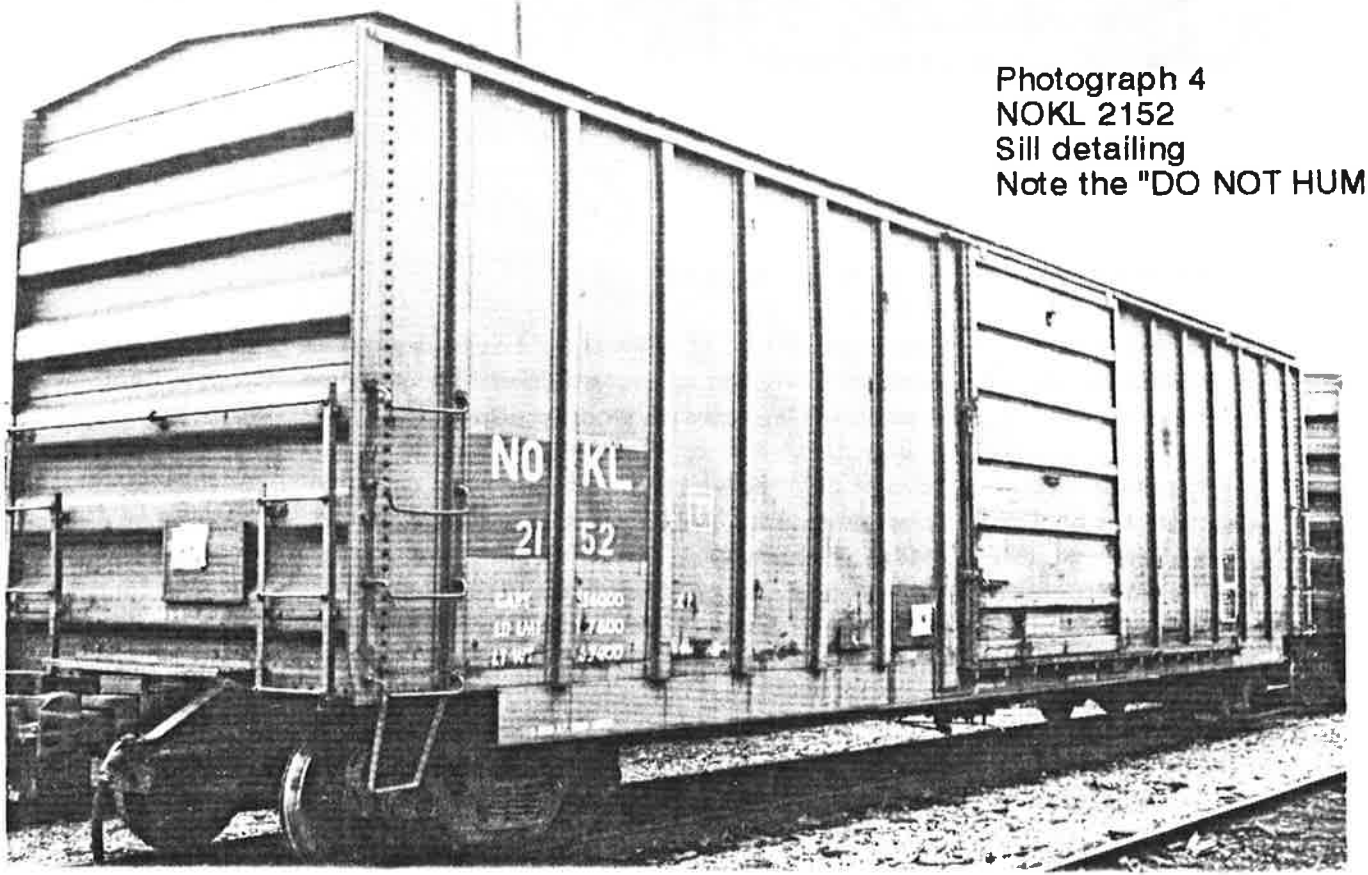
I decided to leave the green "Plate C" as painted, so when numbering the car, the NOKL letters were placed above the numbers. On the prototype, the "Plate C" is located one rib to the right and the black NOKL letters are next to the black numbers. The tack board was not relocated onto the door as found on the prototype since additional painting would have been required. On the prototype, the words "Cushion Service" are painted in green. For the model, I used black lettering from my scrap pile since green lettering is unavailable.

For all of the models, the letters NOKL were assembled either from words "Canadian National" or "Canadian Pacific", which in turn were taken from CDS dry transfer scraps and applied onto Walthers decal paper prior to installation on the model. On all of the NOKL cars, the letters NOKL are slightly larger and bolder than the numbers. This pattern is also typical on many CN and CP cars. Refer to Sketch 1 regarding the assembly of missing letters.

For my model of NOKL 88175 (which I chose to number 88177), I used CDS HO-168. For the other two cars, where white lettering was required, scraps from CDS sets 261 and 433 were used.

NOKL 2152 (refer to photographs 4,5, and 6)

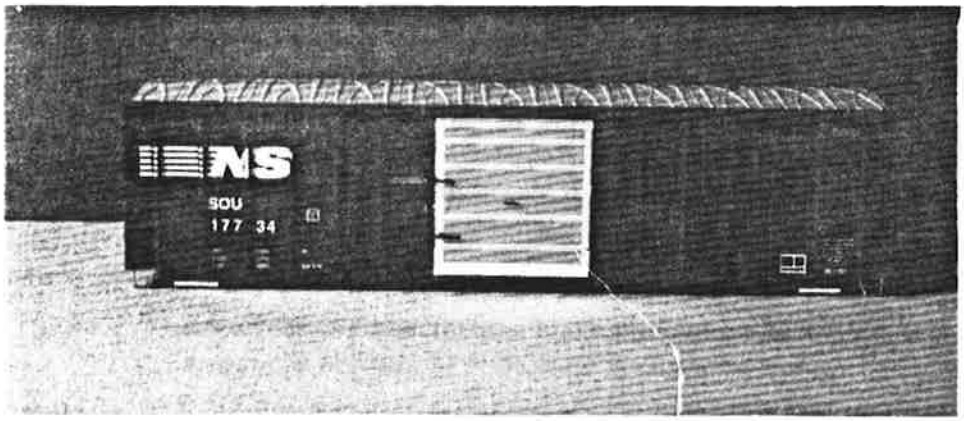
For this model, I began with kit #1917 (50' FMC), though an undecorated version could be used. The door was replaced with Detail Associates FD 6311 six panel superior door. The replacement door is 6" short and so a strip of 4"x6" styrene was glued to the bottom of the door to compensate for the discrepancy. The sill ends were modified with the addition of the styrene which was filed flush once the glue had set. Rivets on the sill were removed and the plastic stirrup steps were



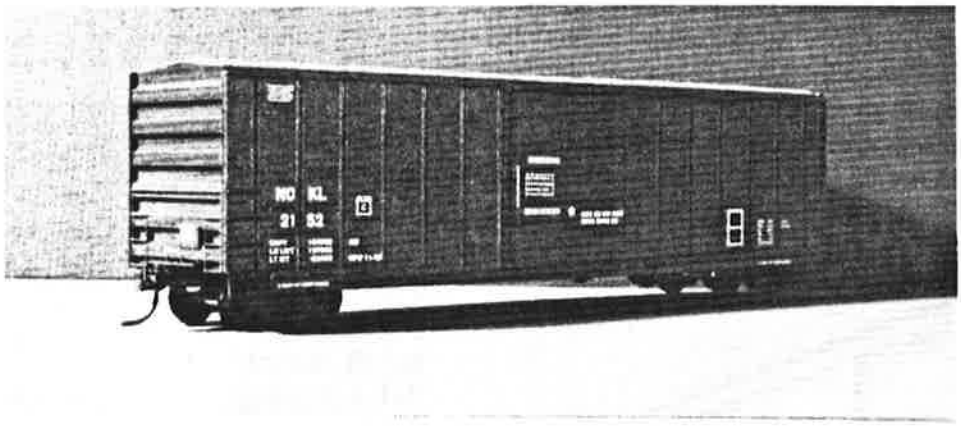
Photograph 4
NOKL 2152
Sill detailing
Note the "DO NOT HUMP tag

replaced with metal steps by A-Line. On the model, the ribs extend too low, making the sill appear shallow. On each rib, the bottom 4" was removed in order to correct the appearance. The two tack boards to the left of the door were carefully shaved off and replaced at a lower position just above the sill beam with those supplied with the superior doors.

I painted the shell with a mixture of 75% Floquil Weyerhauser Green 110036 and 25% Light Blue 110051. The roof was painted to represent galvanized metal. For this model (NOKL 2152), and the following model (NOKL 88281), I used Microscale 87- 0416 and 87-0415, mixing and matching them to letter the two cars. CDS decal scraps were used for the numbering. Refer to Sketch 2 regarding the "DO NOT HUMP" tag.



Photograph 5
Model prior to painting.
Note the styrene filler under the door and at the ends of the sills.
Laszlo Dora



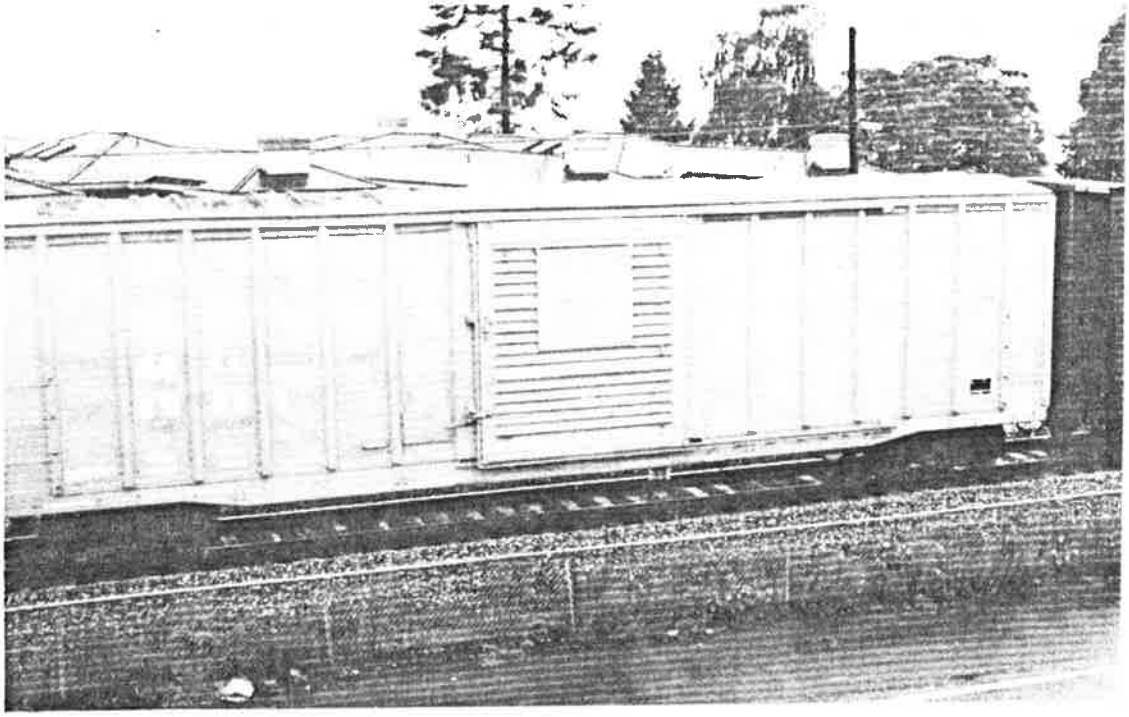
Photograph 6
Finished model
Laszlo Dora

NOKL 88281 (refer to photographs 7, 8, and 9)

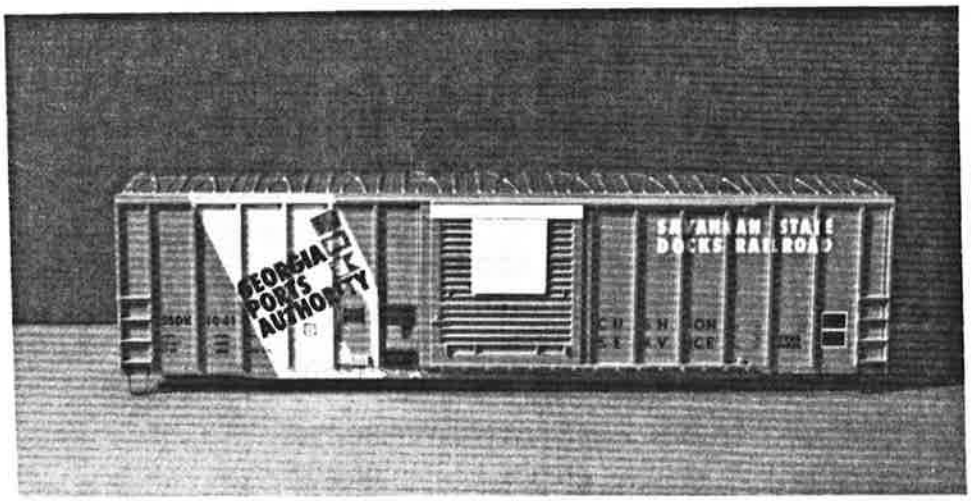
As was the case for the model of NOKL 2152, a FMC 50' boxcar is required. For this model, I used kit 1959 since the undecorated version was not available. The prototype shown in photograph 7 is an ex St. Lawrence car with the plate over the door revealing the previous user.

On the model, a piece of styrene 5'x5' with a 10" strip above it, was glued onto the door to represent the St. Lawrence herald mount. The two tack boards were shaved off and new ones glued on at a lower position. Refer to photograph 8. The sill of the model was originally stepped at each end. Each step was carved to create a "sloped step", from midway between the third and fourth ribs to midway between the fourth and fifth ribs. The rivets on the sill were removed and the plastic stirrup steps were replaced with metal steps.

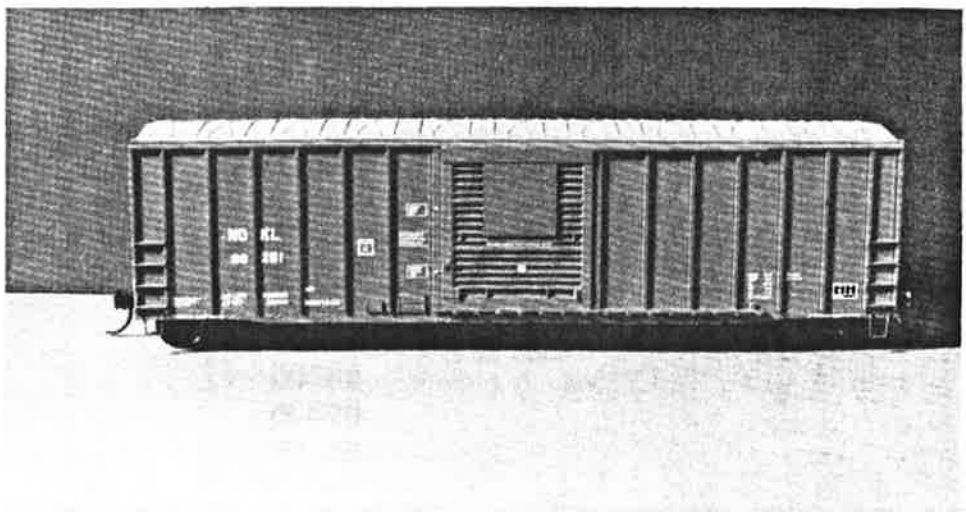
The model was painted Floquil Conrail Blue 110058 and the roof was painted to simulate galvanized metal. The prototype has been recently repainted, though the roof has severe rusting in several locations.



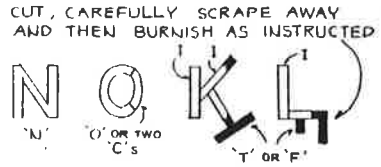
Photograph 7
NOKL 88281
Andy Barber



Photograph 8
Model prior to painting.
Note the relocated tack boards and the addition of the styrene on the door.
Laszlo Dora



Photograph 9
Finished Model
Laszlo Dora



WITH CAREFUL PLANNING THE MISSING LETTERS FOR 'NOKL' MAY BE ASSEMBLED FROM THE CN AND CP DRY TRANSFERS.

Sketch 1 Sketch 2

PLACE THIS PAGE INTO PHOTOCOPIER AND REDUCE TO 50 %. CUT OUT AND ATTACH TO TACK BOARDS.

SKETCHES BY LASZLO DORA

"Cariboo" Extra: NOKL Spotting Report

As of June 30, 1993, the following cars have been spotted:

Dull Red			Pale Green	Yellow	Bright Blue
2001	2063	2135	2151	88164	88227
2015	2081	2137	2159	88175	88281
2019	2095	2141	2169	88207	88284
2029	2099	2142	2171		88293
2030	2102	2201	2185		88294
2046	2107	2207	2191		
2049	2112	2211	2193		
2050	2117	2214			
2060	2131	2215			Pale Blue
					88241
					88290
					88301
					88303
					88305
					88306

SPOTLIGHT: BCR CABOOSE #1880 by Andy Barber

Caboose #1880 is unique, for it is the only one which bears a black "Expo 86" logo on its cupola sides. Other cabooses sporting the "Expo 86" logo display it in white.

It now appears that #1880 may soon disappear from the roster. It is currently stored out-of-service, and shows extensive damage on one end. 1880 was involved in a seven-car derailment at Prince George Yard on January 3, 1993. At 0245 hours, a string of cars was accidently pushed into a freight entering Prince George. Caboose 1880 was at the end of that string. One corner of the caboose suffered extensive side-swipe damage.

Caboose 1854 was also involved in this incident, falling to its side. Both cabooses were subsequently rerailed. The extent of damage to 1854 is not known, nor is "The Cariboo" aware of its current status.

Andy Barber photo.
Squamish
June 1993

PRODUCT & GOODS EVALUATION

MDC #1314 Bulkhead Flatcar

Reviewed by Marcel Devlieger

In 1986, the revenue car roster included some 3645 bulkhead flatcars; 745 of which fell into the series 866000-866899. These cars were built by Marine Industries, owned by Procor, and leased to BC Rail. The cars, designated "FB", are 66 feet in length and have a restricted capacity of 175,000 lbs.

I found the MDC bulkhead flatcar, as built in 1980, more accurate than most other BCR-oriented models. The model's overall length of 62' (over coupler boxes) contrasts sharply with the prototype's 76'10" dimension. This discrepancy is reflected in a loss of five stake pockets, compare to the prototypical eighteen.

The center post for the rear bulkheads on the model are incorrect. Instead, they should be open-style construction. This shortcoming results in a loss of two vertical posts.

End ladders are offered separately, while stirrups and other details are molded to the body. The two vertical grab irons, on the side bulkheads, are not utilized.

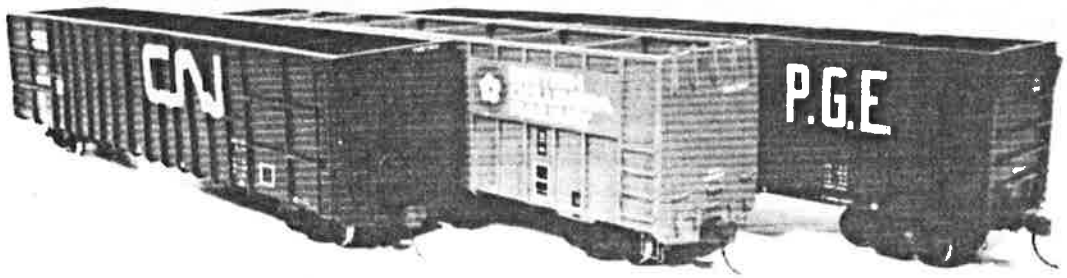
As the finished model weighs only three ounces, I recommend adding an additional two ounces of weight, possibly in the form of a lumber load (see "Cariboo" #5).

I found the molded color quite acceptable, and the lettering crisp to MDC standards. Even the Marine Industries logo is replicated. However, it is important to note that some marking inaccuracies do exist. For instance, I could never find the car's number BCOL 869378 to be within any published BCR flatcar series.

All in all, I would still recommend this car, as any "required" modification could be accomplished with little effort. This HO scale model has a suggested retail price of $5.25 US.

PRODUCT NEWS

Alpine Railway Shops is pleased to announce the release of the first in a new line of craftsman kits: three 61-foot modern wood chip cars. The cars are of Alumilite and styrene construction. Each high quality Alpine Railway Shops kit includes trucks and horn and hook style couplers. Available roadnames are British Columbia Railway, Pacific Great Eastern, and Canadian National. Kits may be ordered direct from Alpine Railway Shops, RR #2, Kettleby, ON L0G 1J0 Canada. Price is $15.95, plus $2.50 for shipping. Please allow 4-6 weeks for delivery. "Cariboo" contributor Marcel de Vlieger is ARS's brass hat.



The Model Railroad General Store (25a Hamilton Road, Cambridge, New Zealand) announces a new HO scale metal/plastic kit. The kit contains material for one British Columbia Railway 63' stake car (series 10151 to 10300). The kit includes prototypically correct stirrups, grab irons, brake chain, trucks and Kadee couplers.

The completed car weighs 3.5 ounces. Price is $18.00 U$ (postage paid, air mail). Add two dollars for metal wheels. Visa and Mastercard are accepted.

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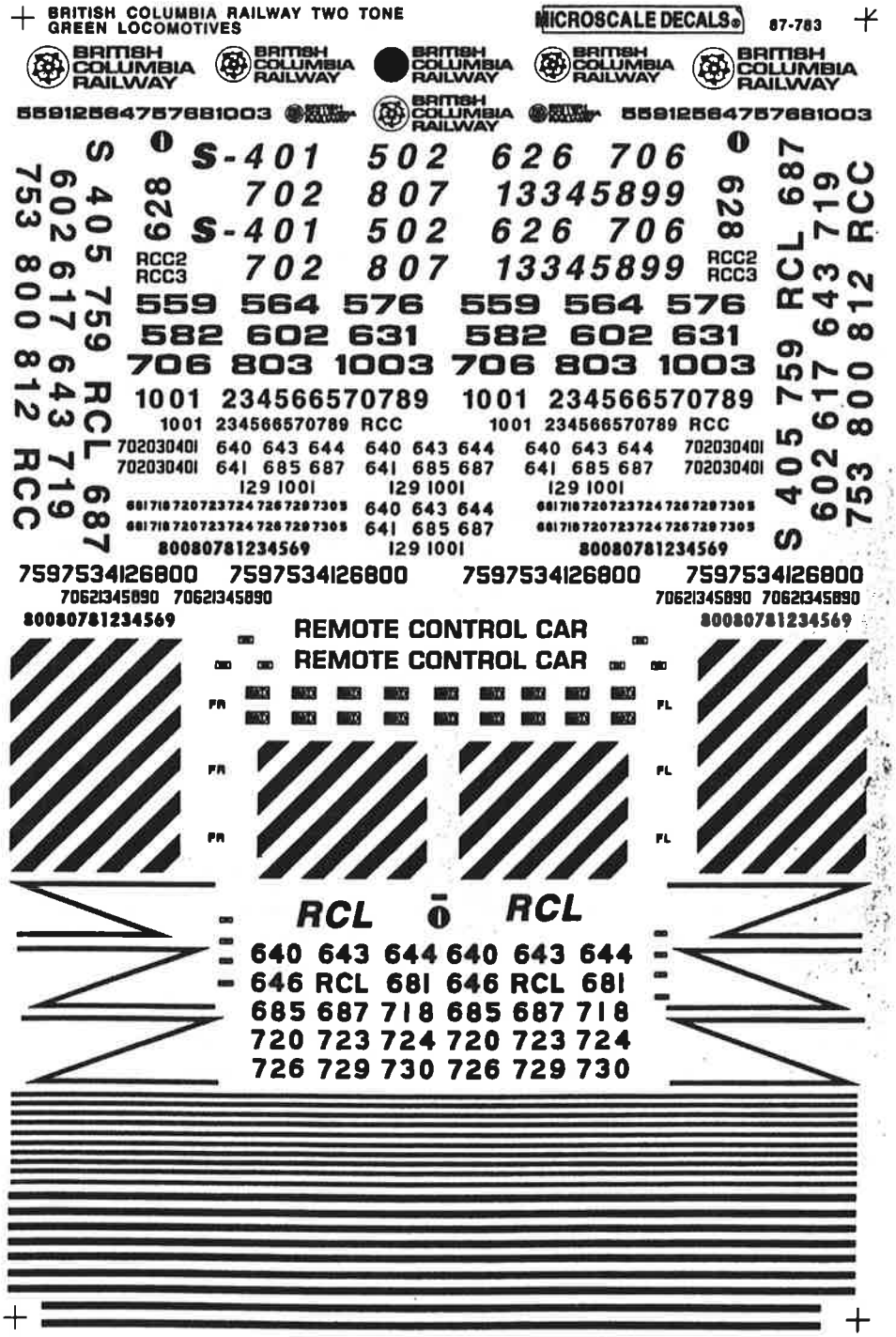
Microscale Industries has released another decal set that is sure to catch the eye of the BCR two-tone green modeler. Set for September release were HO scale #87-783, N scale #60-783, and O scale #48-317

We printed a proof sheet of the HO scale set below. As with prior Microscale releases, both printing quality and colour match are very good. There's enough material here to do a number of different locomotives; be they powered, remote contol cars, or converted slugs.

Microscale's latest offering is a direct response to interest expressed by several BCRH&TS members. Greg Kennelly, Andy Barber, and Mel Lyne are to be commended for their efforts which helped make this project a reality.

Dale Martin advises that set for future release is a sheet of locomotive striping, along with a set designed for the original red/white/blue locomotive paint scheme. Dale wants to know what PGE/BCR modelers would like to see next. Send your suggestions to "The Cariboo". We will compile your comments and send a tally off to Dale.

Microscale decals are available at at all better hobby shops or direct from the manufacturer at POB 11950, Costa Mesa, California 92627.



Helpers on the Squamish Subdivision

Text & Map by Eric L. Johnson

Operations:

Helper locomotives on British Columbia Railway's Squamish Subdivision have been used on freight trains for many years. Since the early days of the Pacific Great Eastern, helpers were needed to push loaded freights northward up the Cheakamus Canyon between Cheakamus and Garibaldi Stations. But with the post-World War Two development of British Columbia's interior and north country, there was a shift to loaded freights southbound with mainly empties running northward. Helper service also shifted to the two major hills between Darcy and Mons, and in recent years, helper locomotives and crews became permanently stationed midway between the two hills. At the village of Pemberton, 100 miles north of Vancouver, BCR maintains quarters for six enginemen, and at all times four SD40-2 locomotives are based here. Engines are refueled by truck at Pemberton, but are sent south for servicing.

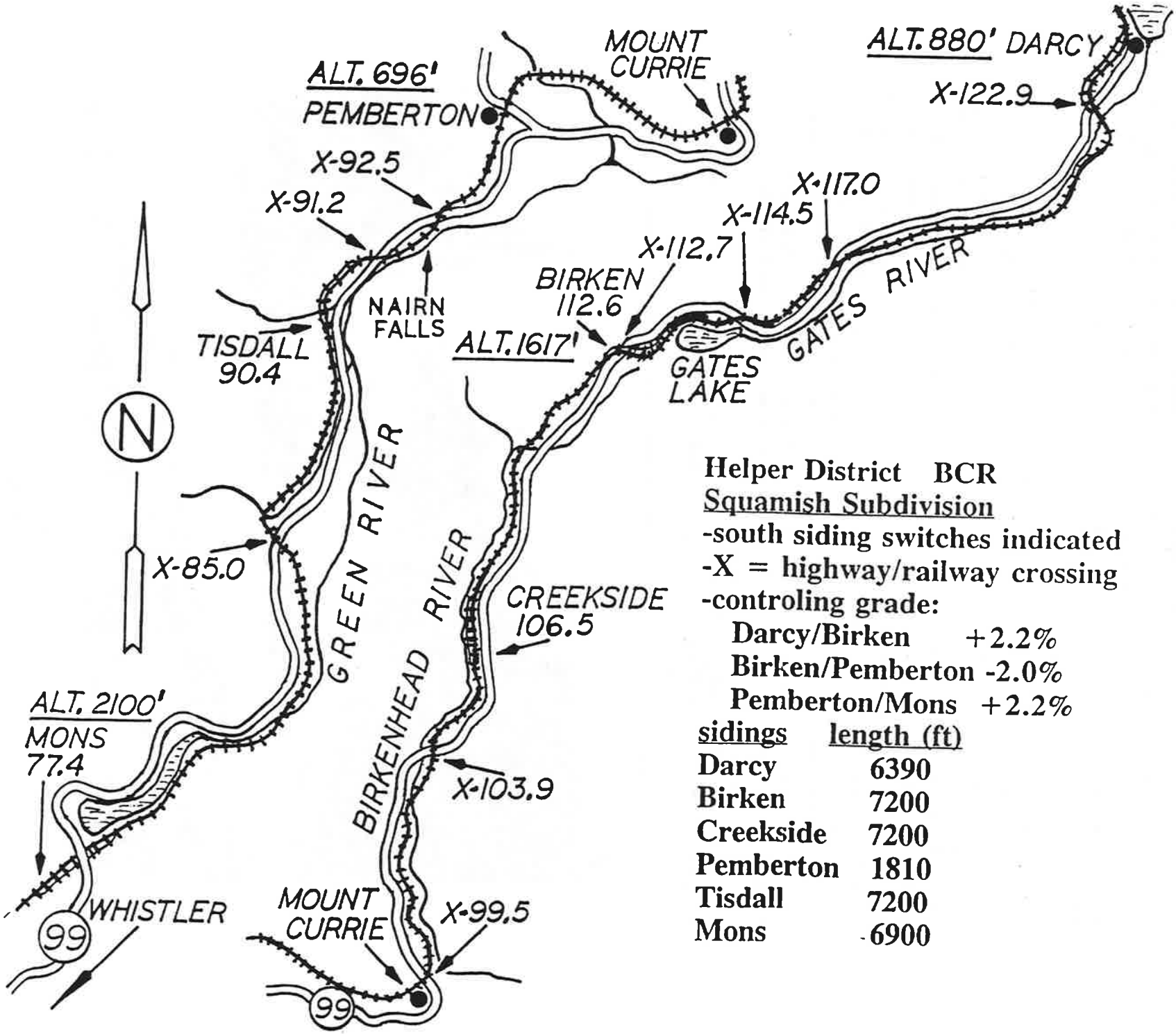
In addition to Budd car passenger service, way freights, and work trains, traffic usually includes three northbound and three southbound freight daily, to and from Prince George. Southbounds are heavily loaded with wood chips, lumber, plywood, sulfur, copper concentrate, piggy back trailers, and the occasional load of aspen chopsticks from Fort Nelson. Trains consist of about 100 cars --over a mile long-- and weigh in at about 10,000 tons. More than 25,000 horsepower is needed to get these trains up the 2.2% grades between Darcy and Birken and between Pemberton and Mons.

Times for southbound departures from Lillooet, the northern terminus of the Squamish Subdivision, are unpredictable. But since a helper's round trip takes five to seven hours, this will limit the time of departure of the next train. Thirty minutes to one hour after a freight leaves Lillooet (MP 157.6), the helpers, with two enginemen on board, leave Pemberton (MP 95.0) for Darcy (MP 123.7). Arriving at darcy, the freight pulls up about 30 car lengths past the north switch where the four helpers are cut in. The freight will usually consist of two GE Dash 8s at the head end with a remote Dash 8 about 70 cars back, although power combinations with, or of all, SD40-2s will also be seen.

On leaving the south switch at Darcy, throttles are shoved to notch 8 for the stiff climb up the valley of the Gates River. Engines relax at milepost 118 for a short level section, then it is full throttle until reaching Gates Lake and the Birken siding at mp 114. Once over the pass, the helpers are sometimes called to assist in dynamic braking down the 13 mile, 900 foot drop, valley of the Birkenhead River. After running for almost five miles of level track between Mount Currie and Pemberton, throttles are once more in notch 8 for the ascent of the Green River valley. Although the steepest grade lies between Pemberton and milepost 91.5, there is no let up until the track levels off on the shore of Green Lake, about mp 80. At mp 78.8, the north switch of Mons siding, the helpers are cut out, to return to Pemberton for a short rest, or to continue back to Darcy for the next push. The round trip, home-to-home, takes from five to seven hours.

Railfanning

BC Rail lineups on the Squamish Sub are broadcast at 0700, 1230, and 1700 on radio frequency 159.570. As earlier mentioned, the times of train departures from Lillooet are unpredictable, but at least one southbound freight SHOULD arrive at Darcy between 0700 and 1700. Meets can be expected, either at Darcy, Birken, Creekside, Tisdall, or Mons; and with Budd car meets also at Pemberton. On Highway 99 north from Mons, once out of the Whistler hustle, traffic is very light,



Helper District BCR

Squamish Subdivision

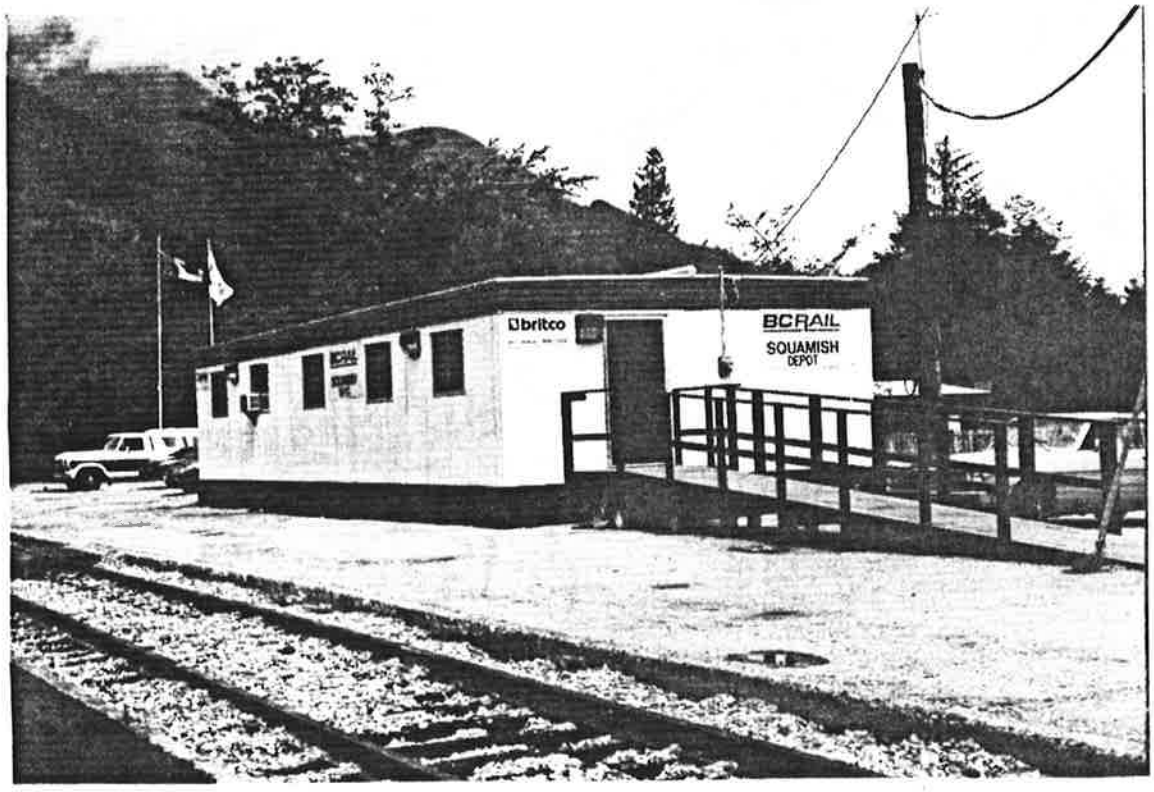
- south siding switches indicated
- X = highway/railway crossing
- controling grade:
  - Darcy/Birken +2.2%
  - Birken/Pemberton -2.0%
  - Pemberton/Mons +2.2%

sidings	length (ft)
Darcy	6390
Birken	7200
Creekside	7200
Pemberton	1810
Tisdall	7200
Mons	6900

and driving is relaxed on an excellent paved road. Along the way, parking is practically unlimited -- except in winter when (as expected) things change drastically. Snow fall can vary greatly from winter to the next, and while Whistler might be deep in snow, Darcy may have none. During the drive, one may note several fine photo viewpoints with mountain, river, and lake backdrops. The railroad closely parallels the highway for most of the way between darcy and Mons, although there are several stretches where only hiking will gain photo access. In the 45 miles there are eight level crossings (see map), one rail overpass (mp 91.2), and additionally a highway overpass right over the Mons siding.

The cutting in operation if the helpers at darcy is completely accessible and takes less than one-half hour. Following the trains southward is not difficult since numerous curves and a controlling grade of 2.2% keep train speeds at about 15 mph uphill, and 20 mph downhill. However, speeds of 30 mph are allowed along the Lillooet River flats, mp 99 to 95. There is a fine view over Gates Lake and the north switch of Birken siding. Easy access is had to Creekside siding, although it is not nearly as scenic. This is the preferred siding for meets, since if long trains must wait at Birken, the train must be cut for the level crossing at mp 112.7. Neither is Tisdall preferred for meets if loaded southbounds must stop; since the siding lies on a fairly steep grade difficulty can be had in getting mobile again. But Tisdall does offer good photo views, particularly at the south end. South of Tisdall, the highway crosses the tracks at mp 85, and between mp 81 and 82 the highway runs just above the tracks. A side road, open in summer, just south of the Mons crossing leads right to the north siding switch, where the end of the pusher's work for this trip can be viewed.

This article originally appeared in Issue 67 of "Northwest Railfan". Thanks to Dean R. Ferris for granting reprint permission.



Jim Moore photo
Interim station
Squamish
June 1993

WCRA TRIVIA
Ryan D. Cruickshank

Two Pacific Great Eastern Consolidation class steam locomotives (#53 and #56) hit rock slides and fell into Seton and Anderson lakes. The locos remain sunken to this day. When did the accidents occur?

January 3, 1950 and August 8, 1944; respectively.

***

On what date did the first PGE passenger train arrive in a) Prince George, b) Dawson Creek, and c) Fort St. John?

a) 1 Nov 52, b) 2 Oct 58, and c) 3 Oct 58

CAR SHOP

An HO scale model of 50' plug-door BCOL 4657 was featured on the cover of the November/December 1992 issue of "1:87 Scale" magazine. The model was reworked by Doug Fleming from an Athearn kit. Details of the kit- bashing are contained on page seven of the issue.
(Ron Tuff)

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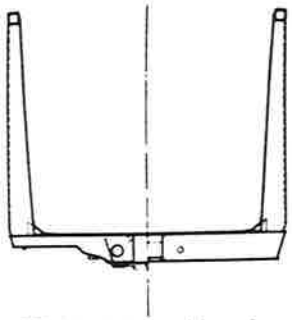
The scale drawing which appears on the following page depicts a Canadian National rotary dump car from the series 199600 through 199899. The cars were built by Marine Industries (in either late 1981 or early 1982) and are used primarily to transport coal from the Alberta Coal Fields for export from the west coast of Canada. These cars feature rotary couplers on the "A end", and weigh 58,600 pounds empty. They are designed to carry 204,000 pounds of payload; thus, roughly 100 ton cars.

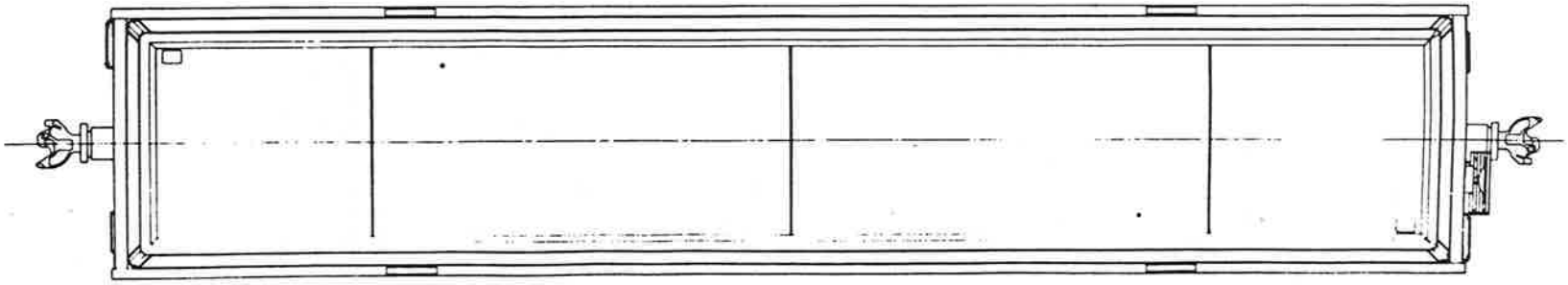
Like Canadian National, BC Rail utilizes 100 ton gondolas. The first grouping consists of mostly 102xxx numbering, with a few 100xxx cars included. They are leased to the railway by Procor and are used to transport sulphur form British Columbia's interior to the railway's North Vancouver terminal. Here the sulphur is stockpiled while awaiting transport by ship to foreign markets. Unlike the CN car in the drawing, these cars feature three horizontal end braces.

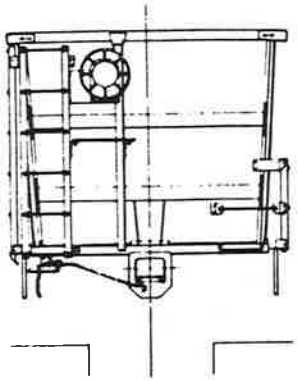
The second series of 675 cars typically found on BC Rail are numbered 900001-900675. These gondolas, jointly-owned by BCR and CN, carry BCNE reporting marks and are used to transport coal from the Tumbler Ridge Subdivision to Prince George. The cars then move via CN to Prince Rupert for export to steel mills in Japan. Cars within this series have two horizontal end braces, and lack the smaller panel stiffener between the bolster vertical brace and the end of the car.

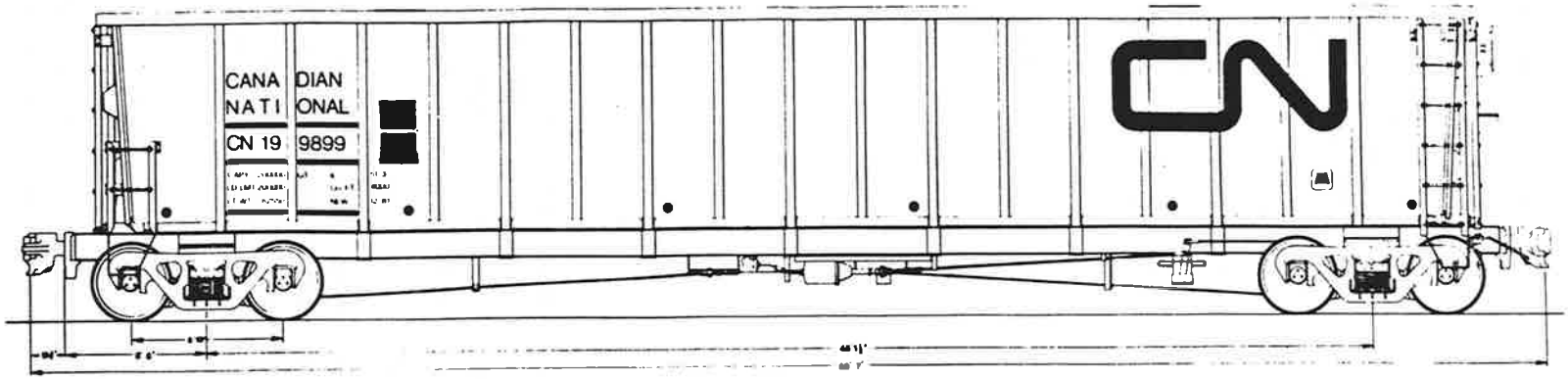
Modeling the car in multiple units would be an interesting project. With an absence of riveting, the car easily lends itself to styrene construction. An in-depth discussion of "Cariboo" editor Andy Barber's modeling of the 102xxx series can be found in Issue #6 (October 1991).

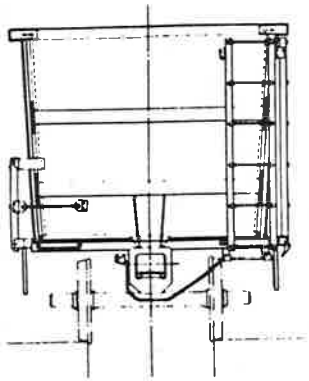
Text: Mark Mills and Andy Barber.
Scale drawing from "Mainline Modeler" (July 1990).
Thanks to Bob Hundman for granting reprint rights.



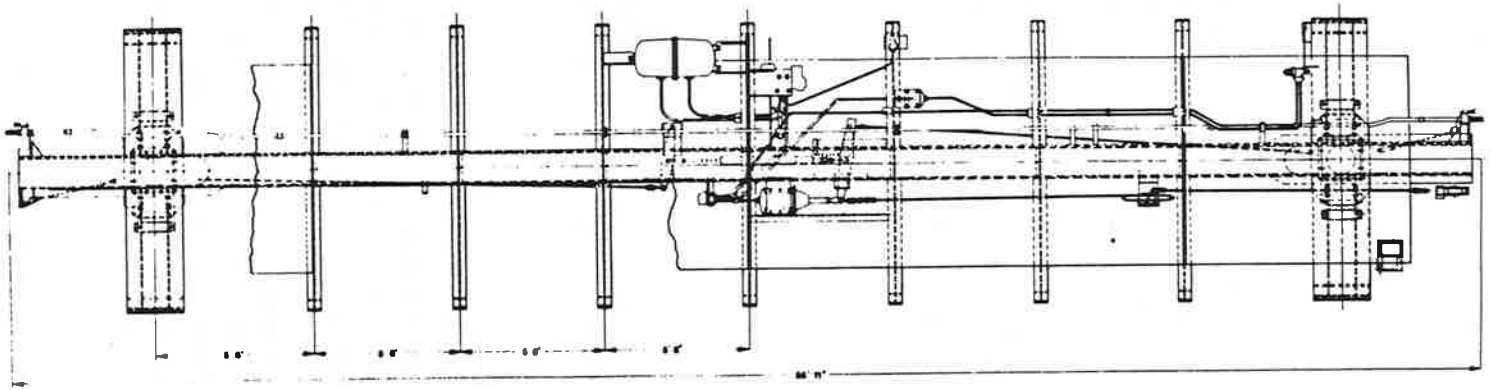


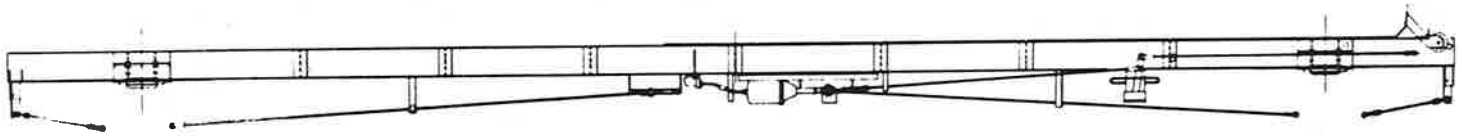






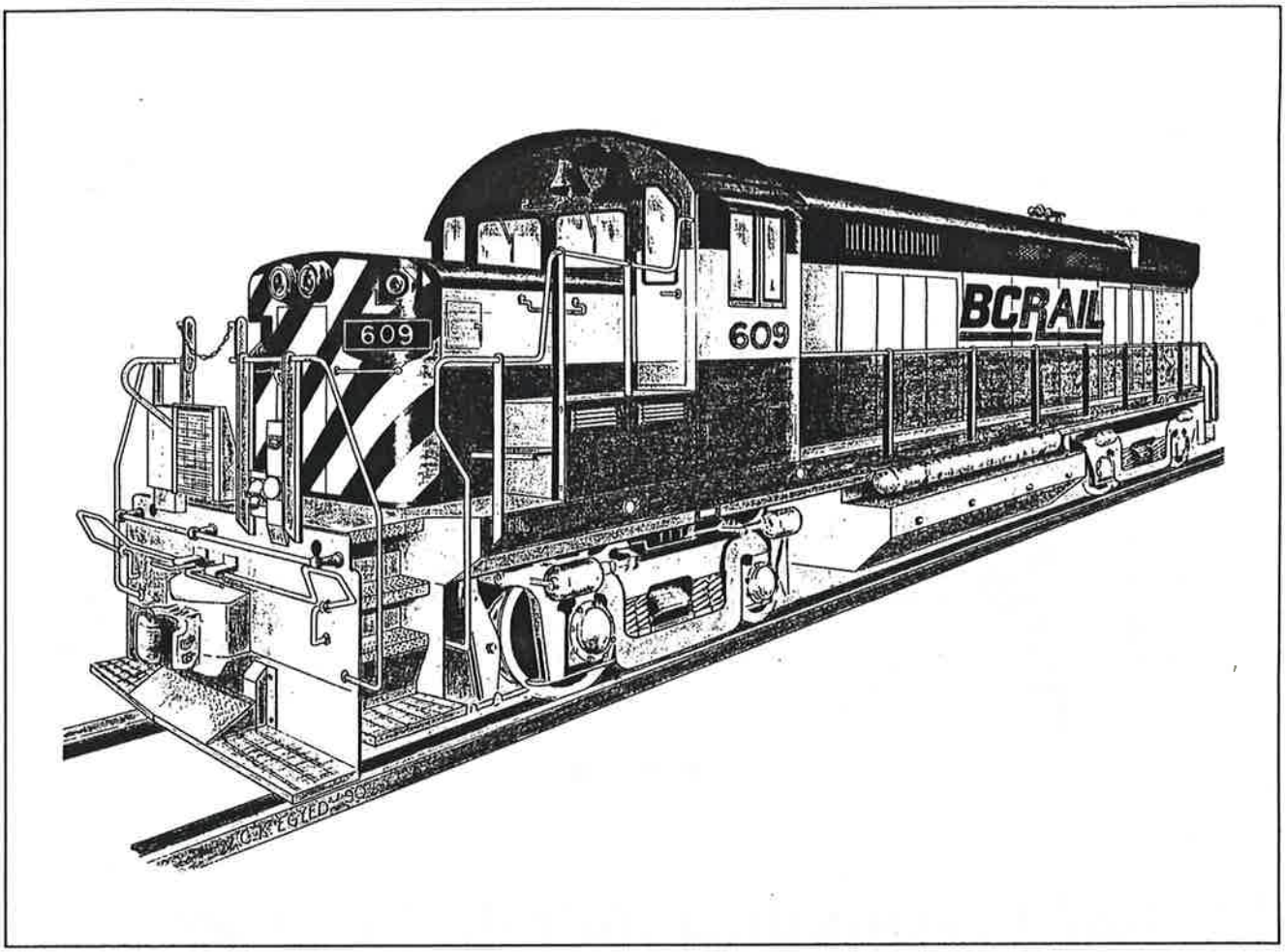
TOP VIEW OF UNDERFRAME





Scale 3/16″ = 1′

Drawn Expressly for
MAINLINE MODELER



BC Rail Locomotive Retrofit Program

Montreal Locomotive Works unit #609, built in 1962, is the first of 27 BC Rail engines to be retrofitted with a new Caterpillar engine package. The 2000 hp locomotives are used primarily for yard and switcher service.

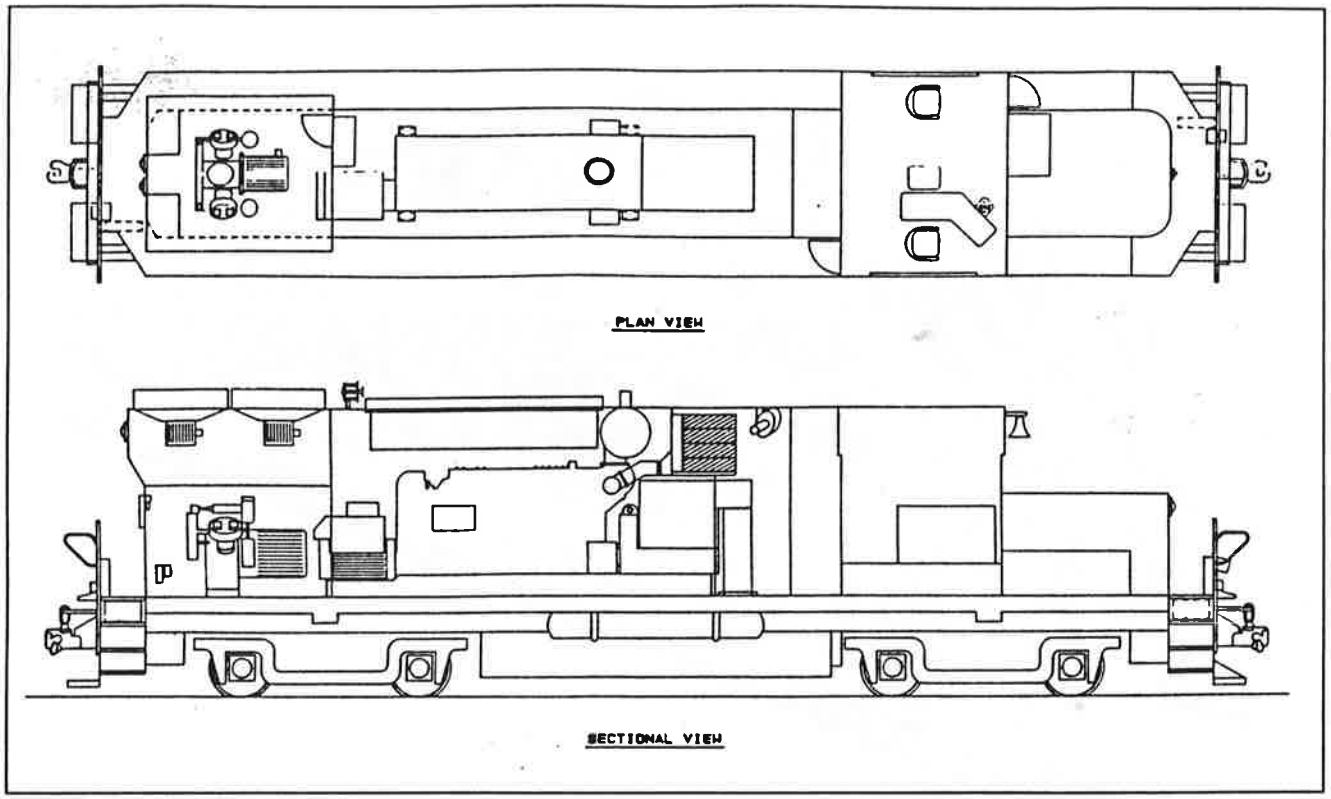
Caterpillar, in conjunction with their local distributor Finning Ltd. are supplying complete power plants for this project in the shape of a new 3500 series 2000 hp engine and Kato traction alternator.

Some of the most innovative features of this locomotive are the engine and generators mounted on an independent frame, which can easily be changed out as a unit. All auxiliaries are electrically driven, reducing the necessity of aligning and maintaining mechanical drives. Excitation and adhesion levels are now microprocessor controlled.

The most significant benefits expected from this conversion are fuel savings and longer intervals between major overhauls.

Cab conditions are also being improved with this project. Windows and the cab will now be electrically heated. Cab lighting insulation and sound barriers are added to reduce noise levels and provide a more comfortable working environment.

Six engine packages have been ordered, with four scheduled to be completed this year. This program is expected to continue to the total 27 units scheduled for re-engining by 1994.



BC Rail Locomotive Retrofit Program

TECHNICAL DATA:

Engine – Caterpillar - 3516, turbo charged and intercooled, this 16 cylinder engine has a continuous rating of 2075 HP.

Generators – Kato Traction alternator will provide 1500 KW with a 4500 amp continuous 6000 amp intermittent duty cycle.
– Kato AC and auxiliary alternators are built in a common frame. The AC alternator provides AC power for radiator fan motors, air compressor motor and air blower motors. The auxiliary generator provides control power and battery charging at 74 VDC.

Chassis – Original MLW - model DL 718 equipped with dynamic braking.

Trucks – Original - soft rider type equipped with elliptical springs and equalizers.

Operating features – self load test on DB grids.
– automatic start/stop for cold weather operation.
– slug master equipped.
– microprocessor excitation and adhesion control.
– reset safety device and recorder equipped.
– battery jog, allow moving unit on battery power.
– push button whistle control.
– all electric windows and heating.
– sound barrier flooring and insulation.
– improved cab lighting.

For more information write to:

BCRAIL

MECHANICAL DEPT.
P.O. BOX 8770, VANCOUVER
B.C. V6B 4X6