THE CARIBOO

PUBLISHED BY THE BC RAIL HISTORICAL & TECHNICAL SOCIETY

ISSUE FOUR APRIL 1991

This issue marks our first year of publishing "The Cariboo". Our readership continues to grow. Please advise fellow PGE/BCR modelers of our existence.

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As promised, we are introducing photos with this issue. And we encourage everyone's participation. Best results will be achieved from black and white prints (5x7s preferably). However, if you shoot color prints or slides, don't feel left out. Send them along for a look-see. If we can use them, we'll have a interneg made. Please mark all submissions with your name. Kindly enclosed a brief description of your photo.

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Please make a note of the deadline for issue five of "The Cariboo". The deadline is 1 June 91. This is earlier than previously planned. Please allow five days for domestic US mail, and eight days for international post. Without your participation we will not have a newsletter.

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Custom decal project update: An idea ahead of it's time?! I received a total of three responses to our survey! This is hard to figure in light of the many new PGE/BCR diesels becoming available. Is everyone adapting Herald King decals, or only modeling the current red/white/blue scheme (using Andy W's set)? We'll extend the reservation deadline to May 1. Otherwise we'll have to refund all deposits and it will be every man for himself.

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As the size of our newsletter grows, so does the workload. So far its been pretty much a one-man operation. In order to continue, I need to enlist the aid of two people: one to handle the publicity/marketing aspect, and one to help with newsletter editing. If you can afford one hour/week, your participation will make a difference. Help prevent publisher burnout!

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Construction was completed (in January) on a $5 million warehouse which will increase Squamish Terminal's ability to handle more pulp. The terminal's increased capacity means less railcars will await unloading in the BC Rail system.

Warehouse space has been increased from 300.000 square feet to 500.000 square feet. This will protect cargo and workers from the weather as rail cars will now be able to enter the north end of the facility for unloading. ("The Coupler")

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The West Coast Railway Association is presenting it's fourth annual BC Rail System Tour. This year's agenda features a slightly different routing and a more leisurely pace. Travel will be in first class comfort aboard two Budd cars. The tours runs from May 25 through June 2, and includes all transportation, most meals and all hotel lodging. Double occupancy is $1475 Canadian. A single supplement is offered. A deposit of only $100 dollars guarantees your seat. This tour has sold out rather quicky in years past, so reserve early. Contact WCRA at: POB 2790, Vancouver, BC V6B 3X2, or call (604) 524 1011.

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The Prince George Railway Museum continues to progress with restoration of some recent acquistions. Amongst these are:

--ex BCR head-end power/diner "Endeavour". This car was also part of the American Freedom Train consist.
--ex Canfor #2, an Atlas 65 ton centre cab diesel
--two former BCR cabooses, 1937 and 1940. (WCRA "News")

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Thanks to the editors of the Bytown Railway Society "Branchline" for their kind mention of "The Cariboo". For additional information about this group, and it's newsletter, write: Box 141, Station A, Ottawa, Ontario K1N 8V1.

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Hallmark and Overland have announced that they intend to produce the troop sleeper and troop kitchen manufactured by Pullman. These cars ran on the PGE in at least three paint schemes: solid green, orange and green, and solid yellow. (Bryan Sirman)

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"Company Store" (25a Hamilton Road, Cambridge, New Zealand) has produced an HO scale fifty-five foot skeleton-frame log car. The kit features soft metal castings, and will accept Athearn trucks and Kadee couplers. The completed model is similar to the BCOL 10000 series. Cost for this model is $13US/$15CA, postpaid/airmail.

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The implementation of Canadian Railroad Operating Rules (CROR) introduced several different rules applications to BC Rail:

***The "Daily Operating Bulletin" (DOB), which trains and engines must have before they can occupy the main track. The DOB is in effect from North Vancouver to Fort Nelson, and on all main tracks on connecting subdivisions.
DOBs contain information related to track conditions. They are issued only once a day, usually at 1800 hours, to be effective at 0001. All "slows" and men working hours are now contained on one or two sheets.

***"Cautionary Limits" replaces "Yard Limits". The difference is that this new rule requires trains and engines to be able to stop short of equipment (engines, boxcars, etc.) and Track Units (such as speeders, cranes, tampers, etc.) and with a top speed of 15 mph. The introduction of Cautionary Limits will reduce the areas to be protected (ie. the limits will be shorter).

Limits have been removed at Exeter, Quesnel, Kennedy, Septimus, and Taylor. The elimination of these limits means increased work efficiency for track maintenance forces, plus now trains are able to operate through these stations at track speed.

***Another change is the application of diamond-shaped reflectorized decals at the main shop, diesel and car shops tracks to signify that such tracks may contain areas where close clearance exist. ("The Coupler")

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WANTED: To complete the artwork for a decal/dry transfer set for the old orange and green PGE scheme on the MLW diesels, I need clear photographs (B/W or color prints or slides) showing the type style used for the following digits: 0,2,3,4,7,8. Otherwise, the artwork for the set is ready to go! Photos should be nearly square-one, emphasizing the cab side. I will reimburse your costs, but please contact me to confirm current needs before having prints made up. Greg M. Kennelly, 7739 Gray Avenue, Burnaby, BC, CANADA V5J 3Z7. (Phone 604-437-3499 evenings, except Friday, before 10 PM Pacific Standard Time).

TRAIN CONTROL ON THE BCR

Nini Roy

Train orders started on the PGE in the early days and remained as the method of train control until mid-1990.

Manual Block System (MBS) was implemented during construction north of Prince George in 1957. In May, 1968, MBS was in effect north of Chetwynd, Dawson Creek Subdivision, and Takla Subdivision. Around April, 1970, MBS was used to control trains on the BC Harbours Board Railway, lasting until CTC was installed.

Glenayre Electronics, along with BC Rail, attempted to develop a system known as LIC (Locate, Identify, and Control). Even though the system was tested for several years, it was never adopted for train control.

BC Rail Operations then began negotiating with CP Rail to secure a lease agreement on the latter's internally developed Computerized Manual Block System (CMBS). CP Rail has spent approximately five years developing, upgrading, and utilizing CMBS at the time of BC Rail's initial proposal. In January, 1990, a software lease was agreed upon, at which time former BC Rail President McElligott gave the approval for installation.

CP Rail carefully monitored the preparation and training necessary for the conversion to CMBS on BC Rail. This was to be the first time in Canadian railway history that a project of magnitude has been attempted. By contrast, CP Rail own operational change had been made gradually. BC Rail took only four months to implement the new system--which came in on time and on budget.

At 0001 on 13 May 90, the first Block Clearance was issued to Extra 752 South by Train Dispatcher Frances Anne (Nini) Roy.

**

CMBS was initially installed on 22 July 85 at Saskatoon, Saskatchewan on CP Rail. With the implementation of Canadian Rail Operating Rules (CROR) many of the rules which had become known as the Manual Block System Rules became known as Occupancy Control System Rules (OCS).

OCS was designed to assist the Rail Traffic Controller (RTC) in controlling movements and issuing authorities. All train movements, or Track Occupancy Permits (TOP), are first entered into the system by creating what is known as a "supply sheet". As data is entered into the computer, a colour bar of appropriate length appears on the RTC's monitor. The length and/or colour of these bars will change depending upon increased or decreased authority, and track release or cancellation. This system is intended to provide a visual indication of a subdivision's active authorities.

Frances Anne (Nini) Roy, a resident of Burnaby, BC, in now in her thirteenth year with BC Rail. Ms. Roy is presently a Relief Chief Train Dispatcher. The Roys are truly a railroading family: Nini's father and two brothers also are with BC Rail. A third brother is employed with CP Rail.

"The Cariboo" is published quarterly for enthusiasts and modelled of the Pacific Great Eastern and successor lines. Sample copies and back issues may be obtained for $2.50US each (posted to addresses in North America). All editorial contributions are welcome. Send all correspondence to: "Cariboo", 27 Dwight Avenue, Hillcrest, New York 10977-3104 USA.

MODELING THE BRITISH COLUMBIA RAILWAY ELECTRO-MOTIVE DIVISION SD40-2 IN N-SCALE

ADDING DETAIL AND WORKING DITCH LIGHTS MAKE THIS MODEL A GOOD REPRESENTATION OF THE BCR SD40-2 FLEET IN THE EARLY 1980'S

From the time diesels first arrived on the Pacific Great Eastern, predecessor to the British Columbia Railway, Alco and MLW units dominated the scene. This was the case until the late 1970's when, due to increasing problems with the aging Schenectady and Montreal-built fleet, the BCR went shopping for motive power. Their primary interest was in six-axle power and this time they chose the General Motors Electro-Motive Division SD40-2.

This 3000 horsepower workhorse is the most common road engine on North American railroads today. It is found on virtually every major Class I railroad from coast to coast in both Canada and the U.S.A. In the world of N-Scale, there are two manufacturers of SD40-2's; Con-Cor and Bachmann. For this project, I elected to go with the Con-Cor offering mainly because the body is more representative of the prototype as it comes from the box. The running characteristics leave a bit to be desired, however, I am hoping to work on this problem some time in the future.

GETTING STARTED

As I mentioned, the Con-Cor body shell is not too bad right out of the box. Some work does have to be done, however, to make it representative of the BCR prototype.

The first order of business is to remove the factory paint job. This is accomplished by a variety of methods; brake fluid, commercial paint removers, etc. Use whichever method is comfortable for you. If you are using brake fluid, do not let the shell stay too long in the fluid. I have found that the type of plastic Con-Cor uses deteriorates badly if left in the fluid too long. Once deterioration begins, the shell is virtually useless. If your fluid is relatively fresh, the shell should not need to be in the fluid more than 30 minutes. At the end of that time, remove the shell from the fluid and check the paint. If it is starting to ripple and peel off, take it out and remove the rest of the paint with an old tooth brush under hot running water. If there is no sign of rippling or peeling, put the shell back into the fluid and check it every five to ten minutes. When all the paint has been removed, leave the shell in warm running water for about 15 minutes to fully neutralize all of the fluid. Let the shell dry and you are ready to start work.

Some cosmetic changes have to be made to the shell to improve its basic appearance. Remove the handrails on both sides and from the end porches. This will require the use of an X-ACTO knife to get under the plastic strips. Gently pry these strips off being careful not to put

too much pressure on them or they will break. There are four holes in the shell that accept clips on the chassis to hold the shell on. These are filled using either epoxy or automobile body filler (Bondo). I prefer Bondo because it is easier to sand smooth. The clips on the chassis should also be filed down at this time.

On the front of the shell, along both sides of the porch, you will notice a slight indentation just ahead of the step up to the cab (Figure 1). Fabricate a filler for this from 0.020" styrene to fit flush with the sill. Using the same thickness of styrene, attach step frame extensions on the four steps as shown in Figure 2. In order to get the correct shape on these extensions, the lower portion of each one should be lightly filed with a small round file. These extensions seem to be common to the B.C. Railway. I have not seen them on other Canadian roads.

LIGHTS

All headlights on the BCR engines are mounted on the short hood. The factory installed light on the Con-Cor shell should be removed and the holes filled with Bondo and sanded smooth. After filing a small flat notch in the short hood, install the headlight casting (see parts list) using one of the CA adhesives. The cast-on tail light should be removed, the holes filled with Bondo and sanded, and the Eric tail light casting installed. After the CA has thoroughly dried, drill holes in the castings using a #75 drill bit. These holes will be used to insert fiber optics to obtain working lights.

HANDRAILS AND GRABIRONS

The handrails for this project were constructed using the technique described by Pete Thomas in the January-February 1990 issue of N-SCALE Magazine. This method produces the best looking handrails I've seen for N-Scale. The procedure is fairly involved and some modelers may not want to tackle it. Therefore, I will not describe the method here. Those who are interested in trying it may read Pete's article for more information. The plastic sideframe portion of the stock handrail is used to attach the new handrails. Therefore, the stanchions and the rails will have to be removed using an X-ACTO knife and sandpaper. The handrails on each end can be discarded. These will be completely re-manufactured.

I removed the cast-on grabs with a chisel X-ACTO blade and sanded the area smooth. Using a pre-drilled "jig" with the correct hole spacing, drill holes for the new grabs using a #80 drill bit. Shape the new grabs from 0.008" brass wire. Following painting and the application of decals, install them into the holes using AC adhesive.

PILOTS & COUPLERS

In order to obtain a more realistic appearance, I elected to fabricate complete front and rear pilots for this locomotive. This involved removing the truck-mounted couplers and installing body mounts. The couplers I used are Kadee #1156. Kadee #1015/1016's will work just as well and and are less expensive. This installation requires gluing styrene shims to the body shell in order to get the new coupler to the proper height. I glued two pieces of 0.020" styrene together and kept sanding this "block" down and checking the height with a coupler height gauge until the height was correct. The 1015/1016 comes with couplers of two different lengths. Be sure to use the longer shank coupler on the front to leave room for the snowplow.

After the couplers are installed, cut a piece of 0.010" styrene roughly the shape of the end of the shell. Also, cut a hole in the styrene the exact shape of the coupler box. Slip the piece of styrene over the coupler and up against the shell end. Using a small flat file, file the styrene to the shape of the shell end. When this is finished, glue the piece to the end of the shell. This will form the new pilot. Details can now be added to the pilots. To the front pilot, add ditch lights (drill holes as in the headlights) and coupler lift bars. Do not add the snowplow at this time.

DITCH LIGHTS

The real challenging part of this project was installing working ditch lights. It all started when my brother, an avid HO modeler, told me it was impossible to achieve that level of detail in N-Scale. Well, that was the proverbial "red flag". After some careful study, I figured a way it could be done using fiber optics.

Figure 3 shows how the fiber optics are routed along the shell to the light source at the rear. All the lights on this locomotive use 0.020" fiber optics that are "fed" from a single 1.5 volt light bulb. Small pieces of styrene tubing are used to hold the fiber optics in place. The only down side of this addition is the loss of the large lead weight that normally fits in the rear of the shell. However, since the units rarely run alone, this should not present a major problem.

It is important in this installation that all of the fiber optics terminate at the same point - just ahead of the light bulb. If they are of different lengths, the lights will show at different brilliances. The light bulb is held in an enclosure made from a piece of styrene tubing or something similar. This enclosure is fastened to the shell with epoxy.

In order to allow room for the fiber optics between the shell and the chassis, some grinding of the chassis is required. As shown in Figure 4, some metal has to be removed on either side of the front of the chassis. This should be done using the small round grinding bit that comes with the Dremel tool kit. Be sure to wear eye protection when using the grinder. Remove only enough metal to allow free passage of the fiber optics. A small notch in the plastic retainer on the gear tower must also be made to accommodate the headlight fiber optics.

Install a fiber optic by first feeding it through the light casting and through each of the styrene retainers until it reaches the light bulb. Mark the place to cut the fiber optic, remove it and cut it on a flat surface using a sharp X-ACTO blade. Slightly flare one end by placing it next to a heat source such as a match or hot soldering gun. Be careful not to get it too hot or it will melt. It should be flared only large enough to just fit inside of the light casting. Re-install the fiber optic and repeat the procedure until all the fiber optics are installed. Now place a 1.5 volt light bulb into the holder, hook it up to a battery or other power source, and rotate it in the holder while observing the fiber optics. Note the position of the light where it produces the greatest brilliance and glue it in place using something like RTV or silicone bath tub sealer. This will allow for easy replacement when the bulb burns out. The light bulb should then be connected to a constant brilliance circuit that can be installed utilizing the existing circuit board in the front of the locomotive.

CHASSIS & TRUCKS

A few things can be done to the chassis and trucks to improve the overall appearance. First, fill the crack between the plastic and metal portions of the fuel tank with Bondo and sand smooth. This by itself makes a world of difference. I removed the cast-on air reservoirs with a Dremel tool and replaced them with ones fabricated from 1/16" styrene rod. I also added fuel filler pipes and fuel level site gauges that were fabricated from styrene and glued on with AC adhesive.

The truck side frames were improved by filing off the square corners to more resemble a prototype Dofasco truck frame. I then added air brake piping by forming a piece of 0.008" brass wire to the proper shape and gluing it into holes (#80 bit) drilled in the brake pots on each end of the frame. Next, I added sand tubes made from 0.010" brass wire to the rear of each side of the truck frame. Due to clearance problems, sand tubes cannot be installed on the fronts of the frames. This was a bit tricky and required many tries and a lot of AC glue but the results are worth the effort.

FINAL DETAILS

Prior to painting, some finishing touches should by added to complete the detailing. These include cab sunshades, air horns, lift rings (both on each pilot and on the top of the long hood), bell, and holes (#80) drilled above the number boards on the cab and the long hood to accept the classification lights made from fiber optics. (Note: These lights are not functional. A spot of paint is applied to one end of the fiber optic which is then inserted in the drilled hole).

PAINTING

First, apply a primer coat to the shell using Floquil reefer gray. Let this dry thoroughly. The colors for this paint scheme are made according to the formulas supplied by Greg M. Kennelly in the Bulletin Board (June/July, 1973), Seventh Division, PNR, NMRA. These are also listed in Issue #3 of The Cariboo. (Note: If you do not wish to mix the prototype colors, a reasonable match can be had using Floquil Weyerhauser Green for the dark green and Coach Green for the light green).

Following the primer coat, apply the light green. When this has dried thoroughly, mask the shell using the template in Figure 5. Now apply the dark green. Let this dry for about ten minutes and then carefully remove the masking tape. This will reduce the possibility of an obvious ridge between the two colors of green. While the shell is drying, the handrails and snowplow can be painted yellow. After the shell has dried, carefully mask off the pilot area and paint both pilots yellow. Also, yellow should be applied to the outer edges of the steps and the frame extensions adjacent to the steps. After the pilots have dried, the plow and the handrails can be installed using AC adhesive.

The chassis and truck sideframes should be painted with Engine Black. These should be disassembled to avoid getting any paint on the motor assembly or the electrical pick-up areas of the wheels.

DECALS

The decals for this project came from a number of sources. Currently, there is no set available to letter a complete locomotive for the British Columbia Railway in N-Scale. I am told that there is work underway to eliminate this problem. For now, however, you will have to use whatever is available in your "junk box" to do the entire project.

For the stripes on each end of the unit and along the sides, I used Walthers set D-450W. This set is readily available from Walthers at last report. The 1/64in. stripes are used to separate the two shades of green along the sides and the 1/16in. stripes are used for the ends. A very close match for the engine numbers can be made using CDS set N-212 for the cab numbers and CDS set N-297 for the number boards on the hood ends. The logo and lettering on the cab sides is from Walthers set #284. This set is no longer available.

After installing the decals, I lightly weathered the unit using an airbrush and Poly-S Earth. I then sprayed the entire unit with flat finish to hide the decal film and seal the weathering.

CONCLUSION

I found this project to be very rewarding not only to produce a close replica of the prototype, but also to extend the limits of detailing that is possible in N-Scale. Granted, not everyone will want to carry detailing to the extreme I have shown here, but it does show what is possible. By the way, I haven't heard a word from my brother since I showed him the finished product.

Douglas A. Davies
February, 1991

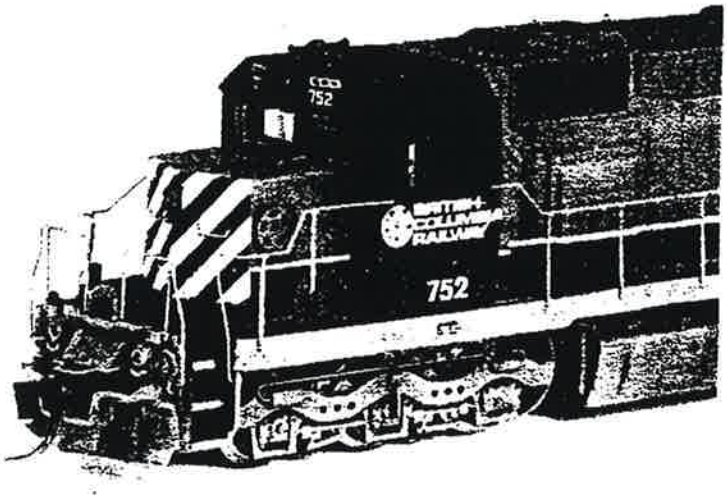


Figure 1

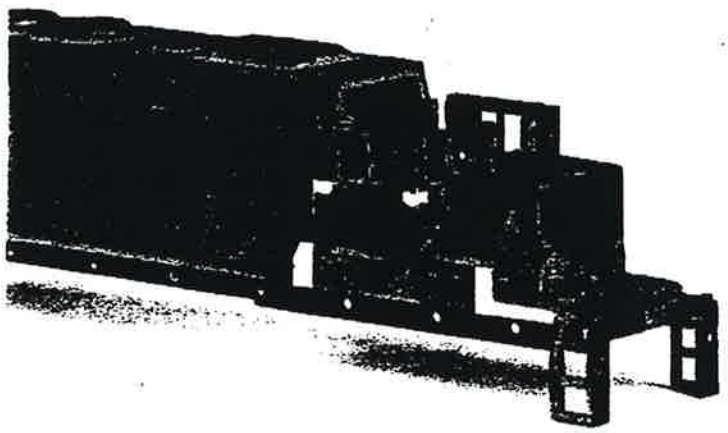


Figure 2

Figure 3

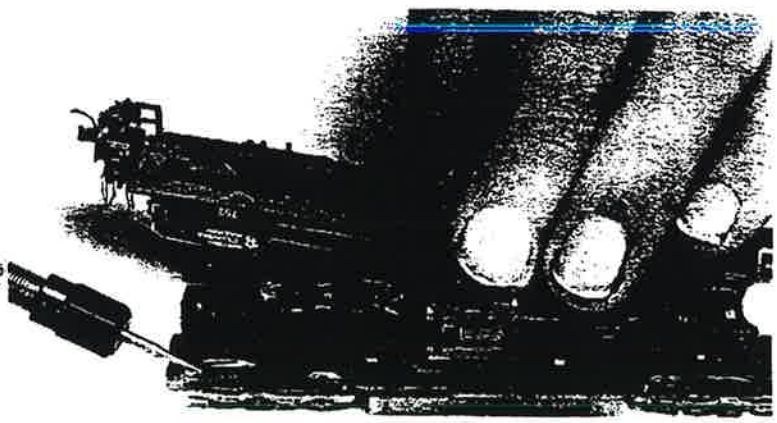


Figure 4

MASKING TEMPLATE

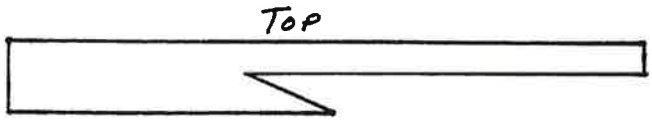
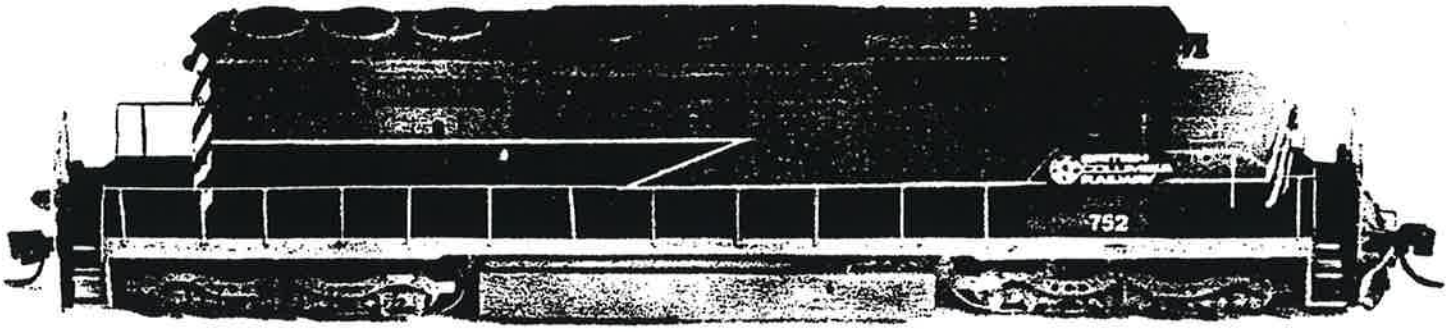


Figure 5



PARTS LIST

DROP STEPS	DETAIL ASSOCIATES	PART NO. 8206
M.U. HOSES	FINAL TOUCH KIT	
COUPLERS	KADEE	PART NO. 1156
CAB SUNSHADES	LOCO-MOTIVES	PART NO. 2010
SINCLAIR ANTENNA	MINIATURES BY ERIC	PART NO. NA-1
BRAKE WHEEL	MINIATURES BY ERIC	PART NO. NB-5
M.U. STAND-LONG (ENGINE FRONT)	MINIATURES BY ERIC	PART NO. NS-5
HEADLIGHT/ TAIL LIGHT	MINIATURES BY ERIC	PART NO. NL-1
M.U. STAND-SHORT (ENGINE REAR)	MINIATURES BY ERIC	PART NO. NS-4
HORN	MINIATURES BY ERIC	PART NO. NH-11
SNOWPLOW	MINIATURES BY ERIC	PART NO. NP-5
BELL	MINIATURES BY ERIC	PART NO. NB-3
DITCH LIGHTS/ LIFT RINGS	MINIATURES BY ERIC	PART NO. NL-2
COUPLER LIFT BARS	SCRATCH BUILT	
FUEL FILLERS & GAUGES	SCRATCH BUILT	
AIR TANKS	SCRATCH BUILT	
BRAKE PIPING	SEE TEXT	
HANDRAILS & GRABS	SEE TEXT	

HO SCALE PRODUCT LIST FOR ON-LINE PGE/BCR INDUSTRIES

Richard Yaremko

When watching a BCR freight roll by, or while viewing pictures or slides of BCR freight cars, you observe tell-tale signs of many of the on-line industries served. Forest product companies, whose fortunes' rise and fall with the North American housing market, dominate. Their colourful marque's are found on lumber wraps or on the sides of leased freight cars. While the PGE/BCR modeler has to be innovative in his efforts to replicate locomotives and rolling stock, many of the products of BCR on-line industries are available to us in model form. Their appearance in our trains helps us achieve the prototypical look we've often observed.

Jaeger Wrapped Lumber Loads:

1. Lumber Pak Kits for 40' or 50' standard or bulkhead flats

#1200	West Fraser	#1700	Keystone	#1900	Weldwood

2. Lumber Pak Kits for 60' bulkhead flats

#4100	Canfor	#4800	Northwood
#4200	Carrier Western Spruce	#5900	Slocan

3. Lumber Pak Kits for centerbeam cars

#7300	Rustad Bros.	#7600	Jacobson Bros.

Herald King/Miller Advertizing decals:

PR-17	Triangle Pacific	(50' boxcar)
PR-34	Mountain Pine Timber Ltd	(50' boxcar)
PR-82	Canadian Forest Products	(Thrall All-Door boxcar)
PR-84	Netherlands Overseas Mills	(Thrall All-Door boxcar)
PR-109	Louisiana Pacific	(52' boxcar)
PR-117	Canadian Forest Products	(50' boxcar)

CDS Lettering dry transfers:

167	Finlay Premium	(40' boxcar)

Champion Decals:

HT-240	Hooker Chemical	(tank car)

All of the above listed companies have mills are located along the BC Rail system. I have not purchased all of the Jaeger lumber wraps listed. However, those I have bought provide fine detail when assembled and banded together in prototypical fashion. I have begun collecting photographic prints of some of these lumber wraps, and I would like to correspond with other modelers who may also have a similar interest.

WAYBILLS

Dave Barone (POB 891, Lombard, IL 60148) has two Overland Models HO scale BCR SD40-2 engines for sale. Both units are painted in the two tone green, as delivered color scheme. Asking price is $345US/engine or $625US for the pair.

DECAL UPDATE

We have learned that Herald King set PR-34 (Mountain Pine Lumber Company) is no longer in production. (See "Car Shop", issue 3).

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Doug Davies reports that the Walthers N scale sets listed in issue one were discontinued in 1986. Doug is interested in learning if any Procor decals are available in N scale.

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Dave Barone (POB 891, Lombard, IL 60148) has produced a decal set for all versions of the BCR center beam flat cars. Included is dimensional data along with accurate warning labels. Pricing is $5US/set.

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PGE/BCR LEASED MOTIVE POWER (Part 3)

Paul J. Smith

Lessor	Road #	Model	From	To
Canadian National	1368	SW1200	1.68	2.68
	2017	C630M	6.80	8.80
	2021	C630M	6.80	10.80
	2025	C630M	7.80	10.80
	2026	C630M	8.80	8.80
	2028	C630M	7.80	10.80
	2036	C630M	6.80	10.80
	2037	C630M	6.80	10.80
	2041	C630M	7.80	10.80
	3200	C424	4.77	10.77
	3202	C424	4.77	9.77
	3203	C424	4.77	8.77
	3205	C424	4.77	10.77
	3208	C424	4.77	8.77
	3209	C424	6.79	?
	3211	C424	6.78	9.78
	3212	C424	6.78	9.78
	3213	C424	6.78	9.78
	3214	C424	5.79	10.80
	3216	C424	6.79	.79
	3218	C424	4.77	8.77
			5.80	10.80
			10.80	?
	3219	C424	4.77	9.77
	3222	C424	4.77	9.77
	3224	C424	4.77	10.77
	3229	C424	?	?
	3232	C424	6.79	?
	3235	C424	5.80	8.80
	3236	C424	5.80	10.80
	3237	C424	6.79	.79
	3239	C424	5.79	10.80
	3240	C424	5.80	9.80
	4234	GP9	4.71	?
	4401	GP9	9.71	10.71
	4402	GP9	5.71	10.71
	4403	GP9	5.71	8.71
	4404	GP9	5.71	10.71
	5087	SD40	3.80	4.80
	5088	SD40	5.80	6.80
	5089	SD40	5.80	6.80
	5092	SD40	3.80	4.80
	5093	SD40	5.80	6.80
	5094	SD40	2.76	?
	5098	SD40	4.80	5.80
	5102	SD40	5.80	7.80
	5103	SD40	4.80	7.80
	5107	SD40	7.80	7.80
	5109	SD40	7.80	7.80

CAR SHOP

Carter Cram (3145 Valentine Lane, Redding, CA 96001) is interested in receiving information on the numbering scheme for BCR cabooses. Specifically, what is the breakdown for the newly released Overland Models #1289 and #1290
(which feature two different roof styles.)

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Jim Moore (27 Dwight Avenue, Hillcrest, NY 10977-3104) would like to correspond with any reader who may have access to either drawings or photos of PGE/BCR open top hoppers.

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Grant Ferguson (3695 Sunset Blvd, N. Vancouver, BC V7R 3Y3) is soliciting any photos, drawings, plans, etc. for use in conjunction with the WCRA's restoration of PGE troop car #722.

PGE/BCR RESOURCES

Compiled by Richard Yaremko & Jim Moore

Books

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"Patterns of Growth" Published to commemorate opening of the Fort Nelson extension.
"Profile of a Modern Railroad", August 1968.
"Remembering", 1987. Published to commemorate 50th anniversary.

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"A Century of Deluxe Passenger Cars In Canada", Wayner Publications.
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"The Pacific Great Eastern", v.2, Timothy J. Horton, 1986.
"PGE: Railway to the North", Bruce Ramsey, 1962.
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"ALCO C630", Mainline Modeler, August 1989.
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"Building Lumber Loads", Railroad Model Craftsman, August 1988.
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"CP Rail & BC Rail Skeleton Log Cars", Model Railroading, May 1990.
"CP Rail's Bathtub Gondolas", Railroad Model Craftsman, November 1990.
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"DW&P/CN Fifty-Two Foot Bulkhead Flats", Railroad Model Craftsman, October 1990.
"Four Twenty-Five", CTC Board, July 1990.
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"GE Dash 8-40CW", Railroad Model Craftsman, January 1991

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"The North End", Pacific Rail News, June 1989.
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"Riding BC Rail's Budds", Railfan & Railroad, September 1988.
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"Smooth Canadian", Railroad Model Craftsman, August & September 1986.
"3 Budds, 7 Days, 2446 Miles", Trains, February 1988.
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The authors welcome any additions to this source listing.

MOTIVE POWER NOTES

Reports of the new Dash 8-40CMs not performing as expected are unfounded. The reason that the planned three units per train are being augmented with an SD40-2 or some other power is to increase the tonnage of the trains. The Dash 8s are actually pulling about 20% more than the SD40-2 lash-ups. (Paul J. Smith)

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The Lillooet-Squamish wayfreight is the best bet for Alco/MLW power on the head-end these days south of Lillooet.

***

Several BCR SD40-2s (760 series) as still operating as the middle unit within three-unit sets of power on CN. (3 above items, WCRA "News")

***

Canfor locomotive #2 (see issue 3, pg 1) was at North Vancouver shops awaiting shipment to Prince George. Diesel is bound for Prince George Railway Museum. (Paul J. Smith)

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In addition to having SD40-2s in the 760 series out and operating on CN within British Columbia, BCR SD40-2s #747 and 750 are on lease to CP Rail. These units are currently operating out of Winnipeg. (WCRA "News")

***

BCR #502 (S-13) has been leased to Eurocan Pulp & Paper in Kitimat. This is believed to be the last unit of it's kind on the BCR roster. (Bytown Railway Society "Branchline)

***

Dash 8 cab horns, which had previously been moved to the cab area, now have been relocated rearward again. The provincial regulation, which required a higher decibel level than the rest of Canada, has been amended to conform with the rest of the country.

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The RS18 rebuild program continues. The project includes the installation of a new Caterpillar diesel power package. The prototype unit (#609), has been joined by #617 and ##623.

***

All of the BCR robot cars (used for mid-train power) have been sold or retired. Retired were RCC 1, RCC 1 (second #1, ex RCC 10), RCC 3 & 4, RCC 6 & 9. RCC 2 was sold to the Engines Preservation Society in 1988. RCC 5 (actually BN RCU 106), along with RCC 7 & 8, was sold to CP Rail in 1987. (3 items via P.J. Smith)

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RAILWEST MANUFACTURING COMPANY

Railwest Manufacturing is a division of BC Rail, which is wholly owned by the Province of British Columbia. RMC is the only railcar builder west of Ontario, and currently employs more than 250 people.

The RMC facility is situated on an eighty-three acre site in Squamish. The main fabrication shop, completed in March, 1975, is 800 feet long and 100 feet wide. A steel storage yard, equipped with a crane, is adjacent to the north end of the shop.

Inside the main shop are two 20 ton cranes, five 5 ton cranes, and two 3 ton cranes. The shop is serviced by three railways tracks, all running the length of the building.

The plant was designed to build 3-6 cars per day, with a total output of 1000 annually. Built with expansion in mind, production capacity can be doubled if needed.

Located adjacent to the main facility is a 480' long/40' wide paint shop. Served by two tracks running the building's length, total plant trackage is over two miles.

The paint shop is a five-bay operation, including an eighteen foot high spray booth.

Railwest's administrative offices are located adjacent to the main plant site.

Source: BC Rail brochure dating from the mid 1970s.
Note: The Railwest Manufacturing Company has since evolved into BC Rail's Squamish carshops.

WANTED: color slides of BCR rolling stock. Carter Cram, 3145 Valentine Lane, Redding, California 96001.

WANTED: color slides and prints of PGE freight cars. Dave Barone, POB 891, Lombard, IL 60148.

PAINTING AND LOADING A BC RAIL CENTER BEAM FLAT CAR

David Barone

If you are modeling the period of the late 1960s to the present, you probably have purchased at least one of the lumber kits produced by Don Jaeger. His company, Jaeger Products, specializes in HO scale flat car loads featuring the wrapped variety of building materials.

In PGE days, most finished lumber was transported from the mill to customers in box cars. This system offered a great level of protection from the elements, but loading/unloading was both difficult and time consuming. Flat cars were also used, but their lumber load were not wrapped, and therefore traveled unprotected from the weather.

In an effort to reduce costs, mills began exploring more efficient ways to transport their products. Higher capacity flat cars began replacing the forth foot boxcar and first generation flat cars. Rolling stock with inside dimensions of 50', 52' and even 55' became increasing common. Loading of these cars could be accomplished by a single crew with a forklift in about half the time previously required. Additionally, a greater variety of lumber lengths could be accomodated.

The main disadvantage to open transportation of finish lumber is exposure to the elements. To solve this problem wood is wrapped in heavy plastic, which is secured to the underside of the load by staples. This wrapping is done inside the mill as the final step in the lumber's preparation. The wrapping process takes approximately forty-five seconds. Now protected, the lumber can be stored outside until it is ready to be shipped.

Initially, the wrapping was a plain white or black plastic. Now days, however, the wrappers are emblazoned with colorful logos advertising the brand name, and in many cases the location of the mill. These brightly colored loads add a lot to an otherwise very green BC Rail drag.

British Columbia modelers can rejoice at some of the new releases from Jaeger (see Richard Yaremko's related article this issue). It is now possible to model loads from several of the railroad's biggest shippers.

I recently purchased one of Overland Models 73' center beam flats to use as a pattern car in the production of a scratch-built fleet. The OM car is a good match to a car in the BCIT 873000-873099 series. These cars were built by Thrall in early 1988, and are the forerunner to the group purchased from Korea in 1989.

I made a few small modifications to the car including the addition of a small .005 plate on which the lube plate is mounted. This plate is 12' x 20' and centered between the fifth and sixth ratchet from the "A" end (non-brake wheel end) of the car. I also added the brake rigging for the handbrake to the underside. This is a minor detail, but it makes a big difference if the car is viewed from eyelevel.

While reviewing several slides of newly delivered center beam cars, I noticed that the forest green paint was a little brighter than that being applied by the line's Squamish shops. The paint mixture I came up with is 50% Scalecoat Southern Green aand 50% Scalecoat CNW Green. To this mixture I added 10-15 drops of NP Dark Green and 10 drops of BN Green. I airbrushed the entire car with this mixture, making sure to get into all the corners. I painted the trucks Scalecoat black. After painting, I bake all of my brass models at 175 degrees Fahrenheit for an hour to ensure a proper paint bond. If you have not done this before you will be amazed at how glossy and even textured the paint will be

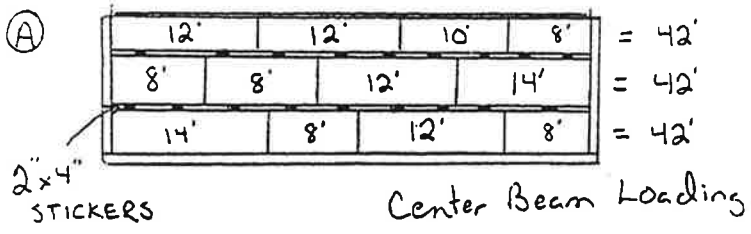
Center beam flats have what I believe is the best international warning symbols. The little figure running from a tipping car with his arms in the air is great. Fortunately, Microscale has produced a set of data for center beams that includes this symbol as well as most of the other relevant markings. The chief drawback to this set is that the warning logos are too small to be correct. I have also used a set of the new modern era decals from Andy W. Scale Models. (Nice job, Andy. The set is great!) I finished the car with an mixture of 80% Testors gloss coat/20% Testors dullcoat. I thinned this mixture 50% using Testors lacquer thinner. Light weathering finished off the model.

I made a removable load for the car using Jaeger's 4100 Canifor load. The car should be loaded using a variety of lumber lengths. The most common are 8', 10, 12' 14', and 16' foot lengths. Most of the time the lumber is stager-loaded to provide increased stability in transit (see drawing A). Once in a while, a customer will order an entire car load of the same length lumber. Recently, one of the lumber dealers in my area received a 73' footer of eight foot 2" x 4" loaded three stacks high and nine across on both sides. The lumber was wrapped with plain white plastic--no mill markings. (See Mainline Modeler, February 1991 for an informative article on prototypical loading of flat cars.)

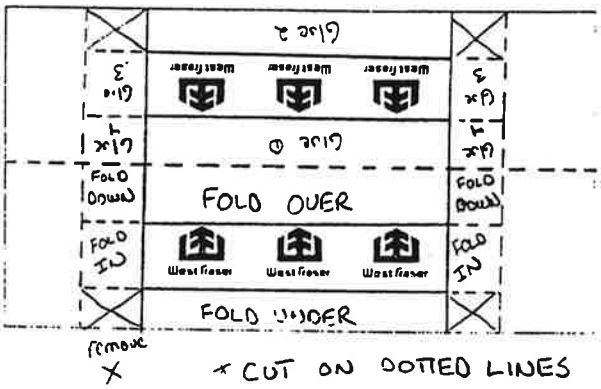
When I make my loads I speed up the wrapping process by modifying the wrapper (see drawing "B"). When you assemble and glue the load together, you do not see the back half of the load. So why wrap it? The only fully wrapped blocks are those on the top row, or the ones located on the ends of an open-ended flat car. By using my method you save time and almost double the number of loads you can make from each kit. I make the modified core from strip pine or balsa wood cut to the proper 8' to 12' length.

Each layer should be separated by a "2 x 4" "sticker" located approximately four feet on center across the entire car. On my loads these are glued in place between the layers. I plan to operate my layout as close to the prototype as possible including the movement of empty cars to mills for loading. To accomplish this, I came up with the following method to make the loads removable. At each ratchet location I used a .010' piece of wire glued to the side of the load aand bent towards the car's center beam tie-down location (see drawing "C"). I also used a small piece of bent plastic to represent the tie-down plate. I painted these cables grimy black and highlight them with a little rust. When the load is in place on the car, the wires extend down into the ratchets and help hold the load in place. If you choose to permanently secure the load to the car, a heavy thread could b used to represent the tie-down cable.

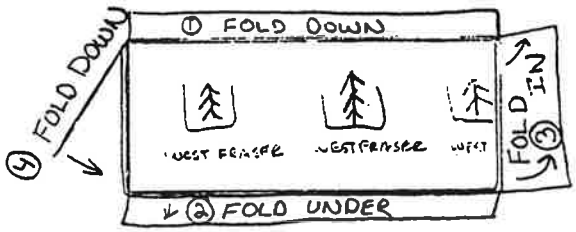
In the future I hope to present an article detailing the scratchbuilding of the Korean kit-cars (which differ slightly from the Thrall-built units). If my article has raised any questions, I would love to hear from you. Please drop me a not at POB 891, Lombard, IL 60181 USA.

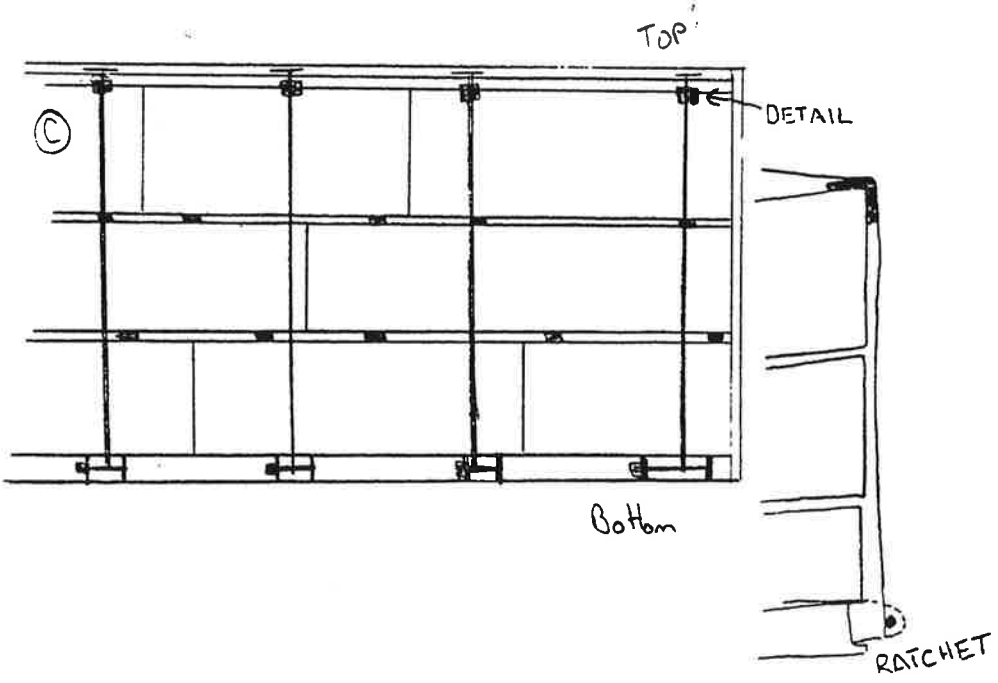


(B)

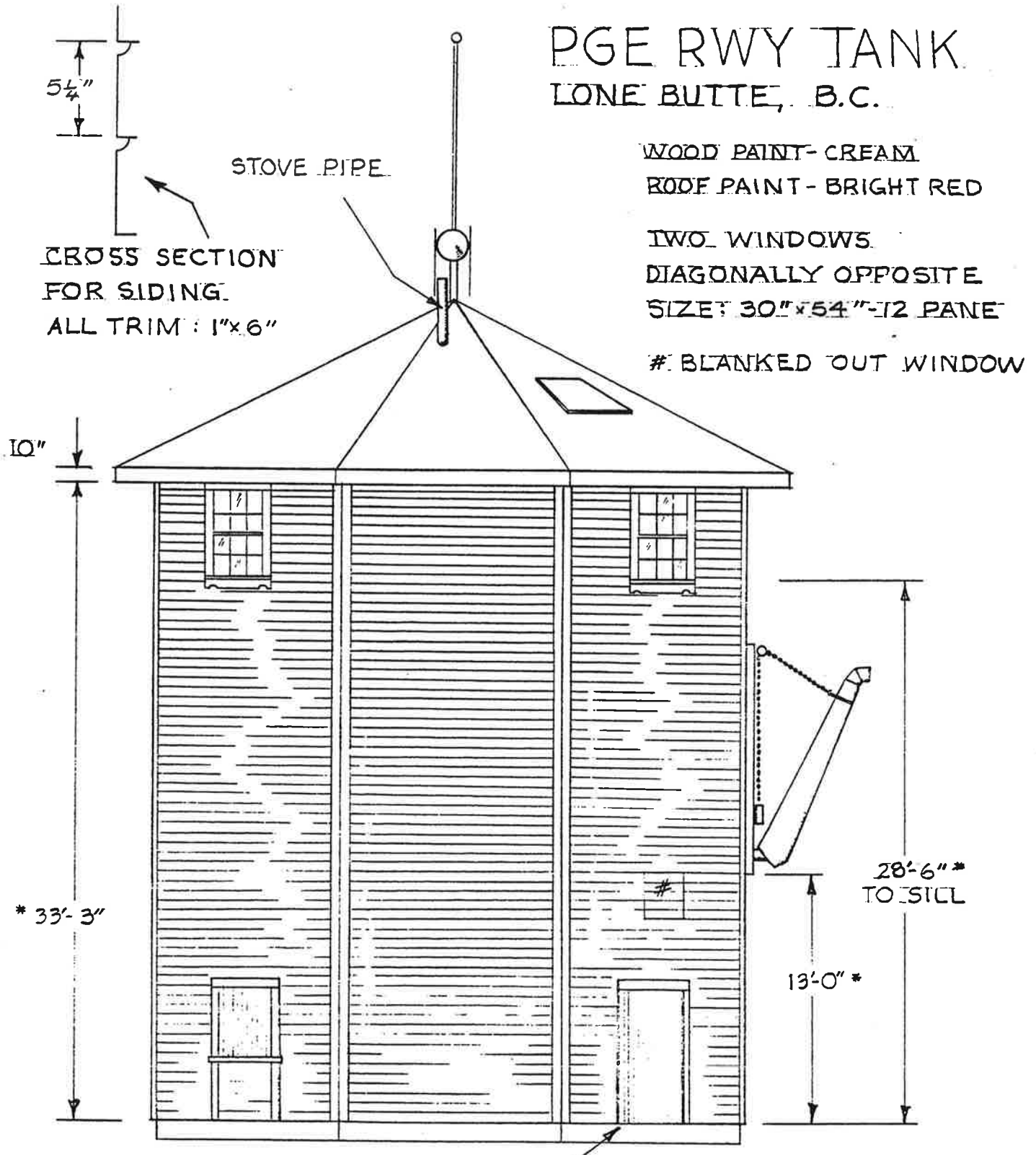


* CUT ON DOTTED LINES
* FOLD ON SOLID LINES
* GLUE AT NOTED LOCATIONS





PGE RWY TANK
LONE BUTTE, B.C.



SIDES OF OCTAGON : 11'-6" (11'-8" OVER TRIM)

* ESTIMATED MEASUREMENTS BY BOARD COUNT

FIELD MEASUREMENTS SEPT, 1975

SKETCH BY GREG M. KENNELLY MAY, 1981

Drawn for "The Cariboo" by Carter Cram.
Based on a sketch by Greg M. Kennelly.

Product Review: CANADA SAFEWAY Truck & Trailer

Richard Yaremko

Throughout the 1980s, the BCR has been moving Safeway trailers on "pig flats" from it's North Vancouver yard to unloading ramps in Williams Lake, Quesnel, and Prince George. From these BCR terminals, the trailers are delivered to nearby Safeway stores. This continuous restocking activity is a daily feature using as many as two trailers for each location. So it is not uncommon to see up to six units on a prototypical operation.

PROMOTEX offers the Herpa Freightliner tractor and standard forty foot trailer in accurate Canada Safeway paint and lettering. Even the wheels are correctly painted red! The trailer has the nice addition of the refrigeration unit.

The trailer itself is generic in design, and does not appear to represent any of the more common builders such as Can-Car, Freuhauf, or Trailmobile. The model is accurately dimensioned, and it's appearance is acceptable right out of the box. I, however, chose to make the following modifications:

--replace the refrigeration unit fuel tank with a Mile Post 501 tank

--add Mile Post 501 mudflaps

--add correct spare tire carrier

--add dolly handcrank

--add airbrake lines

--add rear step

Most of these modifications can be made to the underframe, which is removable. This was done to avoid damaging the unit's paint scheme.

The tractor chosen is a mid 70s era Freightliner cab-over, about the only accurate truck Herpa has produced in their North American truck line. All others, including the Kenworth, Peterbilt, and White; are very poor representations of the prototype.

PROMOTEX imports are not readily available outside of Canada. Non-Canadian readers may contact they at: POB 219, Altona, Manitoba R0G 0B0.

The cost of my model was $13.95 at the local hobby shop. At least one train store in each of the major Canadian cities carries the PROMOTEX line. The model was released in December 1990.

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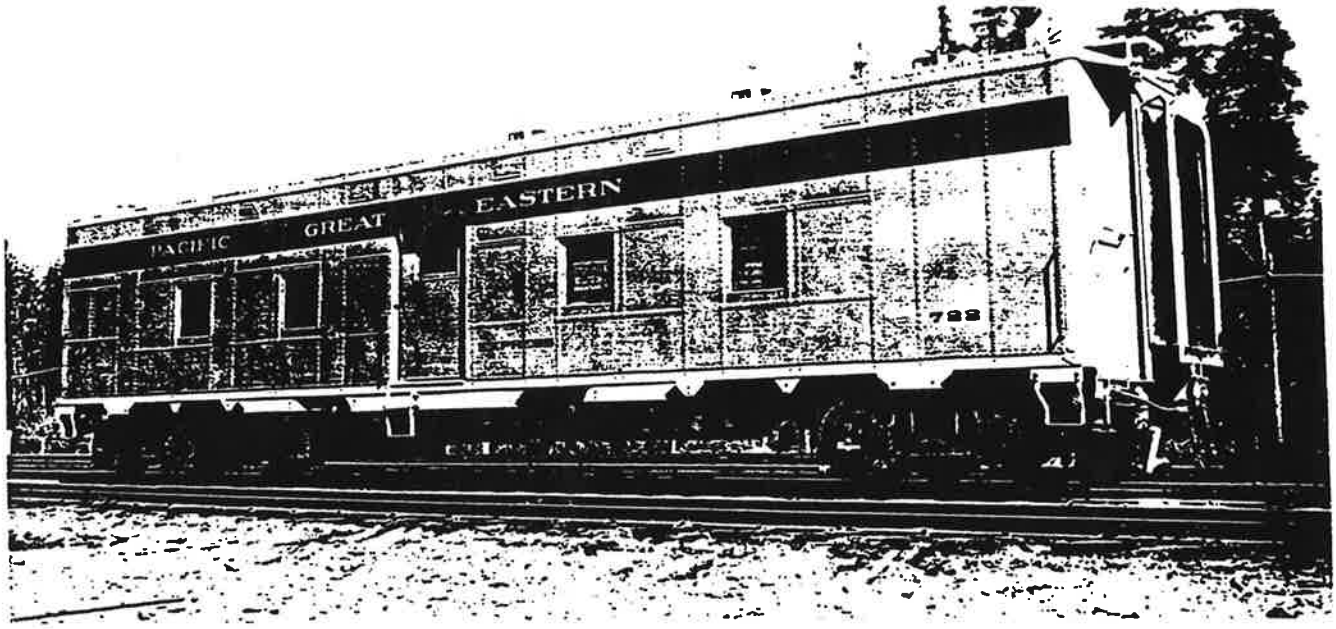
WCRA Collection Corner

Grant Ferguson

Radiant in PGE orange, green and light grey, the freshly outshopped #722 bears it's second PGE paint scheme. After it's purchase from the US Army in 1949, #722 wore the traditional tuscan red livery with imitation gold lettering. Built by Pullman as an express car for wartime troop train service, #722's thirty seven and one-half tons rode on "Allied" trucks. The car held baggage and express assignments on PGE until 1962 when it was demoted to work service and renumbered X231. A subsequent renumbering in 1964 changed it to 990231. The car was retained on the PGE roster until June, 1989, when it was purchased by the WCRA for it's collection. WCRA #722 is awaiting restoration at Squamish.

Number 722 will need some restoration work to bring it back from it's current state to that shown in the photo below. Minor metal work is needed, as well as replacement of the diaphragms, window sash, interior sheathing and flooring. The steam lines and other passenger related equipment were removed in 1952 and, at the same time, it received a pair of Bettendorf trucks. A pair of the original style trucks still exist on another ex-troop sleeper currently in plow service, and the WCRA is attempting to secure them for #722. The crowning touch, of course, will be to paint it into the original PGE orange and green.

Source: "WCRA News".
Photo: Peter Cox Collection.



BC RAIL ASKED TO LOWER CHARGES

BC Rail, along with Canadian National Railways, is being asked to forgo about $45 million* in freight charges as part of Quintette Coal Ltd.'s rescue plan. Quintette's proposal comes on top of it's earlier request that the railways forgive the troubled northeast coal producer $2.4 million in debt. Quintette has filed a request seeking a two month extension to it's period of protection from creditors.

The railway's "take-or-pay" contracts call for payment for transporting 6.5 million tonnes of coal from Tumbler Ridge to Prince Rupert annually (whether or not Quintette provides that much coal).

BC Rail, which could stand to lose about $11 million under the plan, supported the extension request.

BC Rail earned about $30 million in the first nine months of last year, down from $50 million for the same period in 1989.

Quintette is asking the rail companies to reduce freight rates to $17.40/tonne from the current $24.52/tonne. In addition, the reorganization plan calls for the elimination of the "take-or-pay" obligations.

The Quintette reorganization is the company's attempt to cope with a $750 million debt. Quintette is half-owned by Denison Mines of Toronto. Other owners include Japanese steel mills.

* all dollar figures are in Canadian currency

Source: Globe & Mail, via Richard Yaremko.