The CARIBOO

A Publication of the PGE/BCR Special Interest Group Society
(Formerly known as the BC Rail Historical and Technical Society)
ISSUE 39 Winter 2001

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Cover Photo

GE Dash-8 covered wagon 4616 leads a southbound freight over the highway 99 level grade crossing at MB85.1 on the Green River Hill on a sunny day in February, 2000.

The BC Rail system abounds with photo opportunities like this spectacular one by Mike Nyiri.

Send your favourite photo for consideration for use on a future cover.

The CARIBOO

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IN THE NEWS

WHISTLER Northwinds

A New Passenger Service on BC Rail

The Whistler Northwinds Passenger Service began May 6th and ran through October 3rd 2001.

Consists will vary somewhat but in general should include the following equipment.

Power was B39-8E #1700
(see issue #38)

Power car	1710
Kitchen car	1740
Diner car	1741
Dome car	1722
Dome car	1751
Dome car	1721

To prepare for the start up of this service, the railway has been operating a series of dry runs utilizing either the 1700 or the "Pacific Spirit" CRS-20 #601. The full train has been displayed in the Vancouver area several times and a number of test trains have been run in advance of the actual service start up date. One test train ran to Brunswick and back on March 20.

In addition, the train has been operated to various points between North Vancouver and Prince George to test the schedules, April 2 through April 6. The train ran all the way to Prince George only once during these test runs.

A full dress rehearsal trip was scheduled for April 22, 2001

MOTIVE POWER NEWS:

Lease units on BC Rail
HELM 6077, 6298, 6500, 6507, 6512, 6525, 7180, 3876 AND 3878.
Some leases due to end on 4/15

BCR units in Surrey!
April 1st saw BCR 4626 - HLCX 6298 and BCR 4650 delivering BCR traffic to BN at Brownsville. April 03 found BCR 4644 - 757 - HLCX 3876 - BCR 766 leading 23 grain loads out of CN's Thornton Yard at 5 pm.

Power Stored Serviceable:
742, BC10, BC11, 644, 646, 647.

Stored Waiting Disposal:
6001, 6002, 6004, 6005, 6006, 6003
STORED UNSERVICEABLE
641, 3602, BC14, BC12, 7489, 745, 748, 747.

Royal Hudson 2860:
It seems that the rumors about the Royal Hudson are indeed true and that work will begin to repair the superstar 4-6-4 following the completion of work on CPR 2816 in the North Vancouver Steam shop. While there is no firm timetable for repairs, Alan Dever of the BCR group of companies has indicated that the BC government has directed the railway to make plans for the refurbishing of the Royal Hudson.
ed. see issue 40 for an update on this

Mishap On Tumbler Sub:

April 7th TR3-06 hit a slide and derailed at mile 57.2 of the Tumbler Sub at 0445. Engines 4643-765-4642 derailed but remained upright. 17 cars also derailed. The line was quickly cleared and service restored.

CN E units return

The CN's Green E's were supposed to be on the railway April 13th through April 16th with a three day stopover at Mons (Whistler area). We were unable to confirm at press time whether or not the train and the E's actually arrived on the railway.

BCR Steam Special:

BC Rail was running a steam special called the "Cariboo Steam Excursion" April 25 through April 28.

Because the excursion to Kelly Lake was not sold out, the railway was making an interesting special offer. BC Rail offered a day trip for the 25th where for $119.00 you could ride the steam special to Whistler and then return on the Budd cars on train number 2 of the 25th. Lunch and dinner were included in the price.

CONTRIBUTIONS NEEDED!:

I've just taken over this column from Brad and admittedly, we were a little under the gun to put together information in time for issue 39. For #40 and beyond, I'd like to ask your help. If you have any news of BC Rail equipment, train movements or other items that the membership might find interesting, please forward your news to me. I will be assembling this column on a regular basis and will make sure that your contribution is noted and attributed to you.

In addition to news, I have always enjoyed seeing a list of consists that were spotted by fans and would like to make that a part of this column. So if you see an interesting lash up of units, drop me a line with the train, unit numbers and the location.

Please send news items to:

Brian A Elchlepp
Email - elclip@ix.netcom.com
Phone 425-823-7032

A Note from the Publisher

When I was asked by Brad Dunlop to publish *The Cariboo* for the then BCRHT&S I/we created a basic format for the layout of the magazine.

Due to the diversity of the membership I felt we should have one major article on three subjects in each issue. This would be in addition to the the various columns that are in each issue.

I felt that there should be a a major article relating to the prototype operation side of the railway, either current or historical. A second article would be of interest to modellers specifically. The third would be an article of general interest to both those members interested in the prototype or the modelling side of things.

I think we achieved our goal in the first four editions produced here in Winfield.

Issue 36 had the *Mackenzie Sub* article by Eric Johnson and the *BC Rail's Grain Car Fleet* by Andy Barber as the prototype material. *Kitbashing BCR's M-420s* MLW-locos as a modellers article. The article by Andy Barber on the convention City of *Prince George* as the special interest article.

continued on Pg. 24

BC Rail's Tumbler Ridge Subdivision

"The Electrifying Details"

by: J. Singh Biln

BC Rail's Tumbler Sub-division electrification project has been one of Canada's most exciting railway developments of the last century. Those who have been involved experienced the euphoria of being on the leading edge of technology in the early 1980's, the challenges of keeping electric locomotives operating in a formidable environment for nearly 20 years, and the sadness of seeing the curtailment of electric operations last year. Much has been written about the Tumbler Ridge operations elsewhere but in this article, the author will attempt to give some of the background and details that are generally not published or known to anyone other than those directly involved.

Over the years, many excellent articles on this project have appeared in trade journals and railfan magazines. For the benefit of those who have not been aware of the background, I will provide a brief summary of the project. In the early 1980's, the construction of the Tumbler Ridge branchline was part of a massive $2.5 billion Northeast Coal project to develop the infrastructure for movement of metallurgical coal from the eastern slope of the Rocky Mountains near Chetwynd to the port at Prince Rupert for shipment to Japan. The project involved construction of two new coal mines (Quintette and Bullmoose), building the town site at Tumbler Ridge, constructing the 82-mile spur from the mines to the BC Rail mainline at Tacheeda, upgrade of BCR's mainline from Tacheeda to Prince George, upgrading the 450-mile CN line from Prince George to Prince Rupert, and building the Ridley Island sea port.

The BCR spur included two long tunnels (4.5 mile and 6 mile) at the crest of the Rockies. The branchline was electrified at 50-kilovolt and operations commenced in November 1983, hauling 16 to 17 trains per week. Diesel locomotives were used initially and by the spring of 1984, electric locomotives took the trains to Tacheeda for hand-off to CN diesel locomotives for the trip to Ridley. Typical trains were about 100 cars long (100-ton capacity each), had two locomotives on the head end and two manned helpers to assist up the 1.5% controlling grade through one of the tunnels. Over the years, train operations were adjusted in response to declining coal shipments and electric operations ceased on October 1, 2000. Diesel locomotives are currently sustaining operations as coal volumes have diminished to approximately 2 trains per week.

Decision to Electrify

Construction of the project infrastructure was well on the way when the decision to electrify the line was made on May 7, 1982. This decision was very site and time specific in that the location and circumstances favored electric locomotives over diesel units. Major reasons for electrification were the avoidance of tunnel ventilation, the close proximity of the BC Hydro 230kV transmission line, the projected reduced cost of locomotive maintenance, and anticipated lower cost of electricity compared to diesel fuel. Also at that time, North America was reeling from the fuel shortage of the late 1970's and governments as well as industry, supported alternative fuel applications. BC Rail was able to take advantage of some government grants that provided funds to reduce dependence on fossil fuels.

> The challenges of running an electrified branchline in the midst of the Canadian Rockies

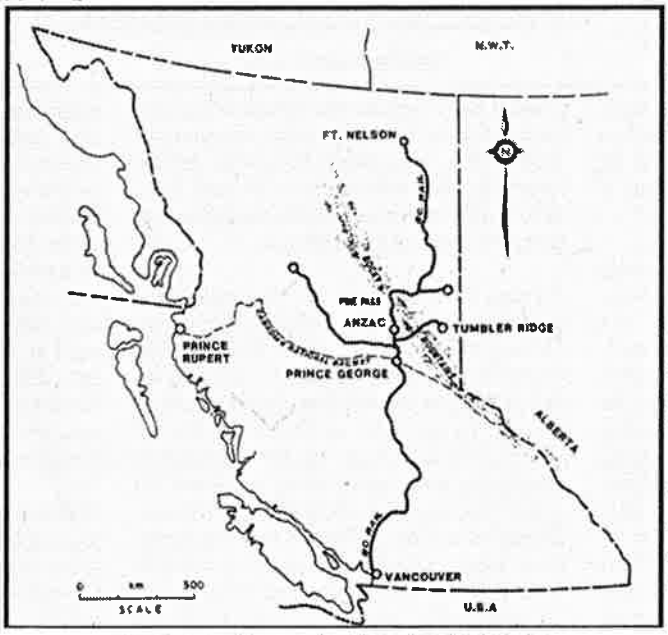
In terms of capital requirements, although electric locomotives cost more, the total cost for the fleet was about the same because fewer electric units would be required ($18m for 7 electrics versus $17m for 11 diesels). Cost of the catenary and substation ($31m) were substantially offset by the cost of tunnel ventilation ($21m) that would be required to provide fresh air for the crews and to keep the diesels from overheating or starving for air. The overall annual operating cost of an electric operation was projected to be about $2m lower than for diesels ($3m versus $5m) so that the additional up-front cost of electrification could be recouped in a few years. These costs were based on 6.5 million tonnes of coal annually and if tonnages increased as was predicted in the early 1980's, benefits of electric operation over diesels would increase.

Supply Voltage and Locomotives

During the early 1980's, the most common overhead catenary supply voltage for new electrification projects was 25-killovolt, 50/60 Hertz and only three railways had chosen 50-kilovolts (Black Mesa & Lake Powell, Deseret Western in the U.S. southeast, and Sishen-Saldanha line in South Africa). The higher voltage was selected for BC Rail's project because only one sub-station would be required to feed the Overhead Catenary System (OCS) and this substation could be located close to the BC Hydro 230-kilovolt primary feeder line near the Teck loadout at Mile 70. A series capacitor station was installed at Mile 42 to boost the voltage near the end of the line at Tacheeda but was not really required because voltage levels remained above the 35-kilovolt critical level required for proper locomotive operation. In addition, the sub-station would also supply any further extension of the line beyond Quintette to tap the potential coal reserves near the Alberta border. The 50-kilovolt design required increased clearances from energized components and although this increased costs somewhat, in general this voltage has worked well in terms of reliability and maintainability.

Both General Electric and General Motors Diesel Division (EMD) submitted propos-

als for the supply of the seven 6000-hp locomotives required for the operation. GE had supplied the 6000-hp E60C locomotive at 25- and 50-kilovolt to several railroads including Amtrak and GM had built two electric prototype units in the 1970's. Amtrak were disappointed with the performance of the E60C and awarded the next order to EMD and ASEA of Sweden to supply 47 model AEM7 locomotives. GM's proposal to BC Rail for the GF6C was based on ASEA supplying the high voltage and thyristor control components, and GM supplying the ancillary systems, traction motors, trucks, body and assembling the units. GM was awarded the order based on price and for having a superior sustained tractive effort achieved through their method of motor connection. This was a primary consideration for heavy pulling out of Teck up to the summit tunnels. Given the difficulties with the performance of the GF6C detailed below, one wonders how the E60C would have performed in this service.



Initial Trials and Tribulations

Following the decision to electrify and the commencement of train operations, BC Rail had approximately 17 months to complete all design, all construction and develop the necessary rules, guidelines, procedures for electric train operations. In this regard, the railway did well in providing the necessary training and information to all involved in order to ensure a safe efficient operation. Despite all the preparations, there were situations and unforeseen circumstances where things did not go as planned. Some of these issues were relatively minor, at times humorous, but other items caused great challenges to those involved in operations and maintenance.

As the overhead line is one path of the 50-kilovolt circuit, return current uses the rails, the ground, and a separate ground wire between the catenary poles (except in tunnels) for the return current. All equipment operating under the wire had to be modified with bonding wires to ensure that stray voltages could be present on the vehicle body. BC Rail's "Electrified Territory Operating Rules" specified that should a locomotive leave the rails, crews are to remain on board but if they need to vacate, they should jump clear and not touch the unit body and the ground at the same time. Understandably, the EMD test crew frequently encountered questions from the crews about urinating off the locomotives. Their tongue-in-cheek answer was "no problem but make sure it isn't a continuous stream". During the 18 years of electric locomotive operation, there was only one incident where anyone was in contact with energized equipment. A consultant inspecting the OCS in the tunnel contacted an energized conductor and was severely burned. There were a few near misses with speeders contacting dangling conductors but fortunately, no injuries occurred.

During the first few months of 1984, diesel locomotives were sustaining operations while the first electric locomotive was being commissioned and the remainder were being built. The locomotive service shop at Mile 71 was not complete and the units were being serviced outside at the Tumbler construction camp at Mile 60. The Mechanical Foreman Barry Thomas and his helper had been working long hours in extreme climate ensuring that coal operations were sustained. Trains were scheduled to allow adequate time for the tunnels to be purged of smoke so Barry was working around the clock as needed. Early one cold morning, he got a call to add water to a diesel using a fire hose from the camp site. Half asleep he commenced his duty and climbed on top of the locomotive to add the water. He had been crouching down dragging the hose

but when he stood up, he heard crackling behind his ears and felt his hair stand up. He had inadvertently climbed on top of the locomotive while it was parked under energized catenary. This was one situation where size mattered because at he is only 5' tall and was able to safely crouch down, climb down off the unit and thank God he was born short.

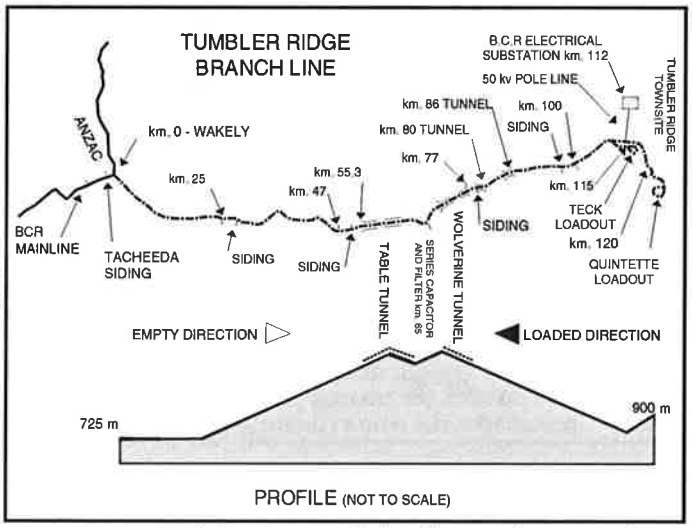
The author spent 4 months with the EMD/ASEA test crew on the test car putting the first unit #6001 through it's paces. Typically, the testing included dragging 3 diesel units that were in dynamic braking up a 1-mile test track on the controlling grade at Mile 54 back and forth under varying rail conditions. Some tests required oil to be applied to the rails to ensure adequate performance under severe rail conditions. One of the little known facts is that the nominal 6000-hp units (4500KW) were de-rated to 3800KW (5200-hp) after the test to reduce stresses on the drive train and traction motors.

Shortly after the test program and as other units were delivered, we encountered the first serious equipment failures. The roof-top potential transformer (PT) started exploding on some units throwing epoxy pieces hundreds of feet away and leaving a mess of fine wire on the roof-top insulators. The PT provides a reference signal to the locomotive control system telling that 50-kilovolt is available on the catenary and the locomotive main circuit breaker may be energized. While a new larger PT was ordered as replacement, all PT's were removed and the locomotive control circuitry was modified so that the main circuit breaker would be closed, and if no voltage was sensed, it would re-open.

As the decision to electrify was made after construction the coal load-outs commenced, the mines had to equip the locomotives with a system to lower pantographs through the loading silos (called green box) and also decided to control the locomotive remotely by a system (called black box). These systems were designed and built by a company in California that did not have any experience with electronic equipment operating in areas of high electromagnetic interference (EMI) such as with 50-kilovolt electric locomotives. With the locomotive off, the system functioned well but when energized, all sorts of phantom actions would occur. For example, when the lead pantograph would get a signal to lower when the unit passed a wayside photocell, the EMI from the arc created by the pantograph leaving the wire (charging current only as the locomotive would first shut down), would create a signal in the electronic circuitry telling the pantograph to raise again. After a year of modifications and testing, the systems were made operational but the mines decided to abandon the remote control operation because of the regulatory hurdles of operating an unmanned train.

Continued Equipment Problems

During 1985 and 1986, internal flashovers of the 50-kilovolts inside the main circuit breakers were resulting in long unit down times and high repair costs. Extensive testing and analysis revealed that the flashovers were occurring because of moisture, and hydrogen sulphide gases in the tunnels were condensing on the internal breaker surfaces and creating a conductive path with the fine coal dust. After about 15 failures, we developed the solution which involved improved filtration of the compressed air to operate the breakers, replacement of some internal nylon components with Teflon, and pressurizing the breaker internally to prevent entry of coal dust. After implementation of this modification, there were no further failures.



Perhaps the area of greatest frustration was the failures of the GM E88 traction motor. During cold weather with fine blowing snow, the locomotives would not pull up the grade and would bog down to about 2 mph. In addition to the frustration of taking 5 hours to go up the controlling grade, the slow trains took their toll on drive components such as traction motors. Extensive testing indicated that the problems were caused by lack of a suitable sand delivery when required to improve rail conditions, and by improper ground speed signals from the Doppler radar. After months of testing and analysis, these problems were overcome by specifying pure silica sand, by improving sand delivery, and by relocating the radar where the face plate could be kept clear of ice and snow. The toll on drive components however was heavy.

During the first year of operation, all traction motors were rebuilt to replace a weak bolt in the interpole coils that held the core laminations together. This was a long and costly rebuild that was successful but did not improve reliability. Soon after, the field coil connections started to burn off, resulting in another complete rebuild. Once again the fix was successful but other problem areas arose. The field coils started to cook and had to be replaced entirely. Recently, a fourth design of field coil was in the process of being implemented when electric operations ceased.

In addition to the electrical failures above, the greatest mechanical failures involved the pantographs. These are of an air-raised, spring-lowered type that are prone to misoperation if not aligned/adjusted properly, and during extreme cold temperatures. The pantograph head rested on rubber bumpers in the lowered position and during the first winter, it would freeze to these bumpers and not raise, and once freed, it would raise very slowly. These problems were cured by replacing the rubber with Teflon and using a lower temperature grease on all moving parts.

The operation of the pantograph at the Teck load-out was particularly wild in that the span of the silos where there is no overhead wire is greater than the distance spanned by the extreme pantographs on two units typically used to load coal. On approaching the silo at about 5 mph, the engineer lowers the pantographs at a sign that states "PANTS DOWN". The train coasts through, the pantograph on the lead unit is raised at the other end, and the train backed up to spot the first car for loading. If the pantograph is slow to lower because of weather or stiffness, it collides with the silo resulting in considerable downtime and cost to repair. A similar process was used at the locomotive shop to bring units into the shop but after some embarrassing incidents, we learned to test pantograph operation first and to open the doors at both ends of the 80-foot shop.

Instructions regarding which of the two pantographs to use on a locomotive were quite complex as using two adjacent pantographs could be cause excessive upward pressure on the contact wire. On each locomotive, the pantograph controls were electrically and pneumatically interlocked so that only one could raise at a time. During a switching operation at Tumbler, one veteran pusher engineer was convinced that he saw both pantographs of a nearby unit up simultaneously. I argued that this

was not possible but was getting nowhere until the Road Foreman (my late friend Gerald Hickey) took me aside and told me to tell the enginemen that I did indeed find the problem - it was a blown diode.

Well I tried the trick and it worked. He was satisfied with the explanation but always uses that example to illustrate that "some strange things can happen with the electrics-just ask Singh about the time that two pantographs went up at the same time".

Although there were very few derailments on the Tumbler sub-division, there were some unique mishaps that were equally dramatic. On two separate occasions, the roof-top high voltage equipment on the head end units were destroyed by collisions with the coal loading chute at Teck.

Cost Reduction Initiatives

During the early 1990's, coal volumes commenced declining and electric locomotive operational costs continued to escalate. In addition to the maintenance costs, electricity costs from the utility continued to climb on a per train basis as traffic reduced. This occurred because the electric tariff is structured for constant-use customers such as industrial plants rather than low load customers such as railroads. At that time, BC Rail's typical monthly bill consisted of $90,000 in electrical demand charges, and approximately $60,000 in energy charges for the 30 or so trains in a month. The demand charges are for the highest 30-minute usage during the month and occurs when a loaded train is on the grade. So for the first train in a month, the charges would be the $90,000 for the demand and $2,000 for the energy. Each subsequent train would add about $2,000 as the demand stayed about the same. Therefore, cost per train would escalate as traffic declined. In order to reduce the number of trains per year, loading was increased from 263,000# to 276,000#, and train length was increased to 102 cars from the initial 99 cars. As a result and in order to improve locomotive reliability, five and then eventually six electric locomotives were used per train.

In order to reduce demand costs, initially we attempted to schedule the trains so that only one would be on any grade at a time and the 40-minute run time on the grade for a loaded train would be spread out over two 30-minute windows. Hence every train was instructed to commence climbing the grade at 10-minutes past the hour or 20-minutes before the hour. This strategy resulted in saving of about $10,000 monthly but proved to be cumbersome to regulate. Subsequently, the author specified a demand monitoring system in the dispatch office that would give an alarm if the demand was going to exceed a preset level. When the alarm sounded, the Chief dispatcher would advise the train to slow down until the top- or bottom-of-the hour. This was easier to regulate and worked well until the coal volumes declined further.

In 1996, coal volumes had reduced to the point where electrical costs per train

were higher that those projected for diesel operation. BC Rail conducted tests using Dash-9 locomotives and convinced BC Hydro that a viable diesel operation using new Dash-9's would save the Railway money. As diesel operation was a viable option, this allowed the use of BC Hydro's "Real-Time-Pricing" tariff that provided for half the demand charges to be free. As a result, the Railway was able to save nearly $50,000 per month and did not have to convert to diesel operation. Diesel operation that was initially considered unfeasible was now viable for several reasons. Firstly, with the decline in traffic, there was plenty of time between trains for the tunnels to clear of smoke. Secondly, the local weather conditions on each end of the two tunnels provided a natural venting action that purged the smoke quickly after diesel operation. Thirdly, the original studies were based on seven SD40-2 locomotives per train. As there was significant improvement in diesel technology, modern units could replace the electric units one-for-one.

As traffic continued to decline in 1998 and the price of coal set by the Japanese steel industry dropped, pressure on BC Rail to reduce operating costs increased. Once again, the Railway considered resorting to diesels that would further reduce costs. This time used MK5000 units were tested and determined to be viable for sustaining operations at the projected coal levels. The business case was presented to BC Hydro who were once again able to reduce demand charges by a further 25% to make the Railway indifferent to diesel operation. Cost savings from the reduced demand charges were approximately $300,000 annually. Over the next year, BC Rail prepared contingency plans on potential diesel operation should traffic reduce further.

End of Electric Operation

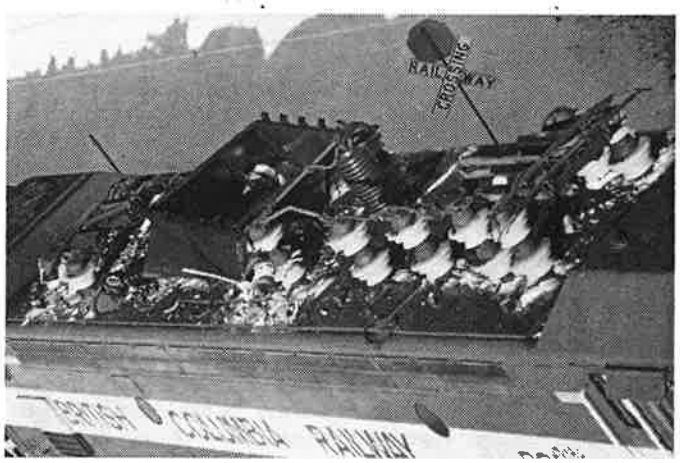
After further declines in coal pricing and required volumes last year, Quintette announced that it would cease operations over the summer. This resulted in imple-

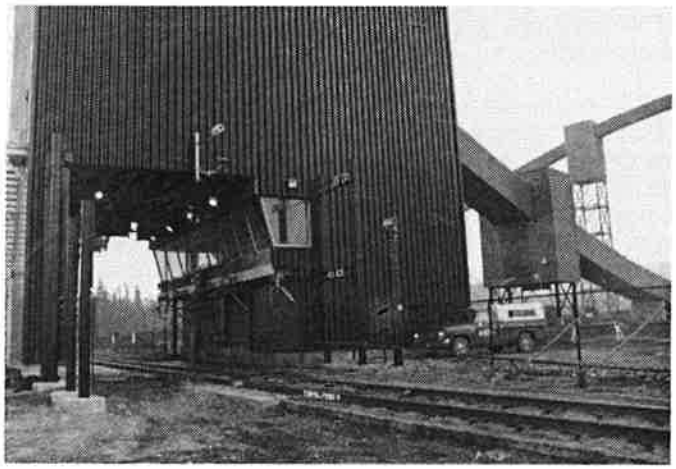
Singh Biln has been with BC Rail for 25 years, primarily involved in equipment maintenance. He started as a summer student in 1975 while attending the University of British Columbia. After graduation with a Bachelor of Applied Science degree in Electrical Engineering, Singh joined BC Rail's Mechanical Department as an Engineer-in-Training. Over the next several years, he advanced though various supervisory positions including Project Engineer, Engineer Motive Power, and Manager Mechanical Engineering. During this period he was closely involved with the Budd Car Refurbishing program, the slug construction program, re-engining of yard locomotives and with the electric locomotives for Tumbler Ridge coal operation.

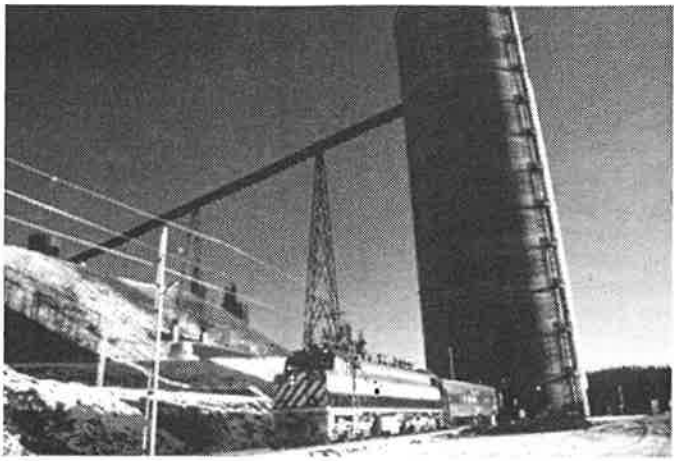
After spending several years working in Tumbler off and on, Singh returned to his home in Squamish and subsequently became the Assistant Chief Mechanical Officer. More recently he was the Chief Mechanical Officer and Manager Asset Planning & Technical Services with the consolidated Mechanical (equipment maintenance) and Engineering (track maintenance) groups. In June of this year, Singh was appointed as Assistant to the President in North Vancouver.

During his career, Singh has been a member of many industry associations and railfan groups. He has chaired a number of technical committees at BC Rail and presented numerous technical papers at industry forums. Singh lives in Squamish with his wife Marion, and has four children aged 17 to 22.

menting diesel operation to transport the two trains of coal from the Bullmoose mine weekly. Currently, only three diesel locomotives of varying configuration are assigned to bring out the two trains weekly in order to improve equipment utilization. Each train consisting of 106 cars is loaded as one but transported in two sections of 53 cars apiece. With no hand-off between electric units and diesels, and no helper engines to cut in and out, there is adequate time to allow this operation to work quite successfully. As the run time to Prince George had reduced and we were unable to reach agreement for the use of CN locomotives for the entire coal haul to Ridley, BC Rail commenced diesel operation using our own power on October 1, 2000. Although most employees did not appreciate this monumental event, a few of us who were so intimately involved were saddened.







above Locomotive 6001 with EMD test car at Bullmoose loadout in January 1984. Commissioning of the first electric locomotive continued until late March 1984.

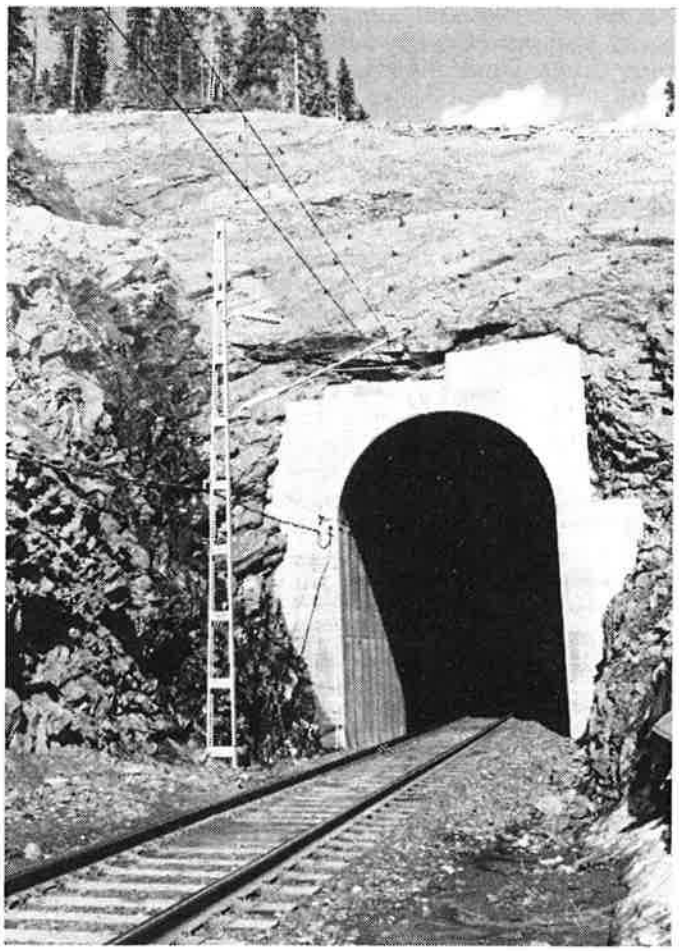
left Bullmoose loadout coal chute resting on top of 6002 after it accidentlt lowered and was ripped off as the locomotives were proceeding through the silo.

middle left Another shot of the coal chute that destroyed most of the high voltage equipment on top of two locos.

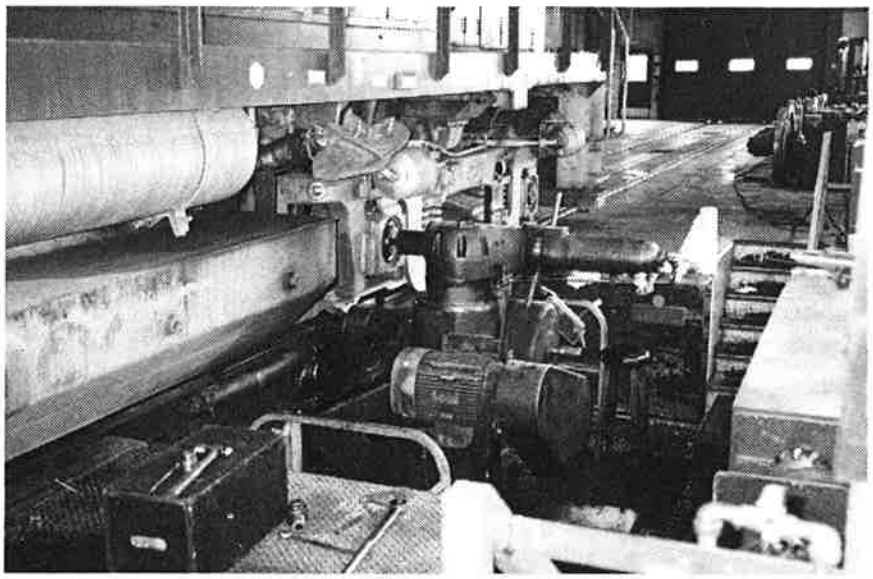
Bottom left A view of the coal loading facility at the much larger Quintette mine.

below South portal of the Table tunnel on a sunny day.

BC Rail photos

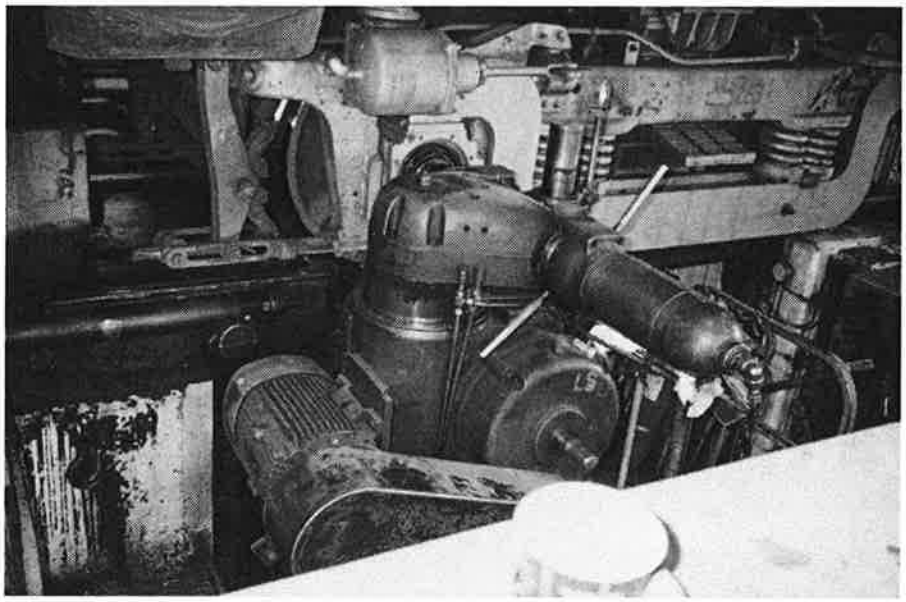


DIESEL WHEEL TURNING



As told to Brad Dunlop by Bob Deno

During my interview with Bob Deno for the "Portrait of a Railroader" in Issue No. 38 of *The Cariboo* the topic of locomotive wheel turning came up. BC Rail's Prince George Shops house a wheel turning machine and that is the basis of this article. The accompanying photos were taken during the P.G. Rails '99 Convention by the author.



Q. How does the wheel turning machine work?
A. The machine sits in the floor and you drive the locomotive on top of it and block the locomotive truck so that the wheels don't drop. There is a moveable rail on each side that can be placed to expose the wheel to the machine. The wheel turning machine has rolls that help support and turn the wheel and milling cutters that come up underneath the wheels. The roller turns the wheel very slowly and the milling cutters chew away at it so you can machine the wheels without taking them off.

Q. When did this procedure come into being?
A. When they built the new diesel shops in Squamish about 1960 they put in a new wheel turning machine. The Prince George shops also got one.

Q. So that would save a lot of time as compared to what was being done before?
A. Yes, normally you would get about three wheel-turns out of a pair of wheels before they would have to be removed from the trucks.

Q. Is the wheel-turning machine for when the engineer would have a little oops and make a flat wheel?
A. No, the track gauge being too wide usually caused the problem and it wore the flanges too fast.

Q. That would do it wouldn't it?
A. There's more truth to that than you may think. In a spell during the 80's sometime we were having terrible flange wear and it turned out that one of the Roadmasters was widening the gauge on the curves. I guess to help reduce the rail wear. But what that does is increase the angle of attack of the flange against the outside rail and it just wears the flanges out like crazy.

Q. (laughter) So his rail was doing just fine?
A. Yes but they finally got to the bottom of it and got them back to standard again.
Q. So what was he making them, four foot eight and three-quarters then?
A. Some thing like that yes. It's not very much but it's enough to alter the wear on the flange.

Q. So he was probably just as pleased as punch with himself then?
A. Oh-ya he was doing just great (laughter)

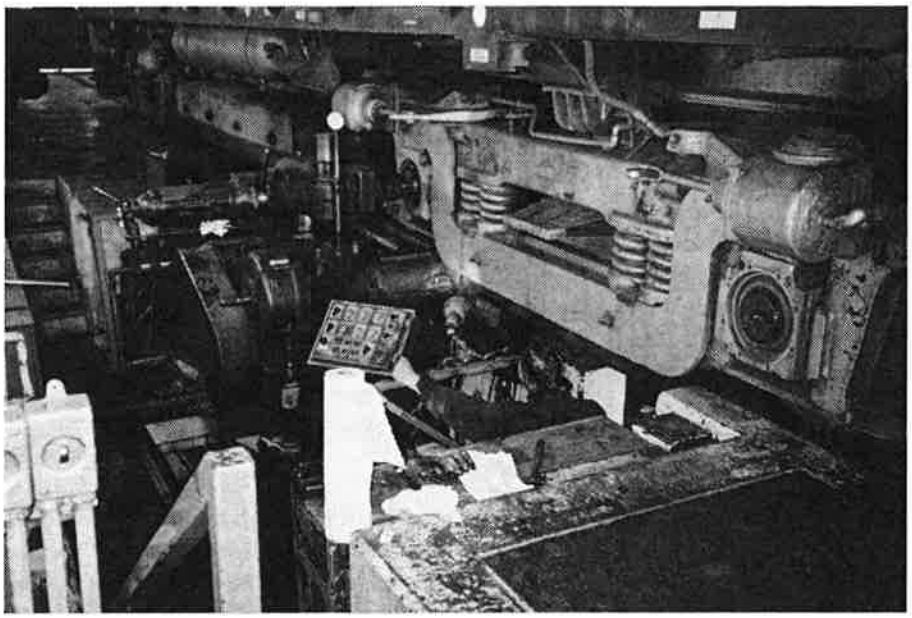
Q. With all of the sharp curves on the PGE would have really raised heck with them then?
A. Oh yes, even with the four-wheel trucks the flange-wear was really bad.

Q. I guess when they put the rail oilers in that would have helped?
A. To a certain extent, they tried all sorts of flange lubricating devices mounted on the locomotives but they never did find anything that really worked. They were hard to maintain because of the movement from the suspension, the bouncing around and everything. They used dry sticks and they used swabs and they used pressurized grease but the rail oilers were the most successful as far as operation was concerned.

Q. Just as long as they weren't lubricating too much?
A. Yes and you have the old theory about lubrication to you know. If you lubricate

and you use sand you pick up the sand with the lubricant and you make a grinding compound so there's two sides there. One says that your not gaining anything with the lubrication because what you gain you lose when you use sand and of course you couldn't operate on here without sand so…but I guess it's successful to a certain degree because they're still using it.

Q. And the wheel turning is still done the same way today?
A. Yes. Until something better comes along but it works well as is.



OOPS

The Grain Car Addendum in issue 38 was to contain the following text. Beyond the photo captions it did not get inserted. The full text is produced here though you will have to get out your issue 37 to see the larger photos.

Andy Barber writes:

In issue 37 of *The Cariboo*, my article on BC Rail's Grain Car Fleet stated that PGE handled the beginning grain shipments using 6 ft. door box cars from their 4001-4072 series cars.

Two readers contacted me to report that this was not so. Ross Pugsley, in fact sent a photo copy of an article from a recent Alaska Highway News newspaper which had reprinted a photo of the "First carload of grain shipped direct by rail from the the North Peace" The photo shows 5 people posing in front of the data on that box car, and what is more important, a BLT -58 date.This could only be the 4101 - 4300 series with 8 ft. doors.

The newspaper mentioned that this reprint was originally published in their July 1958 issue

Dan Rowsell showed me two photos of 8 ft. door PGE boxcars clearly in grain service. Both of these photos

A HIGHWAY N

THE LAND BEYOND THE PEACE AND THE GREAT ROC

THURSDAY, JULY 3, 1958

PGE ROLLING FREIGHT COASTWISE
WHEAT BARLEY AND LUMBER ON ITS WAY

Without fanfare or trumpets, the first two carloads of grain were loaded on Saturday at Hudson's siding. E. W. Clarke and his son Maurice hauled the wheat and the barley from their Pineview Farms, used their mechanical loaders to auger it from the truck into the box car. The railway officials came along and sealed the two cars and thus started the first long line of train cars toward tidewater from the North Peace. Thirty years ago Sir Henry Thornton of the CNR promised the Peace farmers a tie in with Vancouver when the Peace country had five million bushels per year. Poor Henry is long since been called up yonder, and the country has become the second largest wheat shippers in the north.

Gordon Moore's lumber industry has already shipped out 20 cars, loaded at the same place. Shipping of livestock is ready, hogs going out of here by truck every week to Edmonton to the tune of hundreds, but the live stuff must await the yards and the loading facilities which attend them. Vancouver market will be the one that the North Peace will aim at, and soon the impact at Edmonton and Dawson Creek will be felt.

are reproduced below. (issue 37) Thank you Ross and Dan for this correction.

The news clipping sent bothered me. How could PGE ship grain from North Peace in July, when the railway didn't reach Fort St. John until October 2 of that year?

In late June 2000 I was in Fort St. John for a brief time, and so I visited the offices of the Alaska Highway News.

Could I look at the 1958 originals? Yes I could - but a five minute search resulted in a offer for a look at 1957 or 1959 records. 1958 was missing.

The museum in Fort St. John produced better results, and I was given the chance to examine the original 1858 Alaska Highway News. And there it was - the Thursday, July 3, 1958 issue.

"Loaded on Saturday at Hudson's siding." That would make it Saturday June 28, 1958.

As for the location, the article states that it is Hudson's siding. The June 26, 1958 issue of the newspaper casts further light on its exact location. It carried a photograph of the first carload of lumber out of the North Peace District via PGE. I quote "....and A. Hudson on whose farm this car was spotted (the flat car for the lumber load), two miles below the underpass on the Alaska Highway.

If this is the railway overpass, then the grain was loaded about 5-6 miles south of Fort St. John, close to Taylor B.C.

PGE had reached Taylor on June 7, 1958, and shipments south began soon after.

I wish to acknowledge the help of the Fort St. John - North Peace Museum with the research into the 1958 newspapers and tthe Alaska Highway News for permission to quote and reprint their article.

Paint Schemes & Mechanical Details

MLW RS-10, RS-18, and the Rebuilt CRS-20 Units How Many Can Become Models?

RS-10, RS-18, and CRS-20 Paint Schemes and Variances

By Brad Dunlop

Canadian Hobbycraft (Lifelike Canada) has announced a plastic injection moulded model of a Montreal Locomotive Works (MLW) RS-18 locomotive. Since these units are close cousins to the RS-10s and were rebuilt to become CRS-20s one has to include these locomotives as well. What are your personal favourite paint schemes and heralds for these locomotives? In my opinion the question needs to be separated into several parts. I do not believe the RS-18 looks close enough to the CRS-20 rebuilds (or RS-18u as Paul Crozier-Smith prefers to call them) to use the same dies. That probably makes them another project but I will still include them here anyway for future reference. The high-hood RS-10s and high-hood Phase 1, RS-18s without dynamic braking are similar enough in looks to use the same dies for them. After they were equipped with dynamic brakes the Phase 1s require the grid mounted on the roof and the extra two air intake vents just ahead of the cab. The change of direction from long-hood forward to short-hood forward is the final major item to consider for the Phase 1s. The low-hood Phase 2, RS-18s still have the short long-hood doors but the air intakes are completely different. The low-hood Phase 3, RS-18s have the tall long-hood doors and yet another carbody air intake arrangement. The list goes on and on and while it can be a major pain in the butt it is also part of what makes modelling the PGE and BCR interesting and therefore so appealing to many. Very little can be had "out of the box". We must therefore support any of the quality products that do come this way.

By default, since there were several phases and many different schemes and heralds, this list will be lengthy. There have only been five different major schemes over the years. Orange and Green, Green and Orange, Two-tone Green and Red White and Blue and finally Blue and Aluminum, but there have been many variations on most of these schemes. But the more information we can pass on the better the chances are of getting our favourite schemes. Canadian Hobbycraft will have to sell large quantities of these units to cover the die costs but my understanding is that, compared the die cutting, different paint schemes are a minor cost. Giving them an indication of desired quantities, within reason, will also help.

The listing will be presented in chronological order for each phase and major upgrades and/or visible changes to the best of the author's knowledge. Since not all locomotives were painted in all of the schemes the suggested road numbers are units that were verifiably in that particular scheme. If there is not a road number listed it may mean that none of that particular type of locomotive were in that scheme or it may just be that the author was unable to locate an example.

For those of you with something to add or delete from this list or any other comments on this topic please let me know. Thank you in advance for your assistance. Thank you as well to new SIG member Paul Taylor for getting this going via an Internet posting on the topic.

The numbering system is the locomotive type (RS-10 etc.) without the hyphen, followed by the phase (if applicable), followed by the scheme (1, 2 etc.), followed by the scheme variation (A, B etc.).

RS-10 high-hood, operated long-hood forward, no dynamic brakes, friction type wheel bearings, with carbody filters on long hood.

No. RS101 - Road Nos. 579 – 586 in PGE Orange and Green Cariboo Herald Scheme (circa 1956 to late 1950's) Nos. 579 and 581.

RS-10 high-hood, operated long-hood forward, no dynamic brakes, friction type wheel bearings, with carbody filter openings filled-in on long hood.

No. RS101 - Road Nos. 579 – 586 in PGE Orange and Green Cariboo Herald Scheme (circa late1950's to early 1960's) Nos. 583 and 585.

RS-10 high-hood, operated long-hood forward, no dynamic brakes, roller type wheel bearings, with carbody filter openings filled-in on long hood.

No. RS102A - Road Nos. 579 – 586 in PGE Green and Orange Cariboo Herald Scheme with Orange pilot stripes (Circa 1962 to mid 1960's) Nos. 580 and 582.

No. RS102B - Road Nos. 579 – 586 in PGE Green and Orange Cariboo Herald Scheme with Orange cab front and ends (circa 1964 to late 1960's)

No. RS102C - Road Nos. 579 – 586 in PGE Green and Orange Block Lettering Scheme with Orange cab front and ends (circa 1964 to late 1960's)

No. RS102D - Road Nos. 579 – 586 in PGE Green and Orange Map Herald Scheme with Orange cab front and ends (circa 1966 to early 1970's)

No. RS103A - Road Nos. 579 – 586 in PGE Two-tone Green Map Herald Scheme (circa

1969 to mid 1970's) Nos. 581 and 582.

No. RS103B - Road Nos. 579 – 586 in BCR Two-tone Green Dogwood Herald Scheme (circa mid 1970's to 1985)

RS-10 low-hood, operated long-hood forward, no dynamic brakes, roller type wheel bearings, with carbody filter openings filled-in on long hood.

No. RS103B - Road Nos. 579 – 580 in BCR Two-tone Green Dogwood Herald Scheme (circa mid 1970's to 1985) Nos. 579 and 580.

No. RS103B - Road No. 582 in BCR Two-tone Green Dogwood Herald Scheme (circa mid 1970's to 1985) No. 582.

No. RS103B - Road Nos. 584 – 586 in BCR Two-tone Green Dogwood Herald Scheme (circa mid 1970's to 1985) No. 584 and 586.

RS-18, Phase 1 high-hood (A.K.A. RS-11M), operated long-hood forward, no dynamic brakes, friction type wheel bearings and light weight trucks.

No. RS1811 - Road Nos. 587 – 590 in PGE Orange and Green Cariboo Herald Scheme (circa 1957 to early 1960's) Nos. 587 and 588.

RS-18, Phase 1 high-hood (A.K.A. RS-11M), operated long-hood forward, dynamic brakes, roller type wheel bearings and lightweight trucks. (The trucks were later replaced with regular ones or swapped with RS-3 and RS-10 trucks. The main spotting feature is the lightweight ones did not have leaf springs in the middle. Refer to photos for accuracy.)

No. RS1812A - Road Nos. 587 – 590 in PGE Green and Orange Cariboo Herald Scheme with Orange pilot stripes (circa 1962 to 1964) Nos. 588 and 590.

No. RS1812B - Road Nos. 601 – 604 in PGE Green and Orange Cariboo Herald Scheme with Orange pilot stripes (circa 1964 to late 1960's) No. 601 and 604.

No. RS1812C - Road Nos. 601 – 604 in PGE Green and Orange Cariboo Herald Scheme with Orange cab front and ends (circa 1964 to late 1960's)

No. RS1812D - Road Nos. 601 – 604 in PGE Green and Orange Map Herald Scheme with Orange cab front and ends (circa 1966 to early 1970's)

No. RS1813A - Road Nos. 601 – 604 in PGE Two-tone Green Map Herald Scheme (circa 1969 to mid 1970's)

No. RS1813B - Road Nos. 601 – 604 in BCR Two-tone Green Dogwood Herald Scheme (circa mid 1970's to mid 1980's)

RS-18, Phase 1 low-hood (A.K.A. RS-11M), operated low-hood forward, dynamic brakes, roller type wheel bearings.

No. RS1813C - Road Nos. 601:2 – 604 in BCR Two-tone Green Lightning-bolt Dogwood Herald Scheme with diagonal white stripes over dark green ends. This scheme also featured and dark green cabs (circa early to mid 1980's to early 1990's) Nos. 601 and 602

RS-18, Phase 2 low-hood, operated low-hood forward, dynamic brakes, roller type wheel bearings and lightweight trucks. (The trucks were later replaced with regular ones or swapped with Rs-3 and RS-10 trucks. The main spotting feature is the lightweight ones did not have leaf springs in the middle. Refer to photos for accuracy.)

No. RS1821 - Road Nos. 591 – 594 in PGE Orange and Green Cariboo Herald Scheme (circa 1960 to 1964) Nos. 591 and 594

No. RS1822A - Road Nos. 595 – 599 in PGE Green and Orange Cariboo Herald Scheme with Orange low-hood and pilot stripes (circa 1962 to 1964) Nos. 595 and 599

No. RS1822B - Road Nos. 605 – 613 in PGE Green and Orange Cariboo Herald Scheme with Orange low-hood and pilot stripes (circa 1964 to late 1960's) Nos. 610 and 612.

No. RS1822B - Road Nos. 605 – 613 in PGE Green and Orange with Orange pilot stripes but without the Cariboo Herald. (circa 1964 to late 1960's) Nos. 606 and 609.

No. RS1822C - Road Nos. 605 – 613 in PGE Green and Orange Block Lettering Scheme with Orange cab front and ends (circa 1964 to late 1960's) No. 607.

No. RS1822D - Road Nos. 605 – 613 in PGE Green and Orange Map Herald Scheme with Orange cab front and ends (circa 1966 to early 1970's) Nos. 611 and 612.

No. RS1823A - Road Nos. 605 – 613 in PGE Two-tone Green Map Herald Scheme (circa 1969 to mid 1970's) Nos. 607 and 608.

No. RS1823B - Road Nos. 605 – 613 in BCR Two-tone Green Dogwood Herald Scheme (circa 1972 to early 1980's) Nos. 612 and 613.

No. RS1823C - Road Nos. 605 – 613 in BCR Two-tone Green Lightning-bolt Dogwood Herald Scheme with diagonal white stripes over dark green ends. This scheme also featured and dark green cabs (early 1980's to 1990's)

No. RS1824 - Road Nos. 605 – 613 in BC Rail Red, White and Blue Hockey Stick Scheme (circa 1986 to late 1990's) Nos. 606 and 611.

RS-18, Phase 3 low-hood, operated low-hood forward, dynamic brakes, roller type wheel bearings

No. RS1831A - Road Nos. 614 – 618 in PGE Green and Orange Cariboo Herald Scheme with Orange low-hood stripes and pilot stripes (circa 1962 to mid 1960's) Nos. 614 and 617.

No. RS1831B - Road Nos. 619 – 626 in PGE Green and Orange Block Lettering Scheme with Orange cab front and ends (circa 1964 to late 1960's) Nos. 622 and 624

No. RS1831C - Road Nos. 614 – 630 in PGE Green and Orange Map Herald Scheme with Orange cab front and ends (circa 1966 to early 1970's) Nos. 629 and 630

No. RS1832A - Road Nos. 614 – 630 in PGE Two-tone Green Map Herald Scheme (circa 1969 to mid 1970's) Nos. 622 and 624

No. RS1832B - Road Nos. 614 – 630 in PGE Two-tone Green Dogwood Herald Scheme (circa 1972 to early 1980's) Nos. 622 and 624.

No. RS1832C - Road Nos. 614 – 630 in BCR Two-tone Green Lightning-bolt Dogwood Herald Scheme with diagonal white stripes over dark green ends. This scheme also featured and dark green cabs (early 1980's to 1990's) No. 621 and 630.

No. RS1833 - Road Nos. 614 – 628 in BC Rail Red, White and Blue Hockey Stick Scheme (circa 1986 to late 1990's) Nos. 615

No. RS1834 - Road No. 629 in BC Rail Red, White and Blue Scheme (circa early 1990's) No. 629

CRS-20, Caterpillar upgrade, operated low-hood forward, dynamic brakes, roller type wheel bearings.

No. CRS201 – Road Nos. 601:2 – 629 in BC Rail Red, White and Blue Scheme (circa 1990's to present) Nos. 617 and 623

No. CRS202 – Road Nos. 601:2 – Pacific Starlight Dinner train Scheme (circa 1998 to present) No. 601

No. CRS203 – Road Nos. 630 – BC Rail Blue and Aluminum Scheme (circa 2000 to present) No. 630

A separate answer sheet is included as an insert in this issue for members only.

Information for the above list has been garnered from the author's personal recollection, experience, and photo collection as well as the following highly recommended reading material.

Rail Canada Volume 2 by Donald C. Lewis, LPD Publishing, ISBN 0-920264-01-8 Cloth Bound (out of print) or ISBN 0-920264-02-6 Paper Bound (out of print).

Rail Canada Volume 5 by Donald C. Lewis, LPD Publishing, ISBN 0-920264-11-5 Cloth Bound or ISBN 0-920264-10-7 Paper Bound.

British Columbia Railway; From PGE TO BC Rail by John F. Garden, Footprint Publishing ISBN 0-9691621-5-4

Extra 2200 South, The Locomotive Newsmagazine, July – August – September 1991, Issue 92 ISSN 0014-1380

Various previous issues of *The Cariboo*.

PGE/BCR SIG - SPECIAL MEETING
10:30, Saturday, November 10, 2001
CAMERON REC CENTRE,
BURNABY

MINUTES

Attending members
Doug Race, *Director & Secretary*
J.Singh Biln, *Director*
Paul J. Crozier-Smith, *VP & Director*
Graham Bennett, *Membership Chair*
Timothy Horton, *Assoc. Editor Cariboo*

Doug MacDonald, Lee Waterton, Brian Clogg, Bob Pirie, Greg Kennelly, Russ Watson, Mike Nyiri

Regrets:

Brad Dunlop,
Director, President, Editor Cariboo
Don Lewis,
Director, Publisher Cariboo
Ray Konrath,
Treasurer

1. Introduction

After introductions, Singh opened the meeting by welcoming everyone attending and thanked them for attending this critical meeting. He outlining the purpose of the meeting while Doug Race clarified that this is not an Annual General Meeting as sufficient notice has not been issued but as 3 of the 5 directors are in attendance, we do have a quorum to make the required decisions. Singh outlined the current status of our SIG and on behalf of the directors, he apologized for allowing the situation to get to this stage. Although the caliber of *The Cariboo* has improved with the last three issues, we have failed to get/give adequate support to the few individuals involved in its production. Having stated that, we need to move forward and not dwell on the past.

A general discussion followed on "What is goal/purpose of our SIG? Do we continue or do we fold? What are we offering the membership?" The discussion concluded by a re-affirmation by all that too many people have worked too hard to let the Group flounder. We owe it to the founders and the membership to continue and will make all effort to get back on track. We also agreed that *The Cariboo* was the end product that binds the membership and must be delivered regularly.

Some discussion followed on the goal/mission statement of the Group that could be put in *The Cariboo* and on letterheads, etc. Paul volunteered to draft a statement based on any feedback that he gets via e-mail. (pjcrozier-smith@shaw.ca).

2. Directors

One of the immediate requirements for this meeting is to discuss the process for electing new directors. The PGE/BCR

A MESSAGE FROM YOUR NEW EDITOR

I was going through my back issues of *The Cariboo* this past weekend. It is hard to believe our first issue was published eleven years ago! For those of you who have never seen volume one, take my word, we have come a long way! The first paragraph of issue one featured a welcome from then editor, Jim Moore. Jim wrote: *Welcome to the premiere issue of "The Cariboo", a forum for the exchange of both prototype and modeling information.* I believe we have accomplished our mission. No other publication offers the in-depth coverage of the British Columbia Railway and it's predecessor the PGE like the Cariboo does.

Unfortunately we have our limitations. As a volunteer organization, we count on our membership to provide the content of the magazine. Additionally, The Cariboo is put together and published by volunteers in their spare time. We all know how difficult it is to find spare time these days. The number one reason The Cariboo is not published regularly is lack of articles. We need reporters from all over the railroad. The majority of our membership does not have regular access to BC Rail. If you live near the railroad and are out and about, drop me a note with any new freight car or locomotive sightings. If you see an article in your local paper relating to the railroad, clip it out and send it to me. When you are out taking photographs and see that perfect shot, take two and send us one. I would like to build a library of stock photographs that can be used for news columns and future articles.

My goal for 2002 is to publish three issues of The Cariboo. The only way to achieve this goal is with a steady flow of material. I am working on the following themes for upcoming issues. Issue 40 will feature an intermodal theme. If you are interested in BCR or PGE piggyback service and would like to share your thoughts and models with the rest of the group please contact me ASAP. Issue 41 is open for anything. Issue 42 will feature Quesnel. If you like to draw let me know. We need someone to work on drawings of the Quesnel Depot. We also need detail photos of the mills around Two Mile Flat as well as their history. This leads me to one more thing. I would like to hear from anyone that shares my interest in lumber mills. I would like to do a regular feature on the industries that feed the BCR.

As mentioned earlier, The Cariboo is intended as an avenue for the exchange of information. It's success depends upon your participation. All contributions are welcome and needed. We are looking for everything from feature articles to product reviews. If you have an idea but are not sure how to put it down on paper please feel free to contact me. I will be happy to work with you.

When submitting an article the best format is a MS Word document. It can be sent as an E-mail attachment. If you do not use a computer, a hand written copy will do. All photographs and slides will be treated with the utmost care. A confirmation will be sent out for all material received. If requested your material will be returned after publication.

With that said, grab your camera and your note pad and get out there and shoot, shoot, shoot. I look forward to seeing what you come up with. Always remember SAFTY FIRST when you are around the railroad. Expect movement on any track in any direction at any time.

David Barone, Editor
January, 2002

YOUR NEW DIRECTORS FOR 2002

David Barone: David has been a fan of the BCR since his first visit to therailroad in 1986. His interests include both photography and prototype modelling. His HO layout will feature the Prince George Sub set in the early 80's.David was one of the original founders of our former group, the BCRH&TS.

Graham Bennett: Graham is employed in the computer industry and has been helpful ensuring the SIG is "computerized". He also maintains memberships in N-Trak and NMRA. Grham is presently the Registrar of the SIG as well as Web Administrator. His modelling interests are in N scale and focus on the PGE in the 50's.

Singh Biln: Singh was one of the five directors of our SIG during the past year and stepped in as acting President when Brad Dunlop retired. Singh has worked for BC Rail for the past 25 years and presently is the Assistant to the President at the railway. Singh has made numerous presentations to railfan groups on BCR motive power, including at both the Squamish and Prince George conventions.

Paul Crozier-Smith: Paul has been a rail fan, rail historian and modeler since high school. He is president of the British Columbia Railway Historical Association and the Esquimalt & Nanaimo Division of the Canadian Railroad Historical Association. Paul is also a life member of the NMRA. Paul has been a member of the group since near the outset. He has been the editor of the PNR NMRA Switchboard, BCHRA Callboard and the Cariboo. Paul attended both the Squamish and Prince George conventions as a delegate and presenter.

Russ Watson: Russ is the current N scale editor of the CN SIG magazine and editor of the 7th Division PNR Bulletin Board. He has written articles for N Scale magazine, N Scale Railroading, Railroad Model Craftsman, NMRA Bulletin and Canadian Railroad Modeller. He has served as treasurer for 7 years for the Victoria Model Railroad Convention Committee, is the Jack Work Award Co-ordinator for the 7th Division and Vancouver Island representative for NMRA's Achievement Awards programs.

SIG was incorporated on November 1, 2000 under the Societies Act and 5 original subscribers were named directors. The act requires new directors be elected within one year with sufficient notice to the members. Our By-laws are patterned after WCRA allowing mail nominations/voting by the membership that is dispersed all over the world. Now that the membership list has been updated, Doug Race will mail out the notice for nominations from his office, graciously offering to pick up the mailing costs. (Thanks Doug). The nomination forms will be essentially self-nomination with a brief bio for election purposes. So far, Paul and David Barone say they will run and Doug/Singh/Don will do so if no nominations received.

Regarding the current directors, Brad has resigned from all positions. Singh noted Brad's contribution to the Group and also re-iterated Brad's editorial in Issue 38 "Many hands lighten the load". We need to ensure that the duties are adequately divided so that no individual becomes overwhelmed by the workload.

3. Officers

The current positions are in effect until the new board has been elected so Paul, Doug, Don, Ray, and Graham will continue with their respective positions. Given Brad's resignation as president and the need for leadership at this critical time, Singh volunteered to step up as Acting President in the interim until a permanent position is appointed by the new directors. Paul will continue as V-P, Doug as Secretary, Ray as Treasurer, and Graham as Membership Chairman.

Much discussion followed on the other critical positions, particularly editor and publisher of *The Cariboo*. The group concluded that it is imperative that both these positions not be overloaded with other tasks and that a definitive process be in place to delineate the duties of each position. The Group is appreciative that Don has agreed to continue to publish and distribute *The Cariboo*. Regarding the editor's position, the group is grateful for David Barone's offer to accept this position and Singh also hoped that other assistant editors and columnists like Paul and Tim Horton will continue to assist David and Don. Singh will also follow up with each of the directors and officers as required regarding their roles/responsibilities.

Regarding other positions, Andy Barber will be requested to market advertising for *The Cariboo*, Graham will Chair the electronics development (web-site, discussion groups), and Singh will be the main contact for historical or other info requests. Singh will relay these to those who have the specific expertise for the given request. There is a need however, to have a single mailing address for the group.

4. Membership

Graham reported that he has now completed compilation of all membership lists/updates and to the best of his knowledge, here are the current numbers:

- 133 members with two-thirds in Canada, 7 in Europe, 1 NZ, 1 Australia and rest in the US
- 12 memberships expire with next issue of *The Cariboo*
- 53 memberships expire with the following issue of *The Cariboo*
- 25 previous members have not renewed
- there are some memberships ($2300 worth) confirmed to Issue 46.

The Cariboo distribution includes:

- 135 subscriptions total including 133 members and 2 subscriptions only
- 175 issues sent to 12 retailers with 1 retailer being subscribing member
- 11 issues complementary
- 321 total copies Issue 39

Some discussion followed about memberships, renewal, value, etc. The group decided that membership should stay linked with number of issues (currently 4) and that we should not have a subscription only category. The $30 membership for 4 issues ($5.50 each) and $8 for SIG functioning was deemed good value for the members.

5. Finances

Graham provided an update on the finances as provided by Ray. We currently have about $4600 in our account but some of these funds are from prepaid memberships to Issue 46 and Brad is owed for printing costs for Issue 36. Print costs for Issue 37 and Issue 38 have been paid. There are some outstanding receivables from advertisers and perhaps some payables for other items. Ray did not get all the outstanding financial information from Brad so an accurate accounting is not possible at this time.

There was considerable discussion on the need for a financial policy. All invoices must be sent out by the Treasurer and all payables must be supported by bills or receipts. Ray is to continue to gather financial information to prepare an accurate financial statement required for the AGM and annual report. Graham is to work with Ray in ensuring that the bank account is in the society's name and that we have minimum two signatories, but only one required for transactions.

6. The Cariboo

Considerable discussion centered around *the Cariboo* and the group concluded that this is the one medium that binds all our members together and hence must be produced regularly. Regarding Issue 39, Singh understands from Don that we are very close to printing except for any additional editorial and some small ads. Singh to follow up with Don to get this issue out ASAP as there is no need to mail out the nomination forms with the newsletter.

The discussion continued on content, number and size of issues. There were many viewpoints but the group concluded that we will stay with the current content/ layout, start with 3 issues per year but that we will stick with the 28 pages at this time. Issues will be printed on time and if not enough content is available, the size will be reduced. If there is too much content, it will be saved for the next issue. The group concluded that there is need for having a clear process in place and that items such as returning photographs, final editing, reprints, mailing and distribution need to be documented. Lee volunteered to assist with some of these items.

7. Meetings

Today's meeting has been very worthwhile and Doug Race suggested that the directors meet twice a year, once in the early part and once at the Trains show. We will require an AGM but since elections are by mail, the current directors will schedule a meeting for early 2002.

Regarding conferences, all agreed that the 1996 session in Squamish and the 1999 session in Prince George were very successful. The group was divided on whether we should have an independent conference in 2002 or piggy-back onto the 2002 Joint SIG Conference at the Trains 2002 show. There were pros/cons of each and there was some discussion of having a mini-conference in Squamish at the Heritage Park over the summer and also participating with the Joint SIG session in November 2002. Tim Horton and Greg Kennelly were appointed co-chairs to investigate and report to the directors. Tim subsequently advised that there were some funds remaining from the last session for conferences.

8. Other Business

Graham reported that he has found a free service that hosts web sites for non-profit groups and has already registered the web domain (pge-bcr-sig.bc.ca). Paul is currently the Yahoo discussion group moderator but any linkages between these two will be explored.

Some discussion followed on the need to communicate with our members. As 53 subscriptions will expire with Issue 40, it is imperative that members re-join. Singh is planning to send out an individual letter to each member and Doug offered to include it in the nomination forms. It will also be included with Issue 39 if Singh can get it in without further delay. Graham to e-mail Singh a logogram for a letterhead.

The meeting adjourned at 1245. Special thanks to Greg for preparing sign for our booth, Graham/Paul for manning booth, Dick Sutcliffe for sharing the NMRA table, and Bill/Kathy Dixon for meeting room, notices. A special thanks to all the attendees – their comments may not be included in the above but each one made a valuable contribution to the discussion and decisions.

J.S. (Singh) Biln, Acting President

Caboose Plans from Photos

Creating detailed scale drawings for PGE's cabooses built in 1920 by the Canadian Car and Foundry Co.

by: Bob Pirie

Anyone who models steam era PGE soon finds that there is almost nothing that is quite prototypical. This generalization holds true for the cabooses. While not quite as eclectic as their passenger collection, the early PGE caboose fleet was quite varied considering the small number that they owned and the designs, if not unique, were at least uncommon. I have not been able to find a single model that accurately represents a steam era PGE caboose. That leaves us with two options, kitbash or scratch build.

Drawing plans from pictures

Whether you decide to build from scratch or do a reasonably accurate kitbash, you need to have a plan. I was not able to find any drawings for PGE cabooses, so resolved to draw my own. The source of data for the plans would have to be pictures. I had been given a copy of an article by Gordon Odegard (Model Railroader, Aug./77, p. 106) which got me started but I found it a little thin. Then friend and fellow PGE modeller Bart Reemeyer directed me to another article by James Tangney in the May 1996 issue of Railroad Model Craftsman (p. 70). This excellent article on scaling from photographs is much more extensive and covers several different techniques. I highly recommend this article if you want to try drawing your own plans. I will not get into the details of the process in this article.

The trouble with pictures as a data source for plans is that for subjects which no longer exist you have to rely on existing photos. I soon found that not every photo is useable for scaling. Depending on the dimensions you have to start with, you may need a picture that shows both an end and a side so that you can determine vanishing points and thus the horizon. This is critical to develop a scale where you have only limited dimensional data. It is also important that you can make out enough of the details. As long as you can scale the important features from your chosen photo, you can fill in details from other photos of the same or similar subjects.

For the plans presented here I had to use several pictures of three cabooses taken over many years. Clear, sharp images give better results and the larger the image the better for accuracy. In this case I was forced to use a rather fuzzy photocopy of a picture of unknown origin and some smaller pictures from Hungry Wolf's "Route of the Cariboo" which I blew up using my scanner. There is a trade off when you blow images up; the more you blow it up, the fuzzier the image becomes. When I was nearly finished I found that some things were not fitting quite as they should. Fortunately some of my pictures showed the siding clearly enough that I could use it for quite accurate estimates and so locate and correct the errors. I had at least one photo on which I could count all the boards on a side of known length and confirm that their width was 3 1/4 inches.

Choosing a prototype to model in the early caboose fleet

From the information that I have been able to obtain so far, the PGE had 13 cabooses prior to their plywood rebuilds. These were numbered from 1801 to 1810, with numbers 1801, 1802 and 1804 each being used on two units. 1804 (formerly Howe Sound and Northern #1 and PGE C0) was a drover style caboose. The first 1801, 1802 and 1803 (formerly C1, C2 and C3) were steel framed centre cupola models. The second 1801, 1802 and 1804 were steel framed end cupola models with 3 windows on each side. Cabooses 1805, 1806 and 1807 were also an end cupola design but with only two windows per side and truss rod support. Cabooses 1808, 1809 and 1810 were yet another end cupola style and were distinguishable by their exposed steel side frame.

For my first PGE caboose, I decided I would model one of the 1805 - 1807 series. I chose this series with the idea that I might be able to kit bash one from a Juneco CN wood sheathed caboose kit (More on this later.). Canadian Car and Foundry built these cabooses for the Pacific Great Eastern Railway at their Amherst Works in Nova Scotia. According to information obtained by PGE historian Greg Kennelly, these were received in August 1920, however a builder's

photo of 1807 taken at Amherst is dated November 1921.

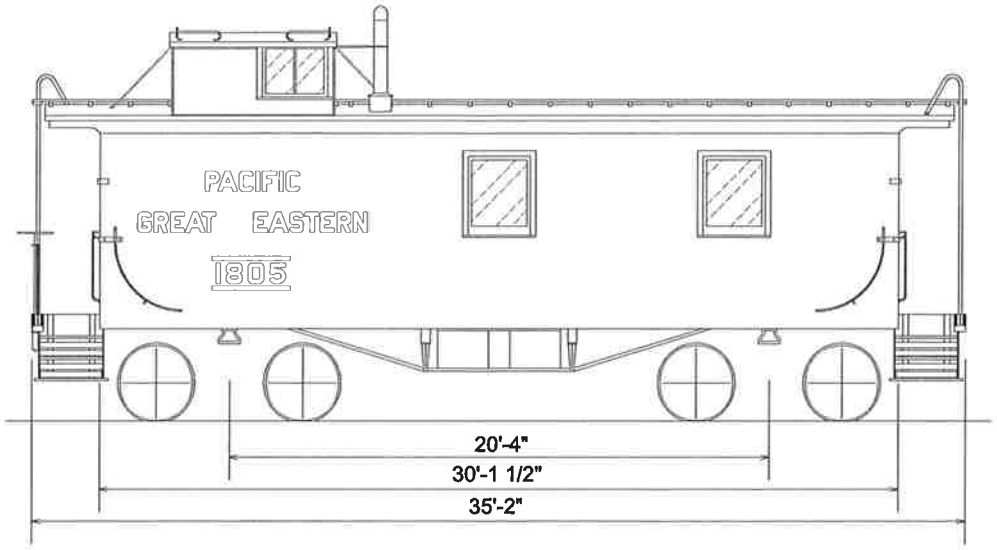
The PGE kept these cabooses for many years and in that time a number of modifications were made. One of the most obvious was the relocation of the side windows of the cupola. These vans originally had a single window divided by a vertical muntin. It was positioned adjacent to the forward corner of the cupola (i.e. toward the long end of the carbody). These were later changed to a single pane window centred on the cupola side. The edge of the roof originally extended the length of the car body but later was cut back to the ends of the cupola, probably at the same time the window was modified. The latest photo I have seen of one of these cabooses (number unknown) with its original window and roofline was dated 1947. The earliest dated photo I have with the window and roofline modified is of 1805 and was taken June 25, 1943. An undated photo in "Route of the Cariboo" (p. 235) shows 1807 resheathed with plywood and with the roofline across the side of the cupola restored, most likely to protect a joint between the plywood sheets.

Perhaps the most distinguishing features of this series of caboose was its double diamond arch bar trucks. If they were not unique they were certainly unusual. I have not been able to find a match for them in photos of any railroads equipment, much less in any model. I have a picture of 1806 taken in 1957 which shows it riding on more modern cast steel trucks, but all others I have seen show the original trucks.

Other noted changes that were made to some or all of this series of caboose include:

Steel support struts on cupola ends moved from inside of the windows to the outside corners and later removed altogether.

- Sheathing on cupola ends changed from vertical car siding to plywood.
- Toolbox changed from wood to steel.
- One piece corner grab irons on the corners of the cupola roof changed to two separate grabs.
- Logos changed over time. A builder's photo of 1807 showed the words



PGE CABOOSES 1805 - 1807
AS-BUILT VERSION

HO SCALE 1:87

Note: Opposite side and end are a mirror image of the side and end shown here

Drawn By:
R.D. Pirie
January 30, 2000

"PACIFIC", "GREAT" and "EASTERN" on 3 separate lines. Other photos show "GREAT EASTERN" on one line. All the units eventually had the Cariboo logo applied. There were also subtle variations in the lettering and spacing, particularly on the ends of the cabins.

The Drawings

To accurately scale drawings, you need to know some of the dimensions. Greg Kennelly graciously provided the following data that he obtained from a PGE Equipment Record found in the Provincial Archives of BC:

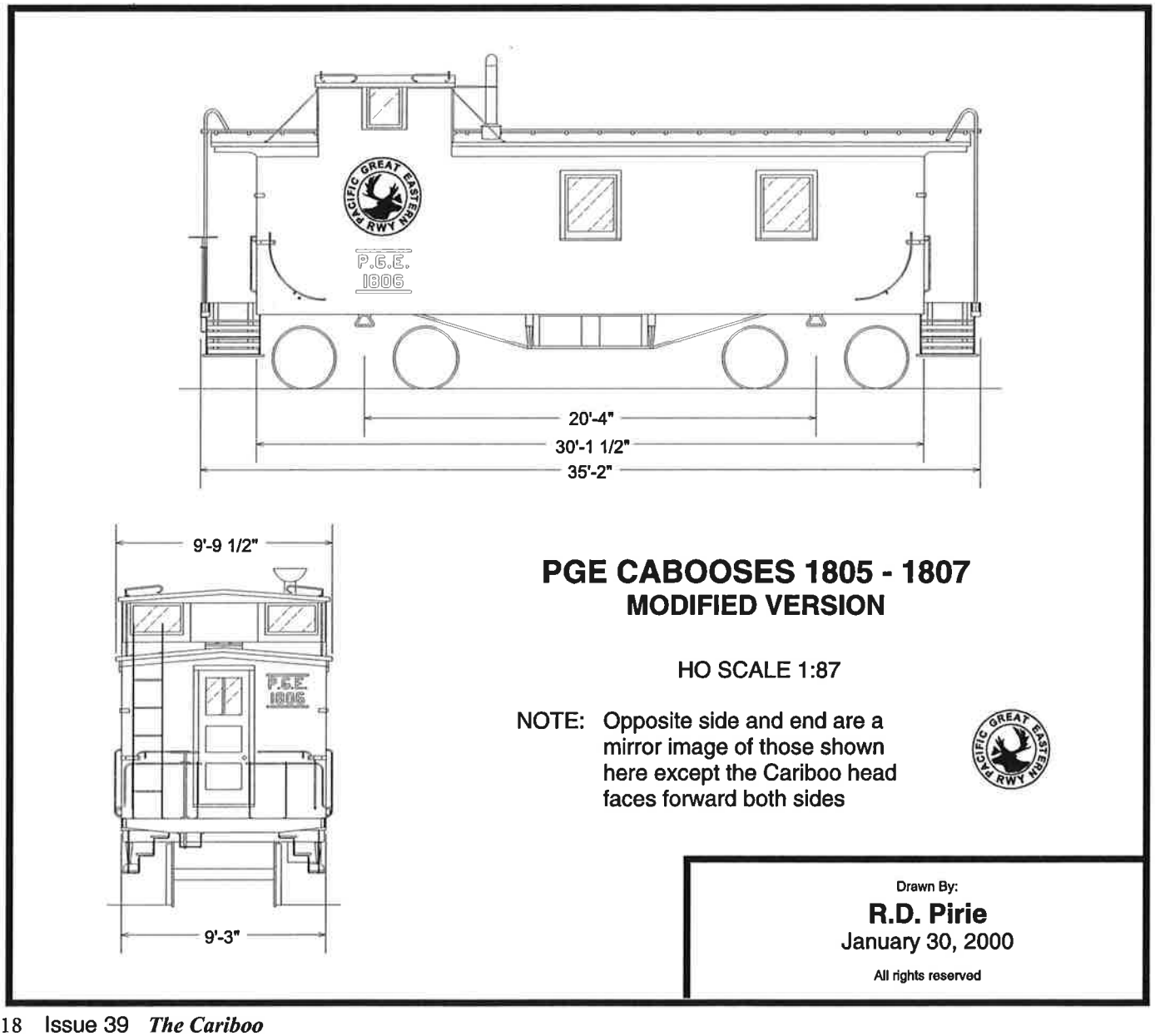
Length over platform	35'- 2"
Length over sills	30'- 0"
Truck Centres	20'- 4"
Width over side sills	9'- 1 ½"
Width over eaves	9'- 9 ½"

The accompanying drawings were based on these dimensions and, to derive heights, from the Cariboo logo that is known to be 42" in diameter. Only known dimensions are shown on the drawings that accompany this article. All other measurements were derived from the photos. Lengths over side or end sills are generally taken to mean inside of sheathing. The corresponding measurements on the drawings have been adjusted to outside of sheathing by allowing for ¾" thick car siding. Sizes and locations of some details like hardware had to be estimated from known dimensions and were more or less sketched.

The two drawings show an early or as-built version (except for the logo) and a later modified one. Note that the details were taken from a collection of photos of all three cabooses taken at different times. I cannot guarantee that the drawings are accurate for all of the vans or at any particular time. If you decide to scratch build or kit bash a model from this series, make sure that you consult photos for your chosen prototype and era.

Building a model

The Juneco kit mentioned earlier (Kit K-1) is a wood craftsman type kit with white metal detail castings. (Note: This is the same kit referred to in M. Devliegers article on modelling a PGE plywood caboose. See "The PGE Hack in HO-Scale", The Cariboo, Issue 10, p. 12. This issue also



contains an article and drawings by Greg Kennelly on this later prototype.) The overall dimensions of this kit are quite close to the PGE prototype. Window locations are different and muntin patterns vary, but the window openings are not cut out of the wood sides so that this would be easily remedied. The roof pitch is slightly steeper on the Juneco model, but again this is easily fixed. Of more concern is the cupola that is made of white metal castings, and is too tall. The side windows of the cupola are also wrong. The door panels are not quite right but could be corrected to a close representation of the prototype. The end railings have the correct outline but have a modern Ajax type brake and a solid infill panel that our prototype does not have. Because the one-piece end railing/beam casting is of brittle metal, it would probably be easier to make a new one than to modify the existing part. The kit also lacks the truss rod detail of the PGE van. If you are not too picky, the Juneco kit may be an option; otherwise it will probably be necessary to build from scratch.

Modelling the distinctive trucks of the prototype could be a problem. BC Models (http://home.sprynet.com/sprynet/bcmodels/index.htm) offers their T-13 Soft-Ride trucks that could probably be modified into a reasonable facsimile.

Thank you to Greg Kennelly for his assistance with this project. I hope that some of you will find these drawings of use. I also hope that others of you will try your hand at scaling drawings from photographs and that you might share the results with the rest of us.

The first two photos that are shown here (pg 16 & 19) though not of the best quality, do show the basic configuration and paint work.

The third photo in the lower left of this page is an other story. The modifications are clearly seen and the new trucks are in good contrast.

The side windows of the cupola have been relocated (see original drawing), The roof line below the cupola was removed, the end of both the cupola and the cabin end in the lower photo have had plywood repacing the T&G paneling.

The one piece corner grabirons on the cupola were replaced with two separate ones. the original panel door was replaced with a salb door in the lower photo as well as the lettering changed on the smooth ends.

The distinctive arch bar trucks have been replaced with leaf spring Bettendorf type cast trucks, and of course the more familier Caribou logo.

Photo on pg. 36 and upper left here are from Paul Roy collection, lower photo by Stan Styles from Bart Reemeyer's collection March 1957 in North Vancouver.

PGE/BCR Special Interest Group www.pge-bcr-sig.bc.ca
"Dedicated to promotion of BC Rail and predecessor railways"

November 15, 2001

To: All Members of the PGE/BCR Special Interest Group

SUBJECT: STATUS OF SIG AND THE CARIBOO

Dear Fellow Member;

Firstly, on behalf of the directors of PGE/BCR SIG, I extend our sincere apology to you for the significant delays in publishing The Cariboo magazine. Our editorial staff have done a great job in improving the quality of the magazine with the last 3 issues but we as directors failed to give adequate support to Brad Dunlop (director, editor, president) and the rest of the team. The good news is that we now have several new volunteers involved to ensure that the group delivers what the membership wants. The directors have accepted Brad's resignation and thank him for his gallant efforts over the last year. Election nominations are now being mailed out for new directors but in the interim, I will be Acting President and David Barone of Chicago will be the new editor of *The Cariboo*. Don Lewis will continue publishing and we expect to have issue 39 out shortly.

Secondly, I want to thank each of you for your past interest in our group and hope for your continued support. The PGE/BCR SIG was incorporated on November 1, 2000 and although we have let the magazine publication schedule slide, the interest and enthusiasm has not waned. I humbly request that you give the current Executive an opportunity to get "back on track" and hope that all 133 of you will continue with your memberships. Memberships will still include 4 issues of The Cariboo so you will get full value despite the delays. In addition there is a web-site under development and a conference being planned for 2002. Details will be provided in Issue 39.

Finally, I encourage each one of you to get actively involved with the group. Immediately, we will need you to nominate someone or yourself as director, then vote once the ballots are sent out. You can assist by recruiting new members, by assisting with the publication, and by submitting articles of interest to the members. Although I am a relative newcomer to the Executive, I have been a member for some years and involved with the first 2 conferences. I have been working for BC Rail for 25 years primarily in the equipment maintenance department, and recently as Assistant to the President. I wish I could talk to each one of you personally about the importance of our group - I have provided all my contact numbers so please e-mail or call. Thank you.

Kindest Regards

J.Singh Biln
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PRODUCTS OF INTEREST

By Timothy J. Horton

It is with pleasure that I assume responsibility for the Products Of Interest column effective with this issue. I say this because we are enjoying an exciting time in our hobby, one in which a large number of new products are being released. Of particular interest to BCR modelers are the releases forthcoming from Canadian Hobbycraft and Trains Canada, which include all-new toolings for specific Canadian locomotives and freight cars. This trend holds much promise for PGE/ BCR modelers who, until now, have been obliged to indulge in heavy kitbashing to obtain the models they need. Our membership is encouraged to support these efforts where possible and relevant, in the hope that additional Canadian models will come our way. Can anyone say M-630?

Commencing with this issue, products will be listed alphabetically by manufacturer within each scale. We will provide as many details as possible, as well as contact information for the manufacturers. Reviews of selected products of interest by our members will follow the column. Finally, I encourage you to contact me at th@aquinas.org in the event that you are aware of releases which should be documented in this column, or if you are willing to undertake the review of a particular product. As an N Scaler I am not always aware of the latest happenings in HO scale, so I would love to hear from you.

N Scale

Atlas Model Railroad Co. (603 Sweetland Avenue, Hillside, New Jersey, 07205 U.S.A. Website: www.atlasrr.com) has announced production of a new tank car in N scale. The new car is modeled after a 17,360 gallon American Car & Foundry insulated general service tank car designed primarily for transporting chlorine. Features include separately applied brake detail, finely molded handrails, tank fittings, 100-ton roller bearing trucks with AccuMate couplers, and brake wheel chain. The road name of most interest to BCR modelers will be the various ACFX schemes. Delivery is scheduled for July with MSRP ranging from $11.95 to $16.95 U.S.

Canadian Hobbycraft (140 Applewood Crescent, Concord, ON, Canada, L4K 4E2. Website: www.hobbycraft.com/ lifelike.html) has announced plans to produce a Proto 2000 model of the MLW Century 424 diesel locomotive in N scale. Of interest to BCR modelers are the 41 units produced for Canadian National between 1964 and 1967, several of which were leased to BCR during the 1970s (see Paul Crozier-Smith's article in Issue 38 of *The Cariboo*).

The Lifelike model will be 100 per cent prototypical with the correct carbody, wheelbase and trucks. The locomotives will be available in the following CN paint schemes: #LL44254 – CN, Black with Red Ends and Noodle Herald; or #LL44255 – CN, Black with Red Ends and Side Stripes. For those wishing to attempt a C-425 conversion, #LL-44256 offers an undecorated model. Delivery is projected for August 2001 and MRSP is $149.99 CAD. The Lifelike C-424 is the first release of a Canadian locomotive in N scale. The success of this model is important as it could well lead to the release of other Canadian locomotives in the future.

Mention should also be made of Hobbycraft Canada's previously announced release of the Alco FB-1 and the CLC C-Liner 'B' units. These locomotive models offer the opportunity to model remote control cars RCC 1 and RCC 3 & RCC 4 respectively.

Carlo's Brass Works has released cast resin models of the fibreglass covers, which are seen on BC Rail and CP Rail gondolas in concentrate service. The covers represented by these models are the latest style with the four posts and ribs across the cover. There are two versions of the model: one designed to fit on the Micro-Trains gondolas and another intended for the MDC Roundhouse cars. The combination of these covers and the MDC car provide a good model of BC Rail's 83001-83099 series gondolas, which have been in service since 1998. The covers sell for $15.00 CAD (package of two) and are available from local hobby shops.

Model Die Casting, Inc. (5070 Sigstrom Drive, Carson City, Nevada 89706 U.S.A. Website: www.mdcroundhouse.com) has announced the release of an assortment of modern cars decorated for Canadian and northern U.S. roads, each with two road numbers. Included in the assortment are #84002, a 50' Thrall Mill Gondola decorated for BC Rail, and #83603, a 50' FMC Plug Door Boxcar decorated for Canadian National. The BC Rail gondola is dark green with the current BC Rail logo; unfortunately, the model is not representative of any cars painted in this scheme. However, the model does resemble the railway's 830001-83099 series gondolas, which were built by Thrall in 1996 and acquired by BC Rail in 1998. These cars are painted black and carry the fibreglass covers described above.

Sidney Model Works (#404-1138 View Street, Victoria, B.C., Canada, V8V 3M1, Tel: 1 (250) 388-0316, E-mail: mgiles@islandnet.com) has released three new models in their range of cast resin freight cars. NCHIP-2 is a model of the 90140-90340 series wood chip cars built for the British Columbia Railway by National Steel Car in 1972. By removing the top rib on each end, this model can also be used to represent the 90001-90140 series, which came from NSC in 1970. NCHIP-3 is a model of the Hawker Siddeley wood chip cars numbered 9766-9825, which were delivered in 1968. The design was repeated for the 90341-90440 series in 1973 and the 90441-90840 series in 1975-1976. Both kits includes a one-piece resin carbody, styrene letterboards and shaker plates, and .020" x .020" strip styrene for the top braces. They sell for $16.95 CAD each.

NCOV-2 is a one piece casting of the Ecofab fibreglass covers used on BCR gondolas in copper concentrate service during the 1970s and 1980s. This style of cover has the four distinctive bumps on top and is intended for use with the manufacturer's kit NGON-1 (see below). The covers sell for $5.00 CAD.

Previous releases from Sidney Model Works

include NCHIP-1, a model of the PGE 9501-9765 series wood chip cars built by Vancouver Iron, and NGON-1, which represents the Hawker Siddeley welded gondolas owned by BC Rail and CP Rail. All of the Sidney Model Works kits are available directly from the manufacturer only at this time.

HO Scale

Athearn, Inc. (19010 Laurel Park Road, Compton, CA, 90220 U.S.A. Website: www.athearn.com) has announced new road names for their 50 foot Pullman Standard boxcar including #5829 NOKL. This road name is seen frequently on BC Rail.

Atlas Model Railroad Co. (603 Sweetland Avenue, Hillside, New Jersey, 07205 U.S.A. Website: www.atlasrr.com) has announced production of the General Electric Dash 8-40B diesel locomotive in HO scale. The model features a die-cast underframe, five-pole motor with dual flywheels, a Dual-Mode Decoder, directional lighting, AccuMate knuckle couplers, metal grab irons, fine scale handrails, and many other details. The road names of interest to BC Rail modelers include #9000 – Undecorated, #9010 - LMX 8526, #9011 – LMX 8577, or #9012 – LMX (no number). MRSP is $139.95 and delivery is scheduled for April. This model is correct for BCOL No. 3903, and with minor modifications, BCOL 3901-3905 and BCOL 1700 and provides modelers of the contemporary BC Rail era with a ready-to-paint locomotive.

Canadian Hobbycraft (140 Applewood Crescent, Concord, ON, Canada, L4K 4E2. Website: www.hobbycraft.com/lifelike.html) has announced that they will offer a Canadian 50' newsprint car in ready-to-run or kit form as part of their Proto 1000 series. The manufacturer calls this release the most prototypical piece of Canadian rolling stock to be introduced into the Canadian market. The model will feature Proto 2000 trucks and two styles of doors will be offered – the flush plug door and the external frame plug door. The first releases will be paint schemes for CN, CP and DW&P. It is not yet clear whether or not this model will be appropriate for the PGE/BCR 4500/4600 series paper cars. No date for their release has been announced, but MRSP is expected to be $34.99 – 39.99 CAD.

Recent HO scale announcements by Hobbycraft Canada include the development of a model of the MLW RS-18 diesel locomotive in high hood configuration for CN, CP and PGE/BCR, and the C-Liner 'B' unit, which can be used to create a model of RCC 3 and RCC 4.

H &D Hobby Distributing Ltd. (3801 16th Street S.E., Calgary, Alberta, Canada, T2G 4W5 Website: www.trainscanada.ca) has announced production of an HO model of a 40' boxcar with 8' sliding doors, NSC-3 ends and roof as built by National Steel Car in 1956. At first glance this would appear to be a suitable candidate for representing the 4100 series boxcars purchased from National Steel Car by the PGE in 1958. No further details are given at this time. Modern Sultran bathtub gondolas are coming soon.

O Scale

Atlas Model Railroad Co. (603 Sweetland Avenue, Hillside, New Jersey, 07205 U.S.A. Website: www.atlasO.com) has announced production of the General Electric Dash 8-40B diesel locomotive in O scale. The model comes equipped with Lionel's Command & Railsounds 4.0 digital sound system and an operating diesel exhaust unit. Other features include a die-cast chassis, sill unit and fuel tank, twin motors with flywheels, and a host of separately applied details. The road names of interest to BC Rail modelers include #6830/7830 – Undecorated and #6834/7834 - LMX (choice of two road numbers). Each road name is available in a three-rail version for $399.95 U.S. or a two-rail version for $349.95 U.S. Delivery is slated for June 2001. This model is correct for BCOL No. 3903, and with minor modifications, BCOL 3901-3905 and BCOL 1700 and provides O scale modelers with a contemporary era BC Rail locomotive that is ready-to-paint.

Also available from Atlas in O scale is their Evans double plug door boxcar decorated for the British Columbia Railway. Both the three-rail version (#6507) and the two-rail version (#7507) feature true ¼" scale dimensions, a die-cast floor, and die-cast sprung trucks. MRSP is $49.95 for the three-rail version and $54.95 U.S. for the two-rail version. This car is now available in three scales from Atlas.

PRODUCT REVIEW

By Dan Rowsell

Following in the wake of their popular "N" and "HO" models, the newest releases by Atlas O include the British Columbia Railway 53 ft. Evans box car. This car is big, measuring an actual 13 inches. The model comes equipped with a die cast floor, separately applied brake equipment and associated rigging. Also separately applied on the model are the ladders, brake wheel, coupler platform , door bars and door handle.

The painting and lettering on these models is crisp, clear and accurate. The only thing that appears to be missing are the ACI labels and they are easily applied using decals. The cars come in two road numbers, BCIT 800435 and BCIT 800447. If I were to make one comment on the colours, it would appear that the Orange/Yellow circle on the Dogwood herald is a bit dark.

These cars sold out fast. I had to settle for a Three rail version as the Two Rail versions were completely sold out. I am in the process of converting these cars to two rail.

All in all these cars will make great additions to my BCR "O" Scale fleet. These cars appeared to sell out fast and hopefully Atlas O will re-issue the cars in different road numbers.

BOOK REVIEW

"The Pacific Great Eastern Railway"

(Volume Three)
Written by: Timothy J. Horton
Published by: B.R.M.N.A.
5124 – 33rd Street N.W.
Calgary, Alberta, Canada T2L 1V4
Published: October 2000
$13.00 plus GST, add $2 shipping

"The Pacific Great Eastern Railway" (Volume Three) is actually the fifth in a series of soft cover books written by PGE/BCR historian and modeller Tim Horton. The horizontal, twenty-six page stapled format, contains thirty-two black & white images with thoroughly researched captions.

Volume Three describes the construction of the railway and some of the equipment not featured in the two previous Pacific Great Eastern volumes, including Howe Sound & Northern locomotives nos. 1 and 2 and gas car no. 106. Equally as interesting are eight smaller rolling stock photos documenting the early box cars, stock cars, ice activated refrigerators, diesel fuel tank cars and flat cars. The PGE was one of North America's first railways to operate piggyback flats as evidenced by PGE 1202 transporting a single axle Northern Freightways trailer at Prince George in July 1954.

Some of the other images include the Squamish dock before the rail connection along Howe Sound was made to North Vancouver, PGE Consolidation no.53 switching the stock yards in Williams Lake, rail diesel car no. BC-31 at Lillooet and Alco diesels in the orange and green paint schemes leading director's specials and through freights. There are also several photos of wooden cabooses, which are often overlooked by rail photographers as the train rumbles by.

The newest photo in this volume was taken in October 1999. Howe Sound, Pemberton Valley & Northern Railway 2-6-2 saddle tank no. 2 was built in 1910. After a long career on Vancouver Island, she was returned to the PGE in 1965 and was placed on display in a Squamish park. Today no. 2, the only surviving Pacific Great Eastern steam locomotive, greets visitors to the West Coast Railway Heritage Park.

The B.R.M.N.A. began publishing Tim Horton's first four PGE/BCR books beginning in 1986. "**The Pacific Great Eastern Railway**" (Volume Three) has now been published after a seven year break. Corrections and amendments to volume one and two follow the opening acknowledgements. For those of us also interested in the current operations of the railway, the closing paragraph hints that a future "**The British Columbia Railway**" (Volume Three) will soon be available.

This latest volume is another fine addition to a growing number of books available on the Pacific Great Eastern Railway and her descendants.

Ron Tuff

30

Continued from pg. 3

Issue 37 started with the top notch article by Eric Johnson, *Tales of Trails & Rails* which I found interesting reading. The *Modelling an Alco RS-27* was the modellers article by Paul Crozier-Smith for the modellers, and Dick Sutcliffe's *Reflections on my trip to the Joint Convention* was the special interest article.

Issue 38 was a little more varied in that there were several smaller articles. The *New Locomotives for BC Rail* by Tim Horton and the *Grain Car Addendum* by Andy Barber and *Squamish Terminals* by Trevor Mills fit the bill as prototype articles. *Portrait of a Railroader* by Brad Dunlop was both a historical and general interest article. Paul Crozier-Smith's mini articles, *Modelling a CN C-424 Leased to BCR* and *Modelling a PGE S-10 in Tuscan Red* were items for the modellers.

This, issue 39, has a prototype/ historical article on the electrified Tumbler Ridge coal sub-division of BCR by our current president Singh Biln, a brief article on wheel turning by Brad Dunlop, a prototype come modeller article about the various PGE/BCR MLW RS-10, RS-18, CRS-20 units that could become HO models by Canadian Hobbycraft in their Proto 1000/2000 line, also by Brad. For the modeller there is the excellent article by Bob Pirie on the PGE 1805-06 cabooses and how to create HO scale drawings.

For issue 40 we have a super article by Basil V. Franey on his journey to the new world and trip on the PGE in 1949. Basil's diary, memories and collection of trip photgraphs make for compelling reading. I sure enjoyed it as I laied it out.

While there are a couple of model articles on hand they require a bit of work to complete as well as an article on PGE/BCR off rail equipment and one on a Jordan spreader, (we could use some prototype dimensions here). This would requires an HO drawing to do properly. Can some one help us there?

If you members and readers (don't have to be a member) want to see this magazine continue in it's present format you will have to send material in to the editorial staff so they may put more issues together.

High quality pictures that are suitable for covers are a major priority, 8x10s or slides preferred here. Note that a verticale format is used so the photo or slide will be cropped to fit in that format.

Photos supplied as 3x5 or 4x6 prints can only be realistically reproduced at that size or smaller. Scanned photos should be B&W at 300 or 400 dpi as *tif* or *jpg* files, 96 or 72 dpi *GIF* or *JPG* are almost useless for printing but good for use on the net.

Issue 40 will contain some hints on preparing data and material for use on the SIG's web site.

While drawings prepared as EPS files can be used in articles, an ACAD dwg or dxf file can be readily used through the conversion software we use here.

David Barone will do the basic layout for the next issue beyond what we already have on hand. This means you send text to David at editor@pge-bcr-sig.bc.ca and photos to me at publisher@pgr-bcr-sig.bc.ca. Low res. scans will be sent from here to Dave for layout work.

Columns prepared by the various contributors are also sent direct to publisher@pgr-bcr-sig.bc.ca . Information for inclusion in the various columns should be sent to the editor of that column at the e-mail address noted on the masthead. If you must send typed data, send it to LPD Publishing, 11035 Pretty Rd., Winfield, BC Canada, V4V 1H6. They will scan it and forward the file to the proper editor.

While I seemed to have recovered from my summer/fall of viral infection and have got this issue out, to continue producing this high quality, we need a steady stream of top quality colour photos for covers. Two of which are needed NOW. Colour slides or 8x10s preferred as the photos will be cropped as necessary in a portrait format.

One other thing was the omission of much of the text that Andy Barber wrote for the Grain Car Addendum in issue 38. We will try to fit it into this issue.

Don Lewis *Publisher*

EDITORIAL

By Brad Dunlop

Almost everyone has commented on the quality of the front and back cover of Issue No. 38. Get used to it as that is now our standard. Publisher, Don Lewis, arranged for a local printing company to print our front and back covers on a regular printing press. By doing two issues worth of covers at once Don was able to negotiate an affordable price for our SIG. We would like to scan from slides or negatives for all future covers whenever possible. The printing company is requesting a 360 DPI image. For that high of resolution and the 8" x 10" size required it is best if Don does the scanning. That will result in an even better looking cover than we already have. Nice work Don!

Speaking of front cover shots we are primarily looking for portrait oriented photos. Both issue No. 38 and No. 39 covers are good examples of this type of photo. If anyone has colour photos of PGE steam and/or the earlier diesel paint schemes and would like to see them on our covers let me know. I would be happy to try and accommodate you.

Don arranged for the purchase of a paper folding machine and stapler of suitable quality for producing *The Cariboo*. I polled the Board of Directors and unanimous approval was given for this purchase. The PGE/BCR SIG owns these machines and after a payback period of no more than ten issues they will have the net effect of reducing our production costs. Don has already lined up some "outside" customers for our new machinery and that will help reduce our payback time.

Armed with copies of Issue No. 37 and No. 38 of *The Cariboo* Don and fellow Director Singh Biln recently met with a representative from BC Rail Passenger Services. As a result of that meeting BC Rail Passenger Services have placed an order for copies of both issues. This will be for a trial time period to see how well they sell on BC Rail's passenger trains. If they sell well we can expect more orders and, probably larger quantities. This is an exciting prospect for our SIG and *The Cariboo* and bodes well for the future. BC Rail is also helping support our SIG by placing the ads you see elsewhere in this issue. This is also due to the efforts of Don and Singh. Thank you guys, well done!

I had errantly included a paragraph in the Issue No. 38 Editorial about a convention survey and a new logo contest. That is only one of the problems that arise when the production of an issue is spread out over to long of a time period. Members will find the convention survey as part of an insert in this issue. Please fill out the questionnaire and return it to me by no later than June 15, 2001. On the other side of the convention questionnaire is the answer sheet for the RS-10, RS-18, and CRS-20 Paint Schemes and Variances Survey. I will endeavor to have the results published in issue No. 40 of *The Cariboo*. The new logo contest will have to wait until issue No. 40 when more information will be published on it.

Accolades to PGE/BCR SIG member Rider Cheyne and company from Williams Lake on their efforts, which are featured in this issue. This is a fine example of what can be done if you put your mind to it. As Rider points out, some of the more "purists" in our SIG may find fault with the some of the equipment used but what the hey. Most of it was donated and the project would not have been possible without that. For the day-to-day audience of the project, most of who probably do not know the difference between a RS-3 and a Dash 9, the end result is just as good. The interpretative display concept is excellent!

The SIG still has a vacancy for an Assistant Editor. The primary duties of this position will be to help solicit articles for *The Cariboo*. If you would like to become more involved and seek an opportunity to work and meet with some of the very interesting people who make up our SIG then give me a call. Or drop me a letter or e-mail. My only real preferences are that the successful candidate be online with the Internet, have regular e-mail access and a good long distance telephone plan. You will not have to begin cold as we have many leads and suggestions for future articles on hand. We just do not have the time to do it all on a sustainable basis without burning ourselves out.

I know this sounds like a broken record however we are still in dire need of material for future issues of *The Cariboo.* We cannot rest on our laurels or we will just get behind in our publishing cycle again and that is an exercise that I do not wish to repeat. For optimum results we should have at least two issues worth of material on hand at any given time. That would give the editorial staff enough time to layout the issues without any undue stress applied to them and also create a better balance. To paraphrase an old quote "Think not what *The Cariboo* can do for you but what you can do for *The Cariboo*". Until the next time, happy reading.

J.Singh Biln, Acting President

Happy New Year everyone! By the time you read this it will be well into January and we are over a year late with this issue. To all members, our retailers and advertisers, I sincerely apologize for this lengthy delay. As you read the minutes from our special meeting on November 12, 2001 and my subsequent letter to each member printed elsewhere in this issue, you will have heard of our commitment to get the publications back on track. We have a new editor (David Barone), who is determined to get issue 40 out in March and the subsequent issues on schedule.

The late publication also means that some of the news is old and even the cover says Winter 2001 as it was printed long ago. Since most of the issue was written, a lot has transpired so please bear with us for some of the old news. Although we now have more members involved with the publication, we can still use more help so please don't hesitate to write if you can help at all. We are specifically looking for someone to handle advertising sales and always looking for more material for publication. We are also looking for any more nominations for directors so please nominate yourself or a friend. Once again, please accept my apology for the delay and have a great 2002.

David Barone, Editor

I was going through my back issues of The Cariboo this past weekend. It is hard to believe our first issue was published eleven years ago! For those of you who have never seen issue one, take my word, we have come a long way! The first paragraph of issue one featured a welcome from then editor, Jim Moore. Jim wrote: Welcome to the premiere issue of "The Cariboo", a forum for the exchange of both prototype and modeling information. I believe we have accomplished our mission. No other publication offers the in-depth coverage of the British Columbia Railway and its predecessor the PGE like the Cariboo does.

Unfortunately we have our limitations. As a volunteer organization, we count on our membership to provide the content of the magazine. Additionally, The Cariboo is put together and published by volunteers in their spare time. We all know how difficult it is to find spare time these days. The number one reason The Cariboo is not published regularly is lack of articles. We need reporters from all over the railroad. The majority of our membership does not have regular access to BC Rail. If you live near the railroad and are out and about, drop a note to Paul or Brian with any new freight car or locomotive sightings. If you see

an article in your local paper relating to the railroad, clip it out and send it to me. When you are out taking photographs and see that perfect shot, take two and send us one. I would like to build a library of stock photographs that can be used for news columns and future articles.

My goal for 2002 is to publish three issues of The Cariboo. The only way to achieve this goal is with a steady flow of material. I am working on the following themes for upcoming issues. Issue 40 will feature an intermodal theme. If you are interested in BCR or PGE piggyback service and would like to share your thoughts and models with the rest of the group please contact me ASAP. Issue 41 is open for anything. Issue 42 will feature Quesnel. If you like to draw let me know. We need someone to work on drawings of the Quesnel Depot. We also need detail photos of the mills around Two Mile Flat as well as their history. This leads me to one more thing. I would like to hear from anyone that shares my interest in lumber mills. I would like to do a regular feature on the industries that feed the BCR.

As mentioned earlier, The Cariboo is intended as an avenue for the exchange of information. It's success depends upon your participation. All contributions are welcome and needed. We are looking for everything from feature articles to product reviews. If you have an idea but are not sure how to put it down on paper please feel free to contact me. I will be happy to work with you.

When submitting an article the best format is a MS Word document. It can be sent as an E-mail attachment. If you do not use a computer, a hand written copy will do. All photographs and slides will be treated with the utmost care. A confirmation will be sent out for all material received. If requested your material will be returned after publication.

Also as mentioned before the position of assistant editor is open, as well as an advertising manager slot who possibly is located in the B.C. lower mainland. We need the revenue as well as the space fills it provides during layout.

With that said, grab your camera and your note pad and get out there and shoot, shoot, shoot. I look forward to seeing what you come up with. Always remember SAFTY FIRST when you are around the railroad. Expect movement on any track in any direction at any time.

The CARIBOO

All contributions are welcome, it is helpful if submissions are provided on PC compatible disks in an IBM type word processor. Files prepared in MS Word on a MAC can also be used. Files can also be sent electronically provided you don't include a lot of formatting. As a last resort we will accept typewritten submissions that we can scan.

Preferred files contain no formatting, are in 10pt type, in Times, Helvetica or Garamond. Use a single column around 3.5" wide for layout, no indents.

All submissions are subject to editing by the societies editorial board as a condition of publication. Material will be retained in the societies files unless other arrangements are made prior to publication. Photos that must be returned following publication should be supplied with a stamped self addressed envelope.

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

Scanning will be done at the layout stage to suit the required size. Any electronic files must be a minimum of 300 dpi at a width of 3.5", 4x6 prints will only be reproduced at that size or smaller. Material for use in page size format or covers must be supplied as 8x10 or negatives.

Text submissions may be sent to Dave Barone or Don Lewis at 11035 Pretty Road, Winfield, BC, Canada, V4V 1H6. All photographic material should be sent to Don.

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

The Cariboo is copyright as a collection and the society retains the rights to editorial changes, design, and artwork used in features.

The PGE/BCR Special Interest Group Society is an independent, registered non-profit society operating under the laws and regulations of the Province of British Columbia. The society and the National Model Railroad Association are independant organizations who have chosen to affiliate for the mutual benifit of their memberships, and are not responsible for the publications and/or actions of the other group.

B&W advertising rates (C$) per issue

Full page (limited)	$ 50.00
One-half page -	$ 25.00
One-third page -	$ 20.00
One quater page -	$ 15.00
One-eigth page -	$ 10.00

All material to be camera ready

Design and layout are available
Ask for a quote.

SD40-2 758 leading two C-630s plus another SD40-2 pull the first train on the Tumbler Ridge line on November 1st, 1983. Low cloud or fog was a common occurance during late fall and winter in the Rockey Mountains around the mine location.

BC Rail photo

No, BC Rail has not been sold! This photo was taken by PGE/BCR SIG Director and Secretary Doug Race at the Squamish North Yards crossing on November 22, 2001 to verify the "W" in front of the BCR logo on unit 3624. Doug had been e-mailing Director Singh Biln at BC Rail trying to figu e out if the alteration was a joke or if the company was now a part of the Washington Group. Nothing that sinister as the mystery was solved by BCR's Film Liaison Officer Bruce Craiggs who advised that units 3622 and 3624 were used for filming an episode of the TV series "Dark Angel". To avoid using a real railroad, the production company applied a "W" onto the locomotives using Vaseline for easy removal after the filming on November 17th. Unfortunately, the decal froze on and could not be removed that evening. Two weeks later, one of the units was still sporting the new logo. Yes that's snow in the air and on the roof.

Mike Nyiri took these two photos of a Northbound freight on the Cheakamus Canyon bridge at MB 55.7 on September 23, 2000. This 470' long 70' high curved bridge was the subject of an N Scale model by Greg Kennelly some years ago. Dash 9-44 CM 4617 leads two SD40-2s with Dash 9-CWL 4641 in mid-train.

Below Rebuilt from an MLW RS-18 and released for service on August 11, 1991, is BC Rail 611 class CRS20. Along with Slug S-401 she is switching a string of log cars at a Prince George Pulp Mill during the P.G. Rails `99 Convention.

Photo by Dave Harvey (PGE/BCR SIG member living in Florida)