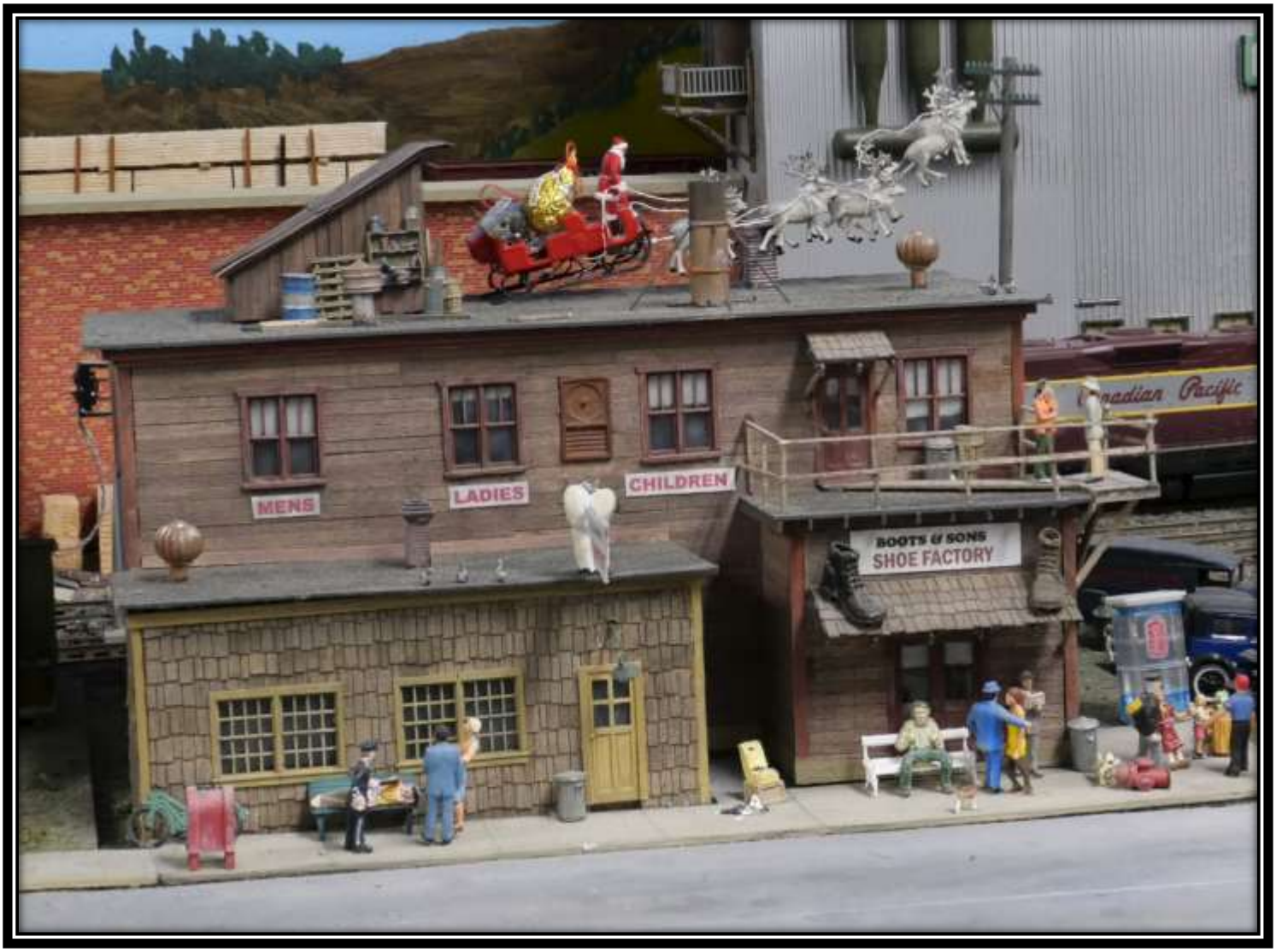
Highball!

OFFICIAL PUBLICATION 6TH DIVISION PNR

December 2023



Santa has just finished making an unusual daytime delivery at the Boots & Sons Shoe Factory on Dennis Dreher's Alberta Midland Railway layout. Nobody on the sidewalk seems to notice. Dennis has built an extremely well detailed layout. Look for more photos within this issue.

6th Division Officers

Superintendent
Ed Molenkamp 6divsuper@pnr.nmra.org
Phone: 780-455-1479
Assistant Superintendent
Rick Astle ve6rla@gmail.com
Phone: 403-507-3314
Secretary
Doug Johnson djca@accesscomm.ca
Treasurer
Rick Walker walkr@telusplanet.net
Achievement Program
Doug Burton dwburton1234@gmail.com
Interim Convention Coordinator
Peter Ulvestad ulvestad@telus.net
Highball! Editor
Rob Badmington highball@pnr.nmra.org

Superintendent's Report – Ed Molenkamp, Supt. 6th Division, President NMRA Canada

Greetings everyone

I write this as the last report for 2023 and as I look back it was a pretty good year for Shows and Meets. Next year looks good too as we are receiving our notifications for the planned events already. As per usual the Division will have a table/booth at most of the upcoming events.

NMRA Canada is planning a series of clinics these winter months. You will be notified of time and dates by email or a link from the website.

There will be a small report given in this publication regarding the Spring Meet in Drumheller from the committee. Look out for it and mark your calendars.

Hope to see you all soon and hopefully the train Santa will be good to you all.

Assistant Superintendent's Report – Rick Astle

The year 2023 has been a challenge for me with my wife's declining mobility over the last few years and her health challenges early on demanding more and more of my time. Things are settling down now with her long term care needs being sorted and it is time to move forward with life.

During our last division zoom meeting discussions concerning the pending election of Superintendent and Assistant Superintendent resulted in Peter Ulvestad stepping up to chair the nomination committee. I am sure you will hear or read more from Peter in this regard, thank you Peter.

The train event schedule is heating up with shows and events planned through to next summer. I hope to be at some of these events to help promote our division and the NMRA. I hope you have a chance to see the CPKC Holiday Train as it passes through or near your community this December. Invites are out for SUPERTRAIN 2024 and registration is open for Surrey Excursion 2024, the PNR convention being hosted by 7th Division. Check out all the events and contact details elsewhere in this issue.

Until next time keep the throttle steady..

.

From the Editor – Rob Badmington

As we approach the holiday season, thoughts turn to family and friends. Although my family is supportive of my hobby, they are not overly interested in model railroading. However, I consider myself very fortunate to have a great many friends who enjoy the hobby as much as I do. In fact, I get together with some of these friends almost every week, whether it is at an op session, club meeting, at the hobby shop, or at one of the many events I am able to attend.

I was recently asked what might motivate me to attend the PNR Regional Convention next May in Surrey, BC. My first answer was the opportunity to meet up with many old friends and make some new ones. Looking back, I realized that the first model railroad meet I attended was more than 52 years ago, the PNR Regional in Calgary in 1971. I still have fond memories of the fan trip we took to Field behind C-Liner 4081, as well as some great clinics and layouts I visited. I also realized that I met some fellow modellers who are still friends all these years later.

I guess my point is that while many modellers enjoy the hobby alone, in my mind it can be way more fun to get together with others. The back page lists quite a number of shows being planned for 2024, so chances are good that there will be one close to where you live. But, if you have

never attended a meet or convention, give some thought to coming to the 6th Division Spring Meet, Dino Tracks, in Drumheller in June.

We also have the PNR Regional Convention on the last weekend of May in Surrey, BC. Surrey Excursion 2024 promises to be an even bigger event, with a full complement of clinics, operating sessions, prototype tours, layout tours, and much more. I plan to be at both events. Hope to see you there too.

Wishing you all a very Merry Christmas and Happy New Year!

Convention Report – Peter Ulvestad, 6th Division Convention Coordinator

For those that have not heard, the 2024 convention will be in Drumheller in June. More info will be forthcoming.

A location has been picked for 2025 but more work needs to be done.

We still have not received any bids to host the PNR Regional Convention in 2027. Every 7 years it is our division's turn to host. If your group would like to submit a bid or have questions about it please contact myself or Ed Molenkamp.

2024 Election Time in 6th Division – Peter Ulvestad

It's time again to look for nominations to fill the Divisions Superintendent and Assistant Superintendent positions. These positions are for 2 years starting September 1, 2024.

I am chairing the nominating committee along with Dennis Dreher. According to our Bylaws, we require three people on the committee so if you would like to volunteer please email me ulvestad@telus.net . We require nominations for these 2 positions by May 31 so that voting can take place and have the positions filled prior to their commencement date.

The Superintendent represents the over 200 NMRA members in the division. A guide book is available at http://pnr.nmra.org/policies/ that may help answer questions about what this position entails or you could phone Ed to get his take on it after so many years in the position.

Do you know someone who would be a great candidate for one of these positions? Have you approached this person with the idea of a nomination? You may find the person receptive but unsure of their ability to do the job. Your confidence in that person may be all that is needed to unlock a talent the division didn't know about.

The NMRA and in particular the 6th Division PNR owes its success to all of its members in whatever capacity, from home layout builders to convention organizers and division officers. We will continue to flourish with those who are willing and able to step up to the plate.

Announcing Dino Tracks 2024 – Ed Molenkamp

Mark your calendars for "**Dino Tracks 2024**" to take place on June 20 - 22, 2024 in Drumheller, Alberta.

The committee is hard at work planning this Spring Meet. We will have clinics, prototype tours, and a banquet with guest speaker, Les Kozma. Les is a well-known historian and writer of numerous books and articles on Canadian railroads.

The Hotel codes should be available soon with the choice of two hotels. We will have regular updates in Highball! and by email, with a website up soon.

Achievement Program Report - Doug Burton, 6th Division, PNR AP Chair

The Achievement Program is alive and well in the 6th Division, judging by the number of AP Certificates that have been earned by members lately. One of the first pages I turn to when I receive a new NMRA Magazine in the mail is the AP page.

In the last six months I have seen the names of nine different members receiving one or more certificates. I believe several of these are only a certificate or two away from achieving Master Model Railroader status. Well done!

I also noted that a PNR member from Division 3, Bill Yancey, recently became an MMR. Bill presented a very interesting clinic on scratchbuilding freight cars at our last Spring Meet in Regina. Bill credits 6th Div members

at the meet for encouraging him to pursue his MMR, which he did in very short order. Congratulations to Bill!

(This column written by Rob Badmington)

Area Reports

Moose Jaw - Thunder Creek Model Railway Club – Al Howard

The Thunder Creek Model Railway Club continues to operate every Friday & Saturday at the Town and Country Mall at 1235 Main Street North in Moose Jaw. We have an operating HO display plus a static N Scale display as well as several other items of interest. Operating sessions are open to the public at no charge. After a very successful Halloween day seeing over seven hundred kids go through the mall, the mall management suggested the possibility of extending our operating hours to include Thursdays during the Christmas season. As young ones are in school during the day, we are going to be open later in the day on Thursdays.

We also have an ongoing permanent display at the Western Development Museum in Moose Jaw and we are in the process of setting up a separate display with a Christmas Train in the lobby of the museum for the Christmas season.

A CP Trainmaster pulling a local freight consist passes through a small town on the HO Gauge Layout at the Town & Country Mall

We had six members attend the Melville Model Train show on Oct 14 & 15. Some of the modules from our mall display as well as others were set up at the show. We transported and set up a 40 X 11 foot layout. The show went well from our perspective, CN sponsored the show. There was lots of camaraderie and everyone had a good time. The Melville Club also conducted tours of the old train station they are helping to renovate and hope to share space with in the future. Very impressive what they have accomplished and we wish them success with this endeavor.

We have started planning for our annual show in Moose Jaw set for 23rd and 24th of March 2024. Members continue to work on the operational displays, ensuring

Two Southern Pacific coaches wait on a siding in a small town in the US southwest; part of Larry Dickenson's O Gauge Mexicali Grande layout currently in the club meeting room at the Mall.

that track, wiring and scenery remain in top condition. We are also planning to expand the travelling layout by up to 4 six-foot long portable sections which are scheduled for construction over the coming year.

The club meets every Tuesday at the Town & Country Mall. Visitors are welcome. Please contact webmaster1@tcmrc.org for more information on meeting times and logistics.

View of the TCMRC Layout as displayed at the Melville show Oct 14 and 15.

Lethbridge – Paul Smith

The Southern Alberta Model Railway Club has had a busy fall. Our Annual General Meeting in September saw some new members added to our Executive. We thank those outgoing members who contributed a lot of their effort and time to keeping our organization on track. Our Fall Open House on October 21 and 22 had a reasonable turnout of visitors despite the weather (as in too nice on Saturday and too unattractive on Sunday!). We were gratified by both the compliments and interest shown by the public. We were treated to a slide show on train wrecks earlier in November by Doug Wingfield and hope to see similar presentations by other members in the future.

Our HO and N scale layout groups have been addressing the usual array of maintenance and repair chores concerning track, electrical systems and scenery. We're pressing forward with developing an operating system for the HO scale layout. The N scale layout design and format is also being reviewed. Some good ideas have been submitted concerning this layout and we plan to examine them in greater detail through the winter.

Any Highball! readers who happen to be in Lethbridge on a Tuesday are welcome to visit us in our Gyro Park clubhouse starting at 1900 hours.

Regina – Echo Valley Railroad Guild – Doug Johnson

Members of the Regina Free-Mo group, including several members of the Echo Valley club, attended the Melville show on October 14 and 15 with a large Free-Mo layout. The configuration was somewhat new, the bugs were worked out and the railroad is ready for the 2024 show season. Members of the group, along with members of the On30 and G scale groups, have met to coordinate plans for attendance at several 2024 shows. Planning has also begun for the annual Regina public show. Railfest 2024 is scheduled for April 27 and 28 next year. Further information is available on the website at www.reginarailfest.com

Airdrie / Iron Horse Park – Greg Orme

Well, another Canadian Thanksgiving weekend has come and gone and with it the end of another successful season at Iron Horse Park. We had scheduled a Halloween run on the 29th of October in support of the Airdrie Food Bank but a midweek snow fall just before the event with freeze and thaw conditions encrusted our trackage in hard packed snow and ice so we had to cancel when we realized it was impossible to open the line in time. Nonetheless we still donated $1000.00 to help the Food Bank help those less fortunate.

During the season we provided journeys to just under 12,000 people along with special events from model railway clubs to the Airdrie Boys and Girls Club.

A very good year all in all with loyal support from our regular ridership keeping us on our toes right to the end.

The Shuswap Sub has now been fully integrated into our operations and was extensively used throughout the year. We started a ballast renewal program this year replacing the pea gravel that was originally used over 24 years ago with a more realistic and functional crushed stone. Some 1500+ feet has been replaced to date and will be an ongoing process for the next couple seasons until the entire system including yards and sidings have been reballasted.

The club has acquired another Heavy Steam locomotive from one of our original members. It's a Pennsylvania Railroad K4 class locomotive and we're really looking forward to getting it into shape over the winter in preparation for next season running as one of our passenger engines along with our CPR Mikado class locomotive. Who knows, we may even have a double header or two next year.

As a club we're not just about trains, we try to support the community as much as possible. Over the years we have been fortunate enough to be able to donate to a number of organizations within Airdrie. From the Airdrie Food Bank, Nose Creek Museum and Veterans Food Bank we have tried to support as many non-profits as possible. About three years ago one of our members at that time was very passionate about helping the less fortunate kids in our schools to get a breakfast or lunch so we made a couple of donations to the Kids lunch

programs. Since his passing in 2022 we started the Jim Swan Award Breakfast Program where we have been donating $1000.00 to a school selected by his wife to help with their program. This year we were able to include an additional school as well as help with the Food for Kids program.

So when you become a member with us you not only learn how to operate our trains you truly become part of the community.

Now that December is almost here we are now once again into our winter maintenance mode on all of the club's equipment as well as members' equipment in preparation for next year. We will hopefully be back to SUPERTRAIN next year if a suitable space can be found for our tracks followed by our opening day for the 2024 season which will begin on the Sunday of the May Long Weekend.

As I have said in my previous reports, we are always looking for new members or volunteers to help out at the park, so if you have a bit of time and would like to get involved we would be happy if you would consider joining us. Information is available on our Web site.

With this being the last report of the year I would like to wish each and every one a Very Merry Christmas and a Happy, Healthy and Prosperous New Year.

Edmonton – Peter Ulvestad

The MMRF Fall Swap Meet was held in October. It was well attended with vendors liking the new times. We had 58 vendors taking up 101 tables! We figure there were 329 folks came through the door to shop. Planning has already started for the spring event.

The Edmonton Model Railroad Association finally has occupancy on the building expansion. The flooring in the new basement still needs to be finished and we have removed the 30+ year old carpet from the old basement to receive the same flooring treatment as the new side. Our A/C unit failed this summer making for some very warm operating sessions. It will be replaced soon along with the addition of A/C to the addition.

We continue to have our quarterly Saturday open operating sessions. While attendance has been low since restarting after Covid, the last session saw an increase in the November session. Along with regular locals with had 2 guests from Calgary and 3 from the Camrose area.

Calgary – Dale Sproule

Not a terribly long report this issue from Calgary. To start this report, it is of note that The Calgary Model Trainmen's Club has become a 100 percent NMRA club. CMT has also welcomed 2 new prospective members in the last 2 months. The recent Calgary Model Railway Society mini meet in mid-October saw 3 morning clinics: A clinic on Telegraphy on the Railroad, Ken Clark presented his clinic on Slocan Star/Silversmith Milling operations located in Sandon, Mike Marquardt presented a clinic on-Time Machines: A Look at Alberta's Steam Survivors, Bruce Watson gave a very good clinic on the CPKC merger , and Jim Ironside presented his clinic entitled "Design Before Build", designing it right the first (or second) time with a System Engineering process. The annual AGM was held during lunch time where CMRS members enjoyed a selection of sandwiches and desserts, coffee was available all day. The modeling highlight was seeing model entries entered into the "Bouma Challenge" where members had previously been invited to build a diorama on top of a Peanut Butter Lid and now we saw the results. Three random winners each took home a $50 gift certificate from Mini Prints.

Invitations have been issued to anyone wishing to participate in the 2024 SUPERTRAIN show, details on how to participate are found in the SUPERTRAIN website.

Finally, this photo is of the CPKC (Honoring Our Veterans Unit ... in the US) diesel seen at the 2023 Rembrance DayCeremony at Ogden Shops, Calgary. Standing beside it I can imagine the smell of the fresh paint drying. The unit

adjacent is unit 6644, the engine dedicated to the D-Day landing in 1944. I have seen photos of 4006 running around since August 18, 2021. It is a 13 year old EMD SD70ACe. I am told the number 4006 is not special, just a normal KCS diesel 4006! I personally have not seen this unit in service.

Olds - Didsbury - Carstairs - Rick Astle

Mountain View Model Railroad Club – Didsbury Museum

It has been a busy fall season for the club and we are now looking forward to some indoor activities. The club supports all the activities of the museum with Saturday running of garden trains weather permitting and operations of the indoor HO layout.

The club still has some routine maintenance and scenery work to complete but is looking forward to operating some trains. The layout is dual power and we encourage visitors to bring some of their rolling stock and locomotives to run with us. With the flip of a couple of switches we can move from DC to DCC operations.

You can run your train around our 16 x 25 foot layout on the second floor of the museum and chat with club members. With the winter weather settling in members will be at the museum every second Saturday as outlined on our meeting schedule posted on our web page at www.mvmrc.ca/page2 .html or you can call Rick Astle at 403-507-3314 day or 403-556-8121 evenings to arrange a group visit anytime. We look forward to meeting with you and running some trains..

Most of the group from Moose Jaw that attended the Melville Show in October

Operating Your Railway – Cal Sexsmith

TIME TABLE & TRAIN ORDER OPERATIONS

Introduction

Time Table & Train Order (TT&TO) is one of the oldest forms of train dispatching. It was conceived by Charles Minot in the 1850s and quickly became the default system of train dispatching in North America until the 1980s. Because of its dominance for over 100 years it is useful to have some understanding of TT&TO. This article should give the reader enough information to be able to successfully operate a train using TT&TO.

Time Table

Timetables are used in most forms of train dispatching. However the schedules are often found only when TT&TO is used. I have attached a copy of Canadian National Time Table No. 1 of October 30th, 1960 for the Aberdeen Subdivision. I will use this timetable as an example.

In the centre of the timetable is a list of stations from east to west, following each station name is the distance to the next station in miles.

The first column to the right has the letters DN, D or P. DN means Day/Night indicating that a train order operator is on duty day and night, D means Day indicating that a train order operator is on duty during the day, P means Phone and indicates no operator but that a phone is, available for the crew to contact the dispatcher. The actual hours and days of the week that the operator is on duty are listed elsewhere.

The second column to the right has the Office Signal for stations with an operator. These were one or two letter codes that the dispatcher would use to contact a specific operator. For example if the dispatcher wanted to contact Carmel he would telegraph CM.

TIME TABLE No. 1, OCTOBER 30th, 1960 — 39

WESTWARD TRAINS				Miles from Humboldt	Symbols	ABERDEEN SUBDIVISION	Train Order Office or Telephone	Office Signals	Car Capacity		EASTWARD TRAINS			
THIRD CLASS		FIRST CLASS									FIRST CLASS		THIRD CLASS	FOURTH CLASS
670 C.P.R. Mixed Daily ex. Saturday, Sunday	674 C.P.R. Mixed Saturday	31 Passenger Wed'sday, Friday, Sunday	9 Passenger Daily ex. Sunday			STATIONS			Sidings	Other Tracks	32 Passenger Tuesday, Thursday, Saturday	10 Passenger Daily ex. Sunday	669 C.P.R. Mixed Daily ex. Sunday	412 Freight Daily
L 22.30	L 20.37		L 14.05	0.0	KWZ	HUMBOLDT	D N	B	44	YARD		A 14.50	A 3.45	A 9.50
				1.0		1.0								
A 22.35	A 20.42			1.0	Z	HULAN Jct. with C.P.Ry.	P						L 3.40	
						3.4								
			14.12	4.4		DIXON			40	31		14.41		9.35
						6.0								
			s **14.25**	10.4		CARMEL	D	CM	30	34		s **14.25**		9.20
						7.9								
			s 14.42	18.3		BRUNO	D	BO	34	47		s 14.03		9.00
						6.6								
			s 14.55	24.9	Y Z	TOTZKE	D	KS	14			s 13.40		8.45
						1.7								
			s 14.58	26.6		DANA	P		30	34		s 13.35		8.35
						8.9								
			s 15.13	35.5		PRUDHOMME	D	HN	33	37		s 13.23		8.15
		From Meskanaw Sub.				8.8					To Meskanaw Sub.			
			s 15.25	44.3		VONDA	D	VD	30	41		s 13.08		7.50
						7.7								
		L 14.50	15.37	52.0	Y Z	LANNAW Jct. with Meskanaw Sub.	P				A 10.15			
						0.6								
		s 14.54	s 15.39	52.6	Z	ABERDEEN	D	AD	52	126	s 10.13	s 12.50		7.30
						7.1								
		15.03	15.50	59.7		CLARKBORO			31	34	10.02	12.32		7.10
						5.8								
		A 15.14	A 15.58	65.5	Y Z	JCT. WITH DUCK LAKE SUB.					L 9.54	L 12.24		L 6.55
Daily ex. Saturday, Sunday 670	Saturday 674	Wed'sday, Friday, Sunday 31	Daily ex. Sunday 9	MOUNTAIN TIME RULES 41 AND 44 APPLICABLE							Tuesday, Thursday, Saturday 32	Daily ex. Sunday 10	Daily ex. Sunday 669	Daily 412

ABERDEEN SUBDIVISION FOOTNOTES

RAILWAY CROSSINGS AT GRADE

Cudworth Sub. Totzke.....(Non-Interlocked)
Duck Lake Sub. Connecting Track
Warman.....(Non-Interlocked)

The track between mileage 65.2 Aberdeen Subdivision and mileage 0.2 Langham Subdivision will be known as "Connecting Track".

Semaphore signals on the Duck Lake Sub. and gates at grade crossing on connecting track are in operation. All trains using connecting track must be brought to a stop not less than 200 feet from the crossing and a member of the train crew must operate the signals and gate before movement proceeds over crossing. (See Duck Lake Sub. footnotes).

The signals on the Duck Lake Sub. must be left in the normal position displaying a CLEAR indication. The gate is in the normal position when across the connecting track. Stop boards have been installed on this track 200 feet from each side of crossing. Operating instructions are located in the cabin at the crossing.

Trains must not exceed 10 miles per hour over this crossing.

SPEED RESTRICTIONS

	Miles per Hour Passenger	Mixed and Freight
Between Mileages.		
0.0 and 65.5 (except as below)..... Public Crossings at Grade.	50	35
Mileage 0.9 Until crossing occupied.....	10	10
Mileage 35.4 Until crossing occupied..... Permanent Slow Order.	10	10
Between mileages 60.4 and 61.2.....	20	20

1. Train Inspection.
Freight trains must stop for inspection within first 45 miles.

2. Siding at Humboldt is located between the crossover west of station and crossover east of station for the meeting of passenger trains.

3. No. 669 may leave Hulan without obtaining terminal clearance.

4. Conductors of trains originating at Hulan will call operator Humboldt for the information required by Rule 83. Conductors of trains leaving Aberdeen Sub. at Hulan will report to operator Humboldt the time their train clears Aberdeen Sub.

5. Cars must not be stored on siding Totzke.

6. Conductor of No. 32 will report from Lannaw to operator Aberdeen time their train clears Aberdeen Sub.

7. Nos. 31 and 32 must obtain a terminal clearance at Aberdeen.

8. Conductors of trains from Aberdeen Sub. to Langham Sub. via connecting track will call operator Warman from telephone located at Mileage 65.2 Aberdeen Sub. to register and for the information required by Rule 83.

9. During operators assigned hours of duty at Warman westward trains must not enter Duck Lake Sub. unless hand signal to proceed to station is received from the operator. When operator not on duty trains requiring information in accordance with Rule 83 must obtain same from train register at Warman before entering Duck Lake Sub.

10. Yard Limit Signs are located as follows:

Humboldt	4000 feet west of west switch.
Totzke	6500 feet west of diamond. 4000 feet east of east switch.
Aberdeen	3000 feet east of wye east switch Lannaw. 3000 feet west of west switch.
Jct. with Duck Lake Sub.	4000 feet east of switch mileage 65.2.

OTHER TRACKS

	Mileage	Capacity	Connected
Bruno Clay Works	20.9	24 cars	West end.
Transfer Track with Cudworth Sub.	24.9	....	East end.

The third and fourth columns indicate car capacity at the station. Sidings were to be kept clear of cars and used to meet or pass trains. Other tracks were industrial spurs and storage tracks and could be full of cars. The Special Instructions state that siding capacity is based on 48 foot cars plus 115 feet for two diesel locomotive units. At Humboldt under Other Tracks is the word YARD indicating that there are lots of tracks.

The final four columns on the right list the schedules for the regular eastward trains arranged first by class and then by departure times.

The first column to the left of the stations lists the symbols which indicate what facilities are at each station. There are five symbols used on this timetable: C – Fueling facilities, K – Standard clock, W – Water, Y – Wye for turning equipment and Z – Yard limits. The second column from the left lists the mileposts and the final four columns the schedules for regular westward trains.

Superiority of Trains

Superiority of trains is an important concept in TT&TO. First Class trains are superior to Second Class trains, Second Class trains are superior to Third Class trains, Third Class trains are superior to Fourth Class trains and Fourth Class trains are superior to Extra Trains. Although not shown explicitly on the Aberdeen Subdivision timetable there is a note on the cover of the timetable stating "The superior direction is east or south, and eastward or southward trains are superior to trains of the same class in the opposite (inferior) direction." Inferior trains need to clear superior trains from the opposing directions by at least five minutes and First Class trains in the same direction. The dispatcher may modify superiority by train order.

Train Orders

The timetable may be modified by the dispatcher through the use of train orders. Regular trains may be annulled, extra trains may be created, schedules may be modified, meeting points may be set and superiority may be changed. The rulebook lists the various forms of train orders along with examples. Some of the more common types are listed below:

Form A: No 10 Eng 1903 meet No 9 Eng 1908 at Dana

Form C: No 9 Eng 1908 has right over No 10 Eng 1903 Humboldt to Prudhomme

Form E: No 10 Eng 1903 run sixty 60 mins late Clarkboro to Totzke and thirty 30 mins late Totzke to Dixon

Or

No 10 Eng 1903 wait at Dana until fifteen thirty 15:30 for No 9 Eng 1908

Form G: Eng 1063 run extra Humboldt to Jct with Duck Lake Sub

Or

Eng 1063 run extra Humboldt to Totzke and return

Form H: Eng 1040 work extra seven thirty 730 until eighteen thirty 1830 between Humboldt and Bruno not protecting against extra trains

NOTE: A work extra may run in either direction as many times as needed and does not actually have to arrive at either end point.

Form K: No 10 due to leave Jct with Duck Lake Sub Friday September 15th is annulled Jct with Duck Lake Sub to Humboldt

These are only a few examples of the more common forms of train order. The rulebook I have has over 20 pages of train order examples.

Let's Run a Train

Let's say you are running train No 10. The first thing you would need to do would be to obtain a clearance at your starting point. Although the west end of the Aberdeen Subdivision is at the Junction with the Duck Lake Subdivision, where there is no operator, this junction is only 0.05 miles (264 feet) from the Warman station so this is where you would obtain your clearance. The clearance would give you authority to use the schedule for No 10 and would list train orders, if any, for your train. Once you have your clearance you are ready to go. Because No 10 is a first class train in the superior direction

you do not need to worry about other trains. The only thing you need to remember is that you cannot leave a station before the scheduled time. The timetable shows a meet with No 9 at Carmel. If No 9 is on time it will be waiting in the siding for you. If No 9 is late it will clear you at an appropriate siding. If you are late No 9 will wait at Carmel for you. If you are significantly late the dispatcher may issue train orders to you and No 9 to keep No 9 on schedule. The dispatcher could issue a meet order, a wait order, a run late order, or could make No 9 superior to you.

If you are running No 9 and you are on time you will pull into the siding at Carmel to meet No 10. If you are running 20 minutes late you will arrive in Dixon at 14:32 nine minutes before No 10 is scheduled and you will pull into the siding at Dixon to wait for No 10. If you are sufficiently late you will need to wait in Humboldt for No 10. If you are not ready to leave until after No 10's scheduled arrival in Humboldt you will need to ascertain that No 10 has arrived before departing.

For an extra train you will need both the clearance card and a Form G or Form H train order before departing. You will also need to keep out of the way of all scheduled trains. If there are two or more opposing extra trains on the line they will also require train orders that will ensure that the opposing extra trains will meet safely.

Yard Limits

Yard limits can be a difficult concept to grasp. From a rules point of view railways have two types of track: main tracks and other than main tracks. The other tracks are sidings, yards, industrial tracks etc.

The rules for other than main track are quite simple. Authority is not required to move a train and trains must move at restricted speed which is defined as being able to stop within one half the distance that you can see to a maximum of 15 mph. In other words if visibility is 1000 feet the train speed should be such that it can stop in 500 feet.

Yard limits apply only to main tracks and basically applies other than main track rules to the main track with one important difference. That difference is that first class trains do not need to move at restricted speed and inferior trains must clear first class trains. This allows engines and trains to occupy the main track covered by yard limits without authority provided that they keep out of the way of first class trains.

Rule 251

All of the above descriptions have dealt with single track, TT&TO was also used for double track. For double track each track would be designated for travel in one direction. Train orders were required for trains travelling against the current of traffic, i.e. on the wrong main. If the line also had block signals this was known as Rule 251 territory. Under Rule 251 only passenger trains had schedules and that was only to make sure they didn't strand passengers by leaving a station early. Extra trains did not require a Form G running order, only a clearance. Once a train had a clearance it could proceed on signal indication. Because all traffic normally travelled in the same direction a train could pass a red signal but had to run at restricted speed and be prepared to stop if it caught up with the train ahead.

Conclusion

The purpose of this article was to give a brief overview of TT&TO. There should be enough information here so that you can successfully operate a train using TT&TO. However, it doesn't go into many of the details needed to set up your layout to operate with TT&TO. That would take a book. In fact there is a book "19 East, Copy Three" by David Sprau and Steve King published by the Operations Special Interest Group. Unfortunately it is sold out, however there is talk of re-issuing it as an e-book. The Operations Special Interest Group has also published the Operation Compendium which is available from their website. Another reference is "The Rights of Trains" by Peter Josserand. Mr. Josserand was Chief Dispatcher for the Western Pacific and his book is aimed at professional railroaders. You can also go to the source and get an employee timetable from the TT&TO era (probably pre 1970) and a rulebook. In Canada the Uniform Code of Operating Rules (UCOR) was used by all railways. I have a copy of the 1962 revision. The rulebook is useful for whatever dispatching system you choose.

Please feel free to contact me with any questions, comments or corrections at calvinsexsmith@sasktel.net.

DIY Keep Alive Build and Installation – Al Matchett

Introduction

When running trains in operating sessions there is one thing that really annoys me and that is poor running locomotives, especially if they are sound equipped. Having the sound cut out and reset breaks that realism illusion right away. Keeping the track clean is obviously vital if you are using powered rails. More recently super capacitor power packs, commonly known as “keep alive” or “stay alive”, have been introduced to help the locomotive bridge dirty or unpowered track sections. Different decoder manufacturers typically make super capacitor power packs that are designed to work with their own decoders, but they come at a premium price. Being thrifty thanks to my Scottish heritage, I make my own keep alive packs and have installed them with Soundtraxx Tsumani, and ESU Loksound 4 and 5 decoders.

Keep Alive Theory

I found the circuit diagram online after watching several YouTube videos. Another good source of DCC keep alive information is https://sites.google.com/site/markgurries/dcc-welcome-page/dcc-decoders/kastay-alive-devices. Mark explains a lot more of the intricacies in capacitor selection, decoder minimum voltage operation, etc.

The circuit diagram I use a keep alive is shown in figure 1.

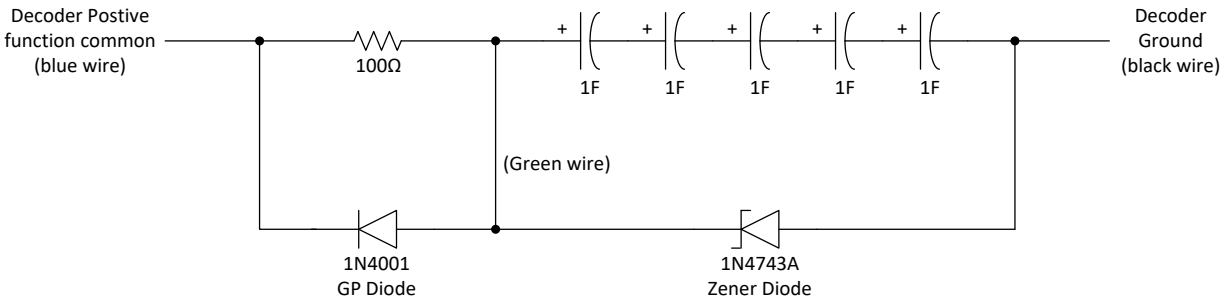


Figure 1 - Keep alive circuit diagram

- Five 1 Farad, 2.7 volt super capacitors
- One 100 ohm, 1 watt resistor
- One 1N4001 50 volt, 1 amp general purpose diode
- One 1N4743A 13 volt, 1 watt Zener diode
- 1 inch diameter heat shrink tubing

I purchased all the components from DigiKey back in 2020 in lots of 100 except for the heat shrink tubing which came as one roll of 50 feet. This allowed me to build 20 keep alive packs. After using up those packs by late 2021, I ended up ordering another 100 1F super capacitors to build 20 more packs. The average cost per keep alive pack after the two component orders has come out to $7.07 (refer to table 1 below).

Order Date	Manuf	P/N	Desc	Qty	Unit cost	Ext cost
April 23, 2020	Eaton	HV0810-2R7105-R	1F, 2.7V capacitor	100	$ 1.13	$ 112.54
April 23, 2020	ON Semiconductor	1N4743A	13V, 1W zener diode	100	$ 0.13	$ 13.36
April 23, 2020	ON Semiconductor	1N4001G	50V, 1A diode	100	$ 0.12	$ 12.41
April 23, 2020	Yageo	FMP100JR-52-100R	100Ω, 1W resistor	100	$ 0.11	$ 11.33
April 23, 2020	Qualtek	Q2-Z-1-01-MS50FT	1" heat shrink tubing	1	$ 32.83	$ 32.83
November 16, 2021	Eaton	HV0810-2R7105-R	1F, 2.7V capacitor	100	$ 1.00	$ 100.33

Total	$ 282.80
Keep alives made	40
Cost per keep alive	$ 7.07

Table 1 - Keep alive component parts and costs

The circuit operation is as follows;

- The five super capacitors are wired in series which increases the total voltage capacity to 5 times 2.7V = 13.5V but decreases the total capacitance to 0.2F. This is more than enough to keep a Tsunami equipped locomotive sound on for 10 or so seconds when track power is lost.
- The 100Ω resistor limits the in rush current when track power is first turned on or the locomotive is placed on the track. As the super capacitors charge up, the current decreases to an equilibrium point.
- The Zener diode protects the super capacitors by conducting if the track voltage is greater than 13V, this keeps the super capacitors within their working voltage limit.
- The 1N4001 general purpose diode is a low resistance current path when the super capacitors are supplying power to the decoder.

See the following diagrams showing the current path in various situations.

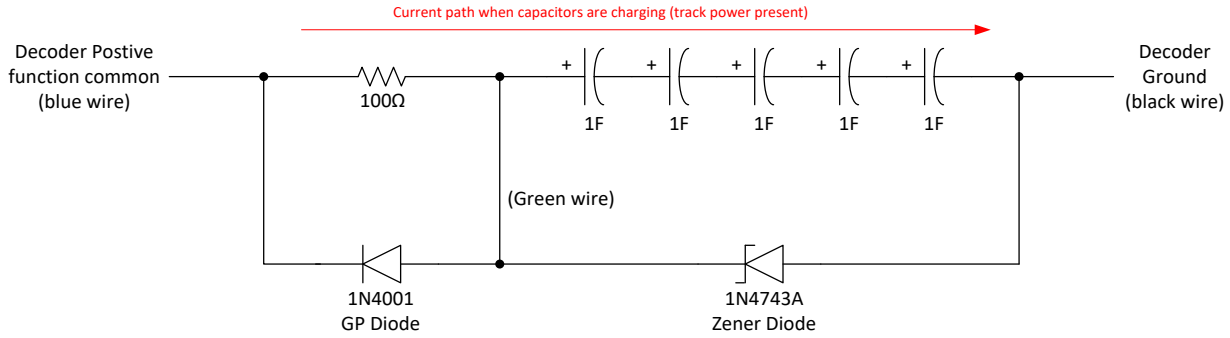


Figure 2 - Keep alive charging

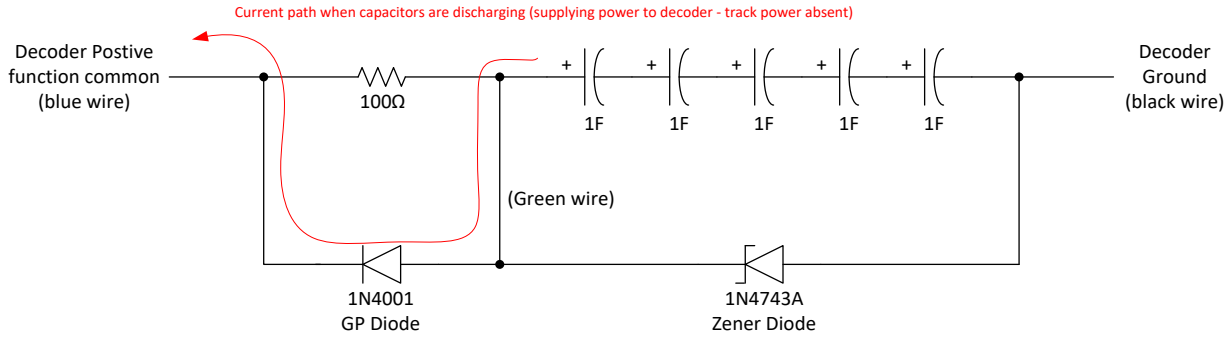


Figure 3 - Keep alive discharging - supplying power to the decoder

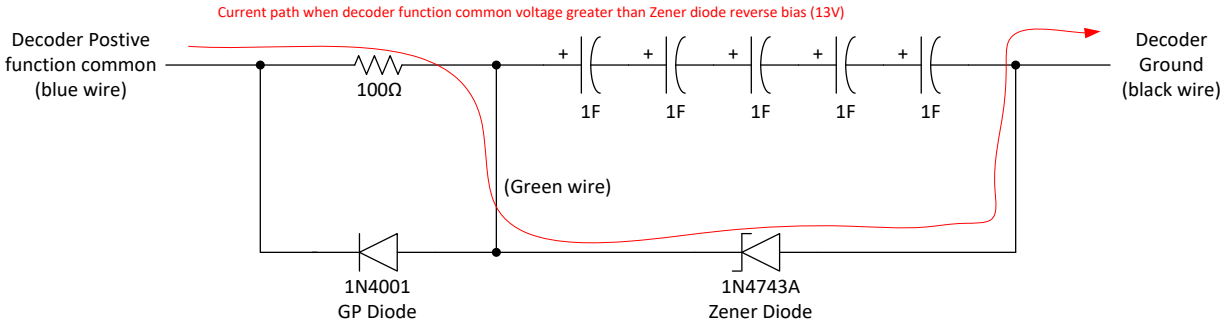


Figure 4 - Keep alive capacitor protection when voltage greater than Zener diode reverse bias

When connected to the decoder the keep alive supplies power to the decoder circuitry upon loss of prime DCC track power. The keep alive is connected between the decoders function common (positive) and the ground. Refer to figure 5 for the decoder block diagram showing where the keep alive is situated.

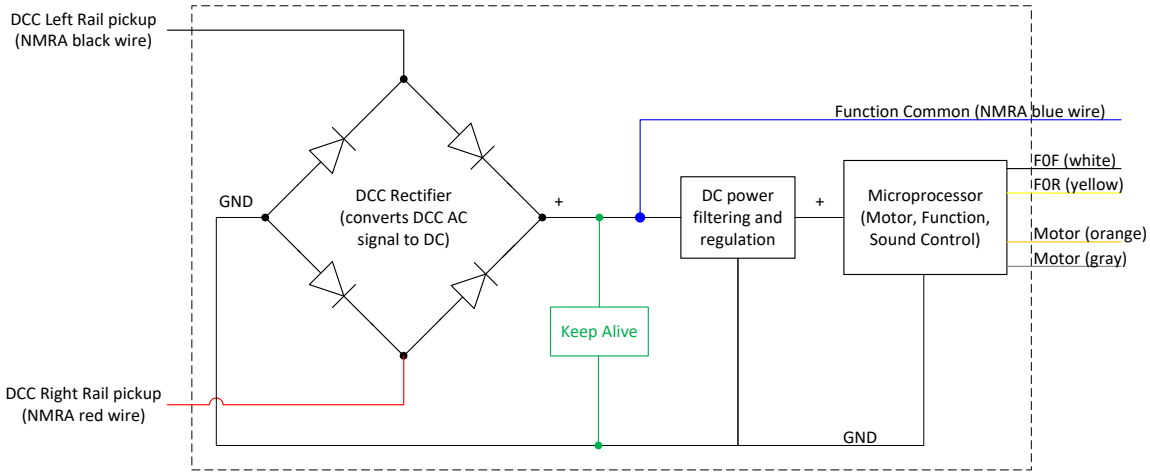


Figure 5 - DCC decoder high level block diagram

There is a problem here in that the DCC decoder ground is typically not accessible via any of the connection points. The ground point will have to be determined by a physical examination of the decoder board and checks using a voltage meter.

Pack Construction

To help build the packs, I drew the circuit diagram on a scrap piece of hardboard and put a strip of double-sided tape down to keep the super capacitors in line and stable as the leads are soldered together. The diagram also helps me confirm the connections when wiring the components together. It is important to note that all the components except the resistor are polarity sensitive and must be installed with the correct orientation.

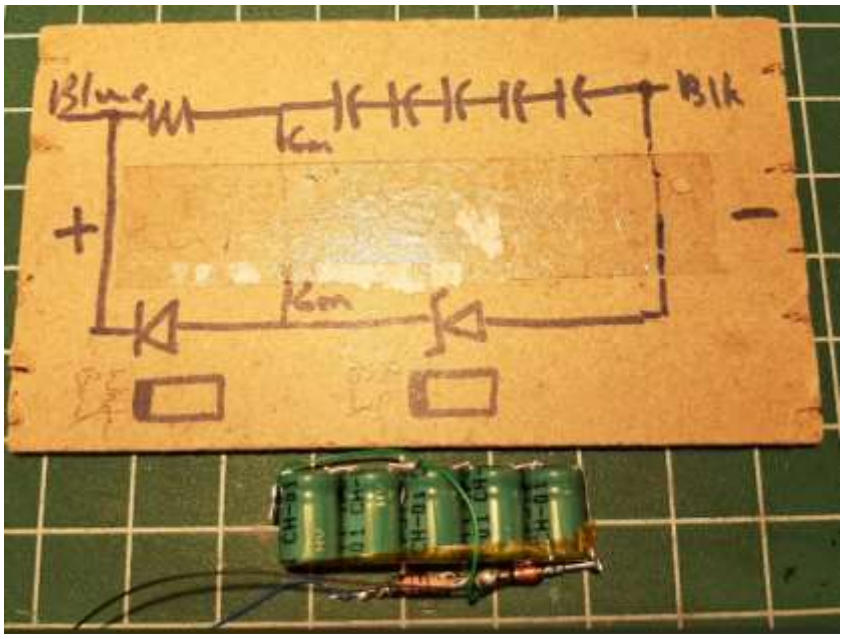


Figure 6 - Capacitor pack construction jig

The capacitors have a band on one side marked with a "-" (negative) symbol and that lead is shorter than the positive lead. Both diodes have a band, gray on black for the general purpose and black on orange for the Zener, which indicates the positive side of the diode. The jig is marked with the diode bands to aid construction.

I use this construction method;

1. Put the five capacitors down (lead side up) on the double-sided tape, make sure the negative marks are all orientated to the same side. On my jig these are all orientated with the negative mark to the right.
2. Connect the adjacent capacitors together with positive lead of one connected to the negative lead of the other. Solder the two leads together and cut off the excess lead. Make sure to keep the positive lead on the leftmost and negative lead on the rightmost capacitor at full length.
3. Remove the bank of connected capacitors from the double-sided tape. I use a piece of Kapton insulating tape on the underside of the capacitor bank as insulation for the other components and to keep the capacitors in as compact an arrangement as possible.
4. Twist the negative lead of the general-purpose diode with the positive lead of the Zener diode. I use a Western Union type splice for mechanical strength. Solder the splice and cut off the excess leads.
5. Twist one of the resistor leads around the positive lead and the other resistor lead around the negative lead of the general-purpose diode. Solder the connection and cut off the excess leads.
6. Twist a green wire around the connection between the general purpose and Zener diodes and solder it. Color code is not critical here, just make sure it is not black or blue as these two colors are used to connect to the decoder. I use ESU 36 gauge Hi-Flex wire for all my decoder installs. It is a small diameter, very flexible wire that can be tucked away in the small spaces of a locomotive shell.
7. The other end of the green wire will connect to the remaining positive lead of the capacitor bank. The wire should be kept as short as possible. Cut off the excess capacitor lead.
8. Bend the negative lead of the remaining capacitor around to the bottom of the pack and solder the negative end of the Zener diode to it.
9. Solder an approximately 6" piece of black wire to the junction of the negative capacitor lead and negative Zener diode lead.

10. Solder an approximately 6” piece of blue wire to the junction of the positive general purpose diode lead and resistor lead.
11. Cut a piece of heat shrink tubing long enough to fit over the completed pack. Shrink the tubing down so it provides a snug fit over the pack.
12. Once the assembly has cooled down, test the pack to make sure it works.

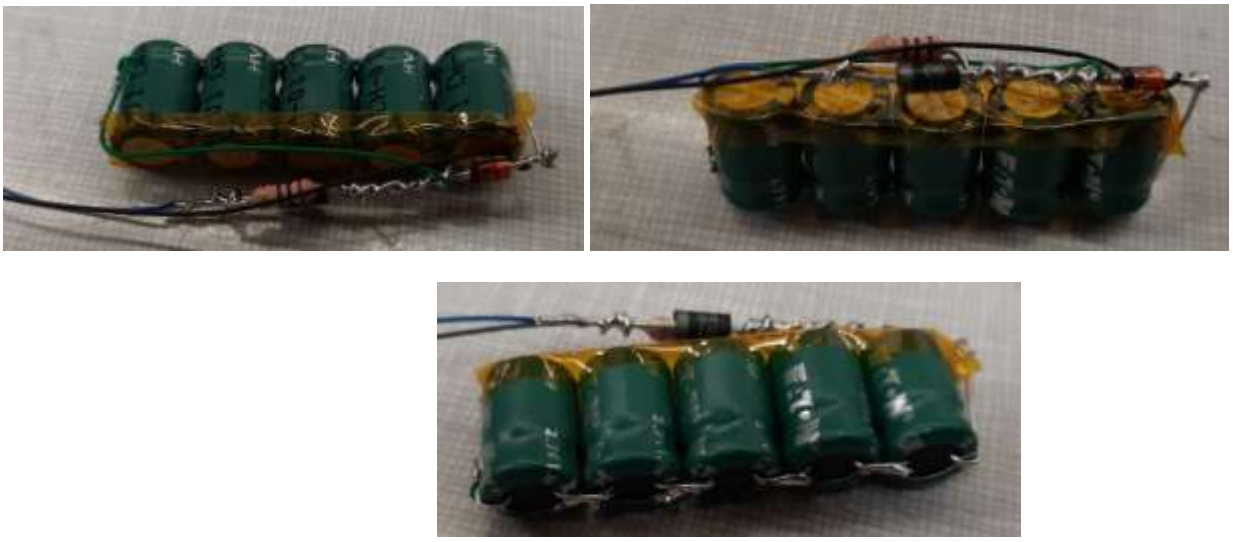


Figure 7 - Capacitor pack before adding heat shrink tubing

Pack Testing

I test every single pack after construction using a home-built tester. The tester consists of an old Athearn motor, four 12V bulbs to test functions F0F/F0R/F1/F2, an old Digitrax DH84 decoder with connections to function common and the ground point, and a piece of circuit board where the pack is connected to during testing. Connections to DCC track power are made via alligator clip leads to the two screws on the left-hand side of the tester.

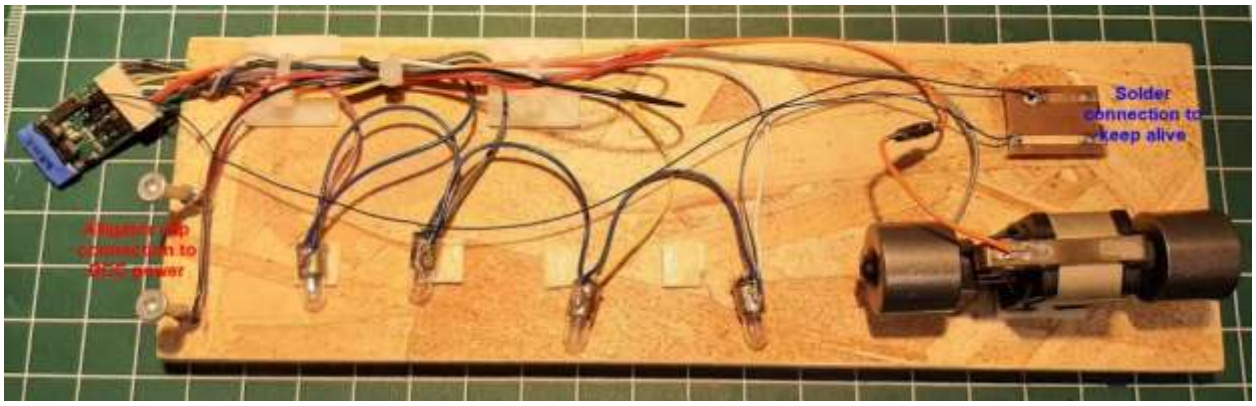


Figure 8 - capacitor pack tester

The DH84 has been modified by removing a portion of the heat shrink and soldering a black wire to the negative side of the decoder bridge rectifier which connects to the circuit board piece. On the DH84, the bridge rectifier is identified by the four surface mount diodes close to the 9-pin JST connector. They will be arranged as shown in Figure 5, two points of the bridge rectifier will connect directly to the DCC left/right pickups, one point will connect to the function common, and the remaining point will be the ground. The blue wire connects to the function common which is the positive side of the decoder. This website https://members.optusnet.com.au/mainnorth/alive.htm has more specific information on finding the ground on various DCC decoders.

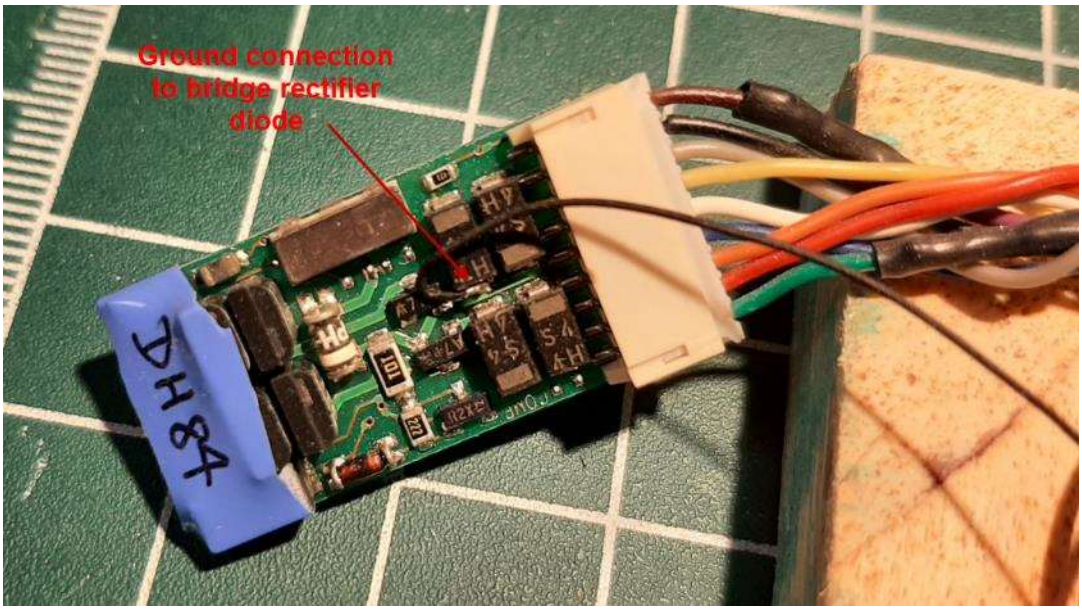


Figure 9 - DH84 modified with ground connection

To test the capacitor pack, I temporarily solder the packs blue and black wire to the circuit board that connects to the decoder. Make sure the polarity is correct and that blue connects to blue, and black to black. Turn on the track power and confirm the decoder works as expected. Turn on a function and observe that the 12V lamp lights. Disconnect the track power and make sure the lamp stays on for several seconds after power has been removed. Mark the pack with a check sign to show it has been tested and verified okay. It can now be set aside for installation in a locomotive. The completed size of the pack is approximately 47mm long, 17mm wide, and 10mm deep.

Figure 10 - completed and tested capacitor pack

Installation in a Locomotive

Of course, once you have built the pack you have to find the space in the locomotive for installation of the pack, decoder, and speaker (if equipped). There is no reason why you cannot install a keep alive in a non-sound equipped locomotive, but the benefit is not as great as with a sound equipped locomotive.

Most of my sound decoders are the older Tsunami TSU1000 series installed in Atlas, Athearn, and Proto 2000 locomotives. I have since gone to the ESU Loksound version 5 decoder with sound files loaded using a Lok Programmer. Speakers are a mix of older QSI 16 x 35mm oval, and newer ESU 11 x 15mm sugar cubes.

In all cases I have had to be creative with finding room to mount everything. This can involve cutting weights, removing weights, fabricating mounts out of styrene shapes, drilling or milling the frame, mounting speakers in odd spaces (such as the cab of an Atlas Alco RS3), etc.

Even a large six axle locomotive such as a Proto 2000 SD60 presents challenges. The weight had to be extensively modified to make room for all the parts. The keep alive sits over the rear truck, decoder is over the motor/flywheels, and the speaker below the dynamic brake see through area. All connections are soldered using ESU Hi-Flex wire. The stock headlight lamps were replaced with LEDs using a small form factor 1.5kΩ resistor array mounted in the shell.

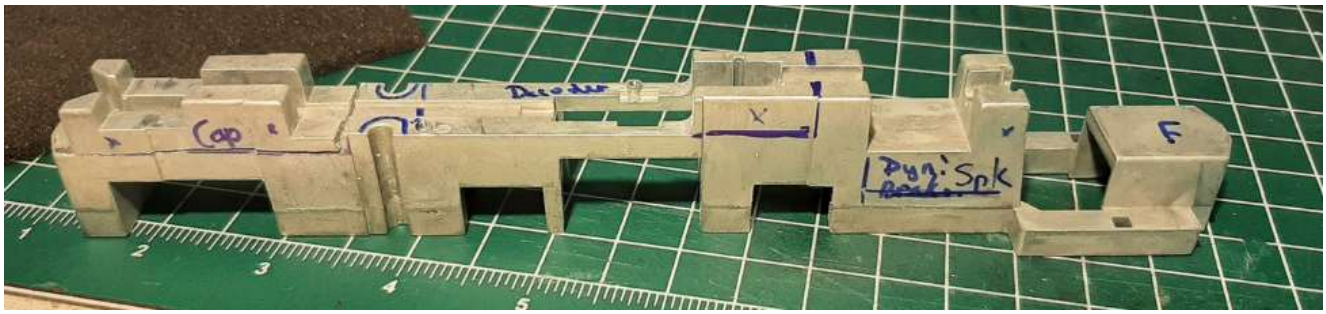


Figure 11 – Proto 2000 SD60 frame showing marked cutting locations for capacitor pack, decoder, and speaker

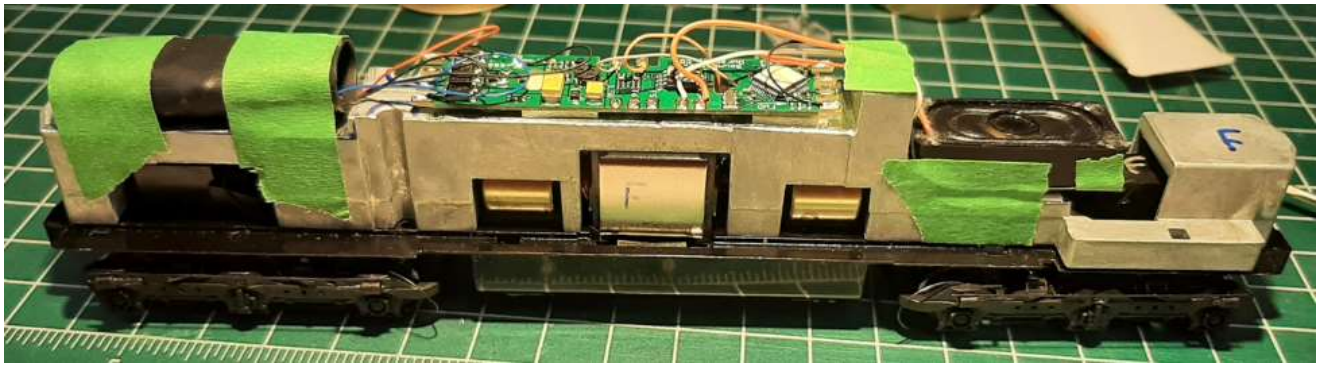


Figure 12 – Proto 2000 SD60 mechanism assembled with all components in place

Each locomotive install will be unique unless you have a fleet of the same type of locomotive that will be modified with capacitor packs. Below are a few more pictures of locomotives that I have retrofitted with capacitor packs.

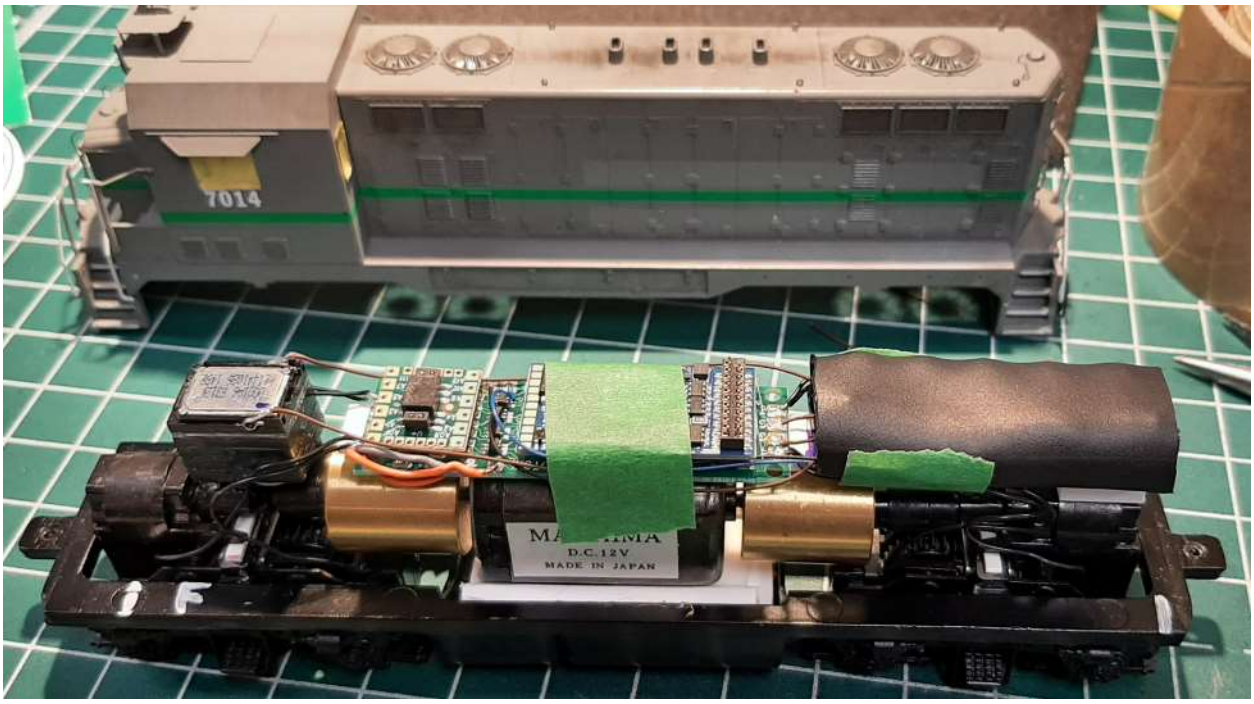


Figure 13 - Athearn CF7 with new motor, ESU decoder, capacitor pack, and sugar cube speaker

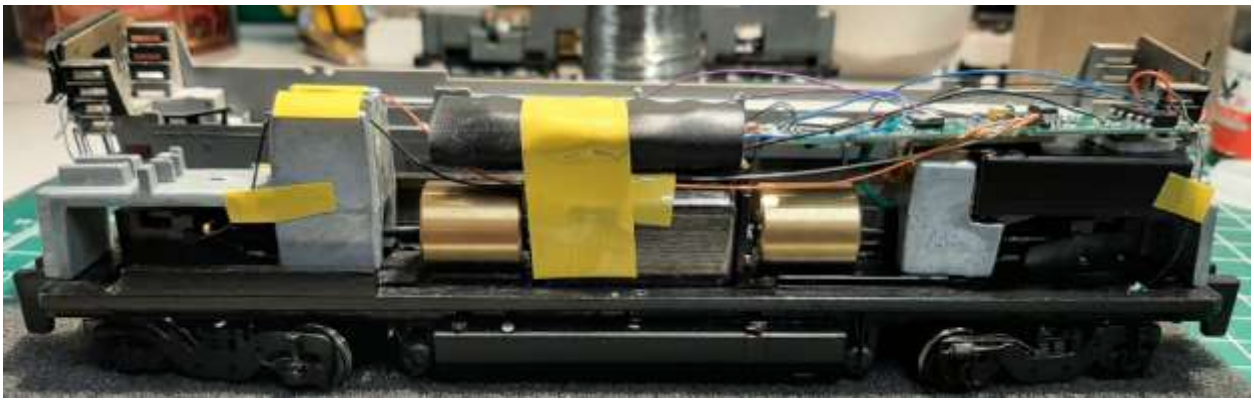


Figure 14 - Atlas B39-8 with Soundtraxx Tsunami decoder, capacitor pack, and oval speaker

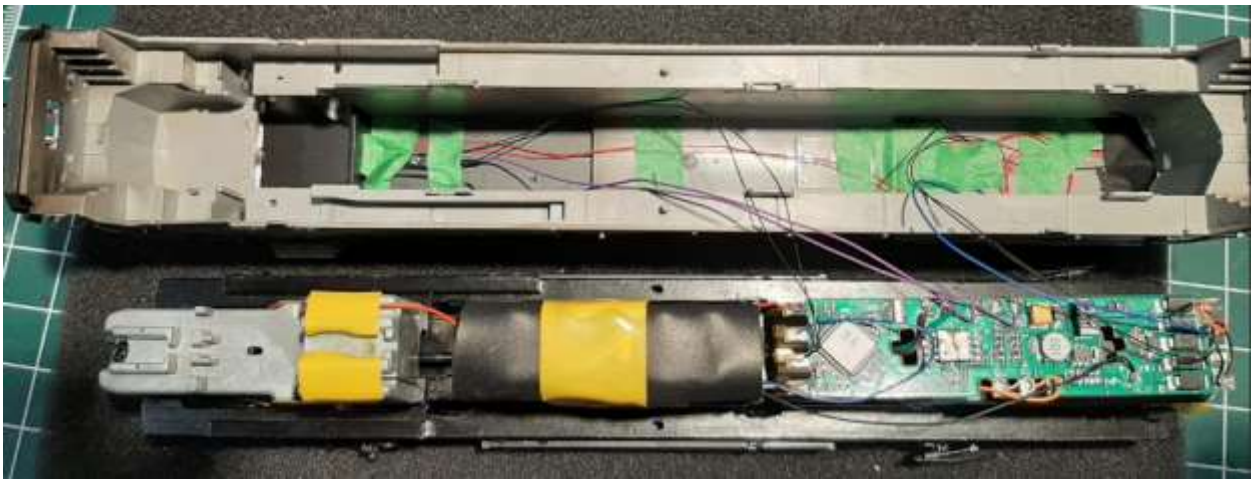


Figure 15 - B39-8 showing connections to LED lights in shell

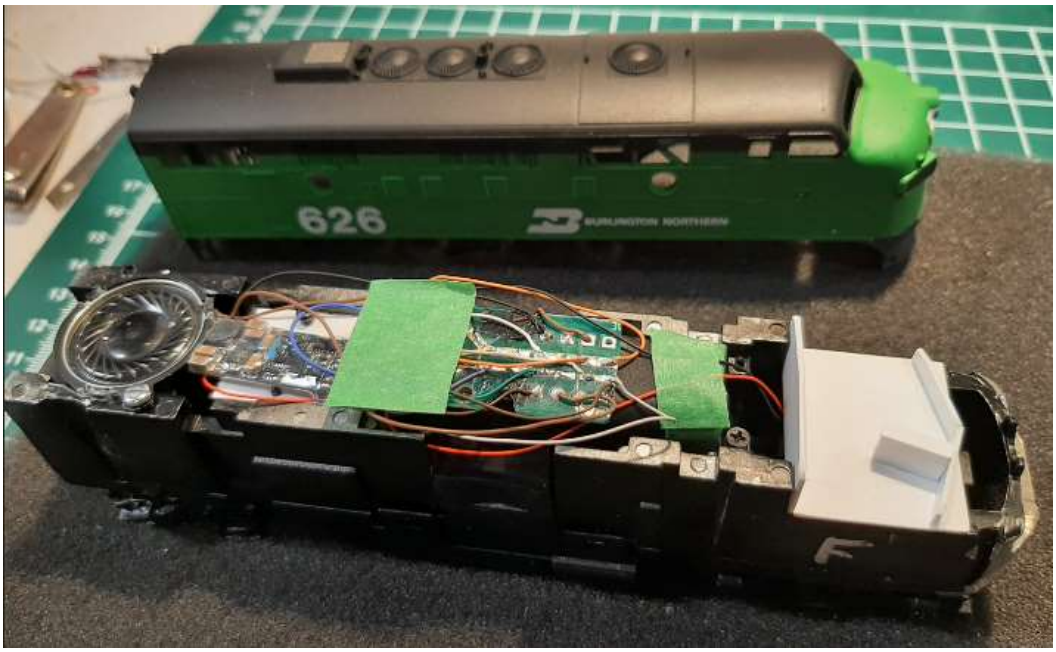


Figure 16 - Proto 1000 F3 mechanism, with capacitor pack, ESU decoder, round speaker, and Inter Mountain F7 shell

CONCLUSION

I consider smooth running to be vital in running model trains and capacitor packs go a long way in helping provide that realism. Building your own capacitor pack is relatively straight forward and can be done at a good price point. If you have basic electronics skills, building your own capacitor packs is a good way to improve your locomotive performance.

Three Sawmills – Malcolm Anderson

Malcolm Anderson of Regina has built three sawmills ranging from small to large. The two smaller ones are HO scale and have been attached to the Regina Free-Mo layout. The large one is O scale and was exhibited at the Queen City Express convention.

It received a merit award and assisted Malcolm in obtaining his Master Builder Structures AP certificate. (three photos – Doug Johnson)

Malcolm Anderson's O sawmill.

Alberta Midland Railway– Dennis Dreher

Early morning the crew arrives at Hillcrest rough cut to start loading logs on the empty cars. The steam donkey engine fires up and steam pressure is monitored. Just another 12 hour day for the crew at the Alberta Midland Railway. (photo by Dennis Dreher)

Hillcrest Lumber Mill is steady at work knowing that in 5 hours another load of logs will arrive at the log pond. The finished lumber still green is loaded on the stake cars and ready to ship to Buck Barrel factory. (photo by Dennis Dreher)

It seems there was a bit of an accident at Cartwright Mill while lifting a pallet of flour to the upper level. (photo by Rob Badmington)

More Layout Photos

In one of many highly detailed scenes on Al's O scale layout in Calgary, a worker waters the Midway station's garden. If you look closely, you can actually see the water spray. (photo by Rob Badmington)

During the recent Open Operating Session hosted by the Edmonton Model Railroad Association, Scott Sabo and his helper prepare to make up a southbound train at the Monashee Pacific's extensive Vernon Yard. This area will be undergoing major changes when the club expands the layout into the new building expansion on the other side of the windows. (photo by Rob Badmington)

PNR 2024 Regional Convention
Surrey, BC May 22-26, 2024

By Bill Van Horn
Advertising & Publicity

http://pnr2024.7divpnr.ca/

We're having a sale – now until Dec 31st.

Please take advantage of our Early Bird discount and save $40 when you sign up for the 2024 PNR Convention. It takes place at the Sheraton Vancouver Guildford hotel in Surrey BC from Wednesday to Saturday, May 22nd to May 26th.

WHY COME? We've got all the usual convention goodies, including Operating Sessions on Thursday and Friday evenings, a highly rated 4-hour Prototype tour offered on both Thursday morning and Thursday afternoon (your choice), layout open house access (tours), lots of models and displays, a non-rail program for your significant other, and an appealing lineup of Clinics. May is a great month to visit beautiful Vancouver, and you're welcome to come early and stay late to enjoy the city. Plus, you'll have a chance to spend time with some great people, renewing old friendships and making new ones.

BONUS: We have arranged very attractive rates (negotiated at 2019 prices) in a modern and centrally located hotel. High quality rooms in Greater Vancouver at this price just don't exist anywhere else.
http://pnr2024.7divpnr.ca/index.php?menu=acc

Registration is Canadian $129 until the end of December. We would love to see a strong contingent of modellers from Alberta and Saskatchewan at the event. Many of you have attended our annual Railway Modellers Meet of BC (RMMBC) and this will be like RMMBC on steroids.

Visit **http://pnr2024.7divpnr.ca/** for information and registration.

We'll be adding a lot more details to our website throughout December. Right now, we're finalizing the list of clinics and presenters - and you can be sure that there will be substantial variety and a wide range of topics.

Why register now? You'll be getting the full Early Bird discount, guarantee yourself a seat on the bus for the prototype tour, receive priority for Operating Sessions and first crack at "Modeling with the Masters".

If you do it now, you can relax, knowing you've crossed one more item off your pre-Christmas list - at the best possible price. Come on out to Vancouver in May, visit some terrific people, and enjoy a well-orchestrated PNR Convention experience.

Upcoming Events in and near the 6th Division

See all the PNR events and our most recent additions at www.pnr.nmra.org

Feb 17-18 (Sat-Sun), Saskatoon SK
The 39th Annual All Aboard Model Train Show will be held at The World Trade Centre at Prairieland Park, 803 Ruth Street E in Saskatoon. If you would like to participate or for any other information please email us at allaboardtrainshow@gmail.com .

Mar 3 (Sun), Calgary, AB
CMRS Spring Mini Meet, Clinics, Show & Tell. For more info see: CMRS - Events (calgarymodelrailway.ca)

Mar 23-24 (Sat-Sun), Moose Jaw SK
Moose Jaw Model Train Show. Check www.tcmrc.org/ for updated information.

Apr 6 (Sat), Edmonton, AB
Mainline Model Railroaders Fellowship (MMRF)'s Spring Swap Meet April 6, 2024. Central Lions Senior Recreation Centre, 11113 - 113 Street, Edmonton. Public hours: 11 AM - 3 PM. Admission: Adult $5, Youth (6-16) $3. Vendor table rate: $30. Vendor reservations will open end of January 2024. Contact: Ric Francoeur, swapmeet@mmrf.ab.ca

April 20-21, (Sat-Sun), Calgary, AB
SUPERTRAIN 2024, Canada's Largest Model Train Show. 9 AM to 5 PM both days. Genesis Centre, 7555 Falconridge Blvd. NE, Calgary. Adult - $15, under 16 - free. Over 50,000 sq. ft. of operating layouts, exhibits and displays, railroad artists, hobby shops, model manufacturers, demonstrations, museums and railroad historical associations, Lego and Thomas Play Area, garden railways, ride-on trains, and much more. Info:- www.supertrain.ca or email to info@supertrain.ca

April 27-28, (Sat-Sun), Regina, SK

Regina Railfest – Model Railroad Show. Over 25,000 sq. ft. of model railroad layouts, displays, exhibits, and vendors! SATURDAY 9:00 a.m. - 5:00 p.m. SUNDAY 9:00 a.m. - 4:00 p.m. ADMISSION: TBD, More information available at www.reginarailfest.com . Caledonian Curling Club, 2225 Sandra Schmirler Way.

May 22-26, (Wed-Sun), Surrey, BC
2024 Surrey Excursion PNR Convention at the Sheraton Guildford Hotel. **http://pnr2024.7divpnr.ca/**

June 20-22, (Thur-Sat), Drumheller, AB
Dino Tracks, the 6th Division Spring Meet. Clinics, prototype tour, banquet with guest speaker, and much more. Hotels, website, and further info coming soon.

Wanted: Craftsman style car kits that are complete and un-built. Prefer wood kits such as Labelle, etc.

contact Bill Smienk at 403 328-4244 or cpr_2816@yahoo.ca
