THE "CANADIAN"

www.caorm.org

CANADIAN ASSOCIATION OF RAILWAY MODELLERS
Founded in 2003

SUMMER 2021 ISSUE #76

IN THIS ISSUE

a quarterly publication of the "Canadian Association of Railway Modellers"

THE CANADIAN ASSOCIATION OF RAILWAY MODELLERS
Founded October 15, 2003
Founding Members: John Johnston, Peter Moffett, David King, Lex Parker

DIRECTORS

CHAIR	Gerald Harper	chair@caorm.org
VICE-CHAIR	Gary Baillargeon	vicechair@caorm.org
DIRECTOR AT LARGE	Peter Moffett	directorpete@caorm.org
DIRECTOR AT LARGE:	John Johnston	directorjohn@caorm.org
DIRECTOR AT LARGE	David King	directordavid@caorm.org
DIRECTOR ZONE 1:	Ian Macleod	zone1@caorm.org
DIRECTOR ZONE 2:	Ted Rafuse	zone2@caorm.org
DIRECTOR ZONE 3:	Vacant	
DIRECTOR ZONE 4:	Vacant	

OFFICERS

NEWSLETTER EDITOR	John Johnston	editor@caorm.org
SECRETARY/TREASURER	Peter Moffett	treasurer@caorm.org
WEBMASTER/CALENDAR	David King	webmaster@caorm.org
CHAPTER SUPPORT DIR:	Ian McIntosh	chaptersupport@caorm.org
MEMBERSHIP MANAGER:	David King	membership@caorm.org
CONVENTION REGISTRAR:	Walter Reid	registrar@caorm.org
PROMOTIONS MANAGER:	Steve Hoshel	promosteve@caorm.org
CHAPTER COORDINATOR:	Gary Baillargeon	chapters@caorm.org

CHAPTERS

CREDIT VALLEY:	Chair: Open Treasurer: Open
LONDON AND AREA:	Chair: Jason Essery jasonessery31@hotmail.com Treasurer: Bruce Harmer bwharmer@execulink.com
NATIONAL CAPITAL:	Chair: Bruce Leckie brucel348@gmail.com Treasurer: Ian Frost ifrost8@hotmail.com
ONT. MIDWESTERN:	President: Steve Hoshel steve.hoshel@gmail.com Treasurer: Randy Schnarr rschnarr@bmts.com
TORONTO:	Chair: Richard Morrison richarddmorrison@yahoo.com Secretary: Open Treasurer: Ian Jameson ian@roundhouse-design.com
VANCOUVER ISLAND:	Chair: Open Treasurer: Open
SOUTH SASKATCHEWAN:	Chair: Open Treasurer: Open
GOLDEN HORSESHOE:	Chair: Open Secretary/Treasurer: Open

COVER PHOTO BY GERALD HARPER: Action at the locomotive shops with 0-4-0 Saddle Tank #2 just arriving and dropping its ash while 0-4-0 ST #4 behind it clearly has a problem inside the smoke box. Some log bunks in the back ground have been repaired and are on the "out" track. 0-4-0 ST #2 is one of the oldest locomotives in Anyox fleet. The scratch built engine shed has a complete interior workshop including tools, and the ash pit was scratch built by Harold Kemp.

MEMBERS AREA PASSWORD

USERNAME: gondola
PASSWORD: hopper

Calling All Photographers

Please submit photos for the 2022 CARM calendar

If you have an image that you would like to submit to us for use in the 2022 CARM calendar please read the following. We are seeking 6 high quality images of prototype scenes and 6 high quality images of model railroad scenes to include in the calendar. These images need to be in sharp focus for most of the image, well lit, well composed and of interest. Images should be in landscape format. You do not need to edit the image as we would prefer to edit the image ourselves as to maximize the image for the printer. If you have an image you wish to submit an image for consideration follow these steps.

Submit a small JPG image if possible (less then 1meg in size) for consideration. Obtain all of the information about the image including:

Location
Date
Photographer
Camera stats
Owner of items in the scene
Description of scene

Once accepted send the large file as a JPG, RAW, TIFF, etc.

Send your submissions to calendar@caorm.org before

August 15, 2021 Thank You

Material for the Canadian should be sent to:

John Johnston
41 Glenview Place,
Hamilton, Ontario, L9C 6H9
or by
e-mail at editor@caorm.org

observation platform
john johnston: editor

WHAT HAVE YOU BEEN DOING IN THE HOBBY DURING COVID SHUTDOWNS?

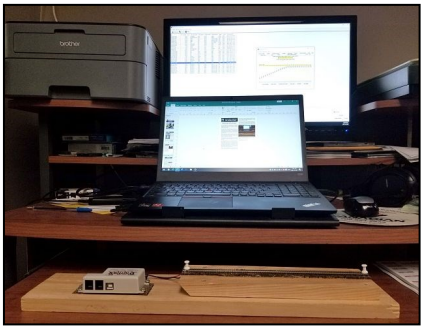
In the last issue, I asked each of you what you had been doing during the pandemic and you certainly came through. This issue contains 10 pages of replies from you the Members. Given this great response it's only fair that I share what I have been doing.

In the early days of the pandemic which it is hard to believe was over a year ago, we were still trying to do things normally. My club group still had get togethers over the late spring and summer We met outdoors, masked, and held a number of clinics, weathering cars, and building trees. That changed in the Fall when we were restricted to our Family Bubbles. My grandsons and I continued to work on the layout a little bit and we operated most Wednesday nights. It was a lot of fun. That changed again in December when we were restricted to our own households and it has been that way since in Ontario. Most provinces have had similar experiences.

Since those December changes, I've been a "lone wolf" as I suspect have most of you. That begs the question, what have you been doing hobby wise during that time. In my own case I have had periods where I have been extremely busy and then periods where I didn't even feel like going into the layout. I have accomplished a few things.

As I reported in previous issues, I went on a weathering binge and I have weathered about 50% of my fleet of 450 cars. This was accomplished almost 100% with PanPastels and weathering powders. About 25% of my cars had MicroTrains trucks and couplers and the remaining 75% were predominantly Atlas trucks with Accumate couplers. I had been experiencing issues with the Accumates uncoupling when a 25 car train was being pulled up the 2% helix. You haven't lived till you see 25 weighted coal cars release at the top of a 4 turn helix and roar back down into the staging yard. I learned my trackwork is pretty good since I never experienced a derailment from these episodes. I'm happy to report all 450 cars now have Microtrains trucks and couplers and, knock on wood, my uncoupling woes seem to be behind me.

The next challenge I attacked was speed matching my fleet of 60 locomotives. I had been putting this off since setting up a table for my laptop, in the layout near the programming track so I could reach over to put locos on the programming track was a pain in the neck. I finally broke down and built a new programming track on a couple of pieces of scrap wood with my PR4 attached so that I could sit at my computer desk and do the programming. The only thing I have to say is, why didn't I do this years ago.



With those tasks out of the way, I set out to work on scenery on a 6 foot section of layout. This area has been untouched for years. I did the scenery between the upper level track and the backdrop but moved on to other things before tackling the foreground scenery. The area had a siding which originally was intended for a set of helper engines but had evolved to being a siding for a trio of coal hoppers to be loaded at a truck dump.

I have been working away at this steadily and progress is being made. I poured and installed a number of rock castings. I changed the contour of the slope. I have built and installed the truck dump. I built the abutments for the double bridges (finally got rid of the plywood stand ins). Area was replastered and base colour, ground foam, and static grass were applied. Track is ballasted. I created the dirt road using grout which is a product I hadn't tried before. I installed the wooden crossings over the rails. You can see a "flat" of supertrees waiting to be installed. Behind them is a flat of fir trees also waiting to be installed. All and all, progress. I have been taking photos as I go, so at some point in the future I will expand further on this project.

Once again, thanks to everyone who shared their work and stay safe. **JOHN JOHNSTON: EDITOR**

Chairman's Report

I wonder how many modelers have an inventory of all their locomotives and other rolling stock. I do and have found it an invaluable aid over the years. Actually I have three inventories one for my HO fleet, another for On3 and the last for O scale equipment. Each one uses the same format in a separate EXCEL spreadsheet and is very simple to set up and maintain. I set up 18 or so vertical columns which start from the left with Railroad, item number, DCC number, item type, item colour, item highlight features, full scale manufacturer, model manufacturer, horsepower, length, weight, wheels, couplers, cost and general comments. Obviously some columns are unique to locomotives, in which case they are just left blank. After you have entered all your fleet then you can use the EXCEL SORT feature to put the list into whatever sequence you wish, chronological, ascending fleet number, etc.

The cost and general comments columns are very important. Firstly the cost is whatever you paid for it but then if you install upgraded couplers and steel wheels then you add their prices into the cost and make a comment in the general comments column. That same comments column also gets the information on DCC decoders and speakers that may be installed and their price is adjusted into the cost. For those of you who haven't made such an inventory before you will find what a substantial sum you have invested in your fleet, usually well into four figures in dollars. That may be a figure you wish to keep private.

So once you have your database set up what is it useful for. I use mine to track DCC issues and compatibility between locomotives that I want to MU. I use it for bad order cars by adding comments as to why they failed. I noted certain trends from this information and stopped using some replacement items as a result. It is also handy to make up consists which straddle railroads but have a common car type. For example grain trains are typically quite a small percentage of the railroads own cars, others are Canada cars and various secondhand refurbished lease units. Another use is to allow easy examination of the fleet to cull it of excess cars. That is a lot easier and quicker than opening and closing boxes of cars which are stored in bigger boxes. One final use is using the database to allow an orderly disposal of your layout, particularly if that disposal is being handled by others.

Total cost is also a necessary number to allow one to adequately insure the model railroad. When you renew your household insurance you should ask your insurance agent if he wants to add your model railroad as a listed item. He almost certainly will and it is well worth doing. If anything should ever happen to your layout the likelihood of getting fair value for it otherwise is slight. If you have some collectables such as out of production brass models you may want to separately list them.

The subject of insurance also brings up other pointers that every modeler should check on. If you have a complex DCC with sound system and a number of high wattage lights and they are in one electric outlet or two outlets wired to the same circuit on the house panel you may be very close to blowing the fuse. Particularly if you are just setting out to build your layout check the wiring to the outlets in your train room to ensure adequate protected current. Make sure all your power transformers have adequate air around them to provide cooling.

It looks as if some model train shows will be happening again by the end of this year, provided we have no more covid lapses. That might also include crossing the border to the USA as they restart physical shows too. Meantime some of the things that happened during the lockdown I think are likely to continues on a permanent basis. The use of ZOOM or TEAM for large group remote gatherings for talks, demonstrations and workshops is one thing that will continue. In the meantime keeping working on those excellent models in time to display then at the next CARM convention. **GERALD**

Chapter Support

ONLINE CARM MEETINGS

In March, Richard Morrison (Toronto Chapter Chair) presented his *Northeastern Guildwood Railway* layout and the many buildings on it.

In April, Steve Watson (National Capital Chapter) gave us a slide show *Eurasian Odyssey: St. Petersburg to Beijing by Rail* of the trip he and Seanna took.

In May, Mike Hamer (Ottawa) is showing how he built two of his dioramas in *Diorama Duet: Combining Kit Building With Scratch Building*, featuring a small lumber mill, and a machine shop.

In June, David Woodhead (Toronto Chapter) will show us his *Madoc and North Hastings* set in Central Ontario around 1900, and some of his modelling projects.

More interesting topics and speakers are lined up for the fall and early winter. Don't miss them!

From November to March Phil Bissell was our Zoom host, meeting moderator, video recorder, my Zoomentor and more. Thanks Phil!

Ian McIntosh

CARM Chapter Support

THE ANYOX MINE RAILWAY

PART 3: THE FINISHED LAYOUT STARTS TO COME TOGETHER

ARTICLE AND PHOTOS BY GERALD HARPER

How time flies! I checked back to when I had written my previous articles for The Canadian on the progress on my Anyox On3 model and was surprised to find that it had been 2017 and 2018 so there has been a significant amount of time since then and a good deal of progress has been made. In spite of the fact that 4 years has elapsed the layout is by no means finished yet but it is operational over parts of its extent. In Part 2 of this series of articles I suggested that I might have some hand made Harp switches built to install by the track switches. That has not happened yet but it has become a lower priority as all the subsequent switches installed have been connected to Tortoise motors and control panels with indicator LED lights. A lot of scenery has been added and the area occupied by the layout has been extended. The main line now has a running length of over 40 feet. The layout started as modular and is still constructed in modular sized chunks but no longer conveniently separates such that the whole layout could be moved in a few minutes. I also still refer to the modules by number as follows:

Module 1: The dock

Module 2: The town's commercial area

Module 3: The town's residential area

Module 4: The river estuary and Y trestle

Module 5: The cliff edge with high line and low line

Module 6: The landslide area

Module 7: The locomotive shop & hydro-electric plant

Module 8: The mill

Module 9: The smelter

All but module 9 are now largely sceniced and the images in this article can be compared with the unfinished appearance of images in the earlier articles.

Completion of the smelter module has been delayed by the covid-19 lock downs, delays to materials delivery and then by the indisposition of the writer who has been on medical leave for 6 weeks. The photos show highlights of the whole 40 feet length of the layout, which occupies three sides of a room. There is no intention to add trackage on the fourth side of the room as one of my rules in building this was not to have any "duck unders" to access the layout. Ocean level is at 46 inches off the floor and the lower line at 47 – 48 inches elevation. The upper line is another 12 inches higher putting it at 60 inches which approximates eye level. The backboard extends 12 inches above the high line so most people are looking straight at or into the layout, not down on to it.

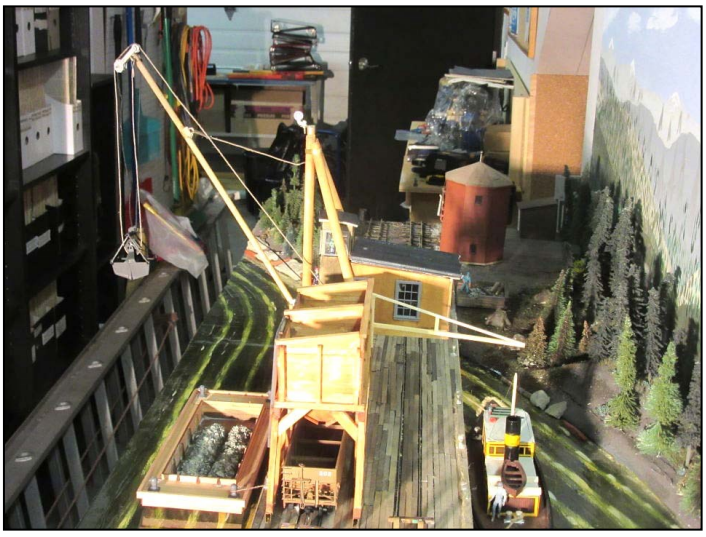


PHOTO LEFT: The dock with its scratch built clam shell bucket crane is where barges ae unloaded. Materials are moved into overhead bins from which rail cars are filled by gravity. The bins hold coal and fluxing ore. The arm at the back of the crane connects to the railway's overhead catenary to provide electric power to the crane.

PHOTO RIGHT: In this photo we see the commercial area of the town of Anyox. Racks of copper ingots and sawn lumber are stacked in the foreground and the mine office and company store occupy the background.

PHOTO BELOW: One tenth of all trackage at Anyox was on trestles including a Y trestle, so I had to model that. Here we see it straddling the river mouth with the left branch going to the smelter and the right to the mine. Note in the background the "high line" from mine to smelter.

PHOTO BELOW: The Landslide area after an early fall snow storm dusted the higher trees.

PHOTO ABOVE: The residential area of the town of Anyox. The large house with river front footage is for the mine manager, the workers live in cookie cutter standard houses as shown on the right. Regardless of status they all put up with frequent trains running by their homes, such as this coal train.

PHOTO ABOVE: The high line has the catenary poles strung for the electric locomotives.

PUBLICATION SCHEDULE FOR *THE CANADIAN*
***The Canadian* is published four times per year.**
Submission by authors or Chapters should be submitted by the following dates.

Spring Issue: February 1 Summer Issue: May 1
Fall Issue: August 1 Winter Issue: November 1

PHOTO ABOVE: The locomotive shop and hydro electric plant. Steeple cab #10 is in the yard.

PHOTO ABOVE: The smelter module is at the far end of the layout where the low and high lines are joined by a switchback which connects through the smelter buildings. In the lower right of the picture is one of the control panels which will manage the switchback, including a detector system to determine where a train is on one of the tail tracks which is hidden.

PHOTO BELOW: The mill with an ore train just disappearing into the unloading chutes on the high line.

A DCC SOUND INSTALLATION IN A VINTAGE BRASS CPR STEAMER

ARTICLE AND PHOTOS BY PAUL ALLARD

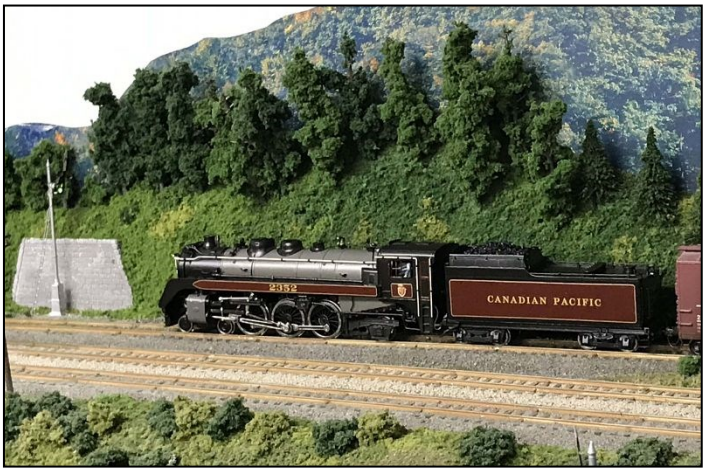


PHOTO 1: CPR # 2352 receives a green signal to enter the Northern Vermont Railway main line.

Back Ground:

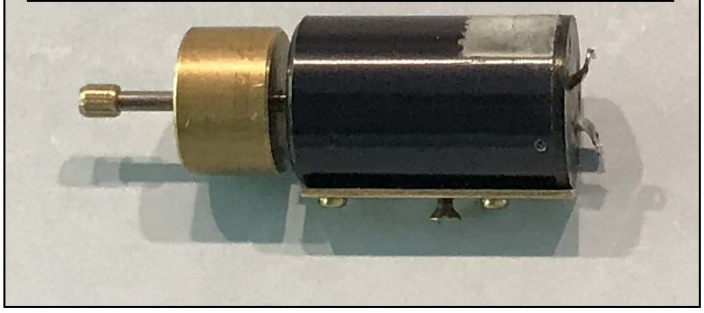
My home model railroad is the fictitious Northern Vermont Railway which is envisioned to run east to west across the state of Vermont. It interchanges with both major Canadian railways since they entered Vermont from Quebec. The CNR entered St Albans in the northwest corner of the state while the CPR entered Newport in the northeast corner. The time frame is autumn 1954. By that time, the visitors from the north had already converted to diesels on their routes into Vermont. The CNR was running C-Liners or F3's while the CPR was running FA's and RS-2's. These models are represented on my layout but when the pandemic lock down occurred, I needed a new model project. Since CPR & CNR steamers were still very active in Quebec and Ontario, I decided to allow the northern visitors to run their steamers beyond the international boundary and into Vermont. I had purchased a CPR G-3 #2352 many years ago at a train show. This is a brass DC model built by Samhongsa Ltd of Korea and imported by Van Hobbies. It is painted in the CPR gray and maroon scheme. It was time to take it out of the box and put it to work.

Changing the Motor:

The model is well built and is a reasonably smooth runner. It had a large open frame motor which required excessive current. It did not have a flywheel. The first order of business was to replace the motor with a low current can motor and add a flywheel. I secured a Northwest Short Line 20 mm x 32 mm can motor built by Sagami. These motors are no longer available but you should be able to secure a low current can type motor from other manufacturers. This motor has a 2.4 mm shaft so I selected a NWSL 403-6 flywheel which has a 2.4 mm bore. The flywheel was press fit on to the motor shaft using a pana-vice. Slow and steady pressure will set the flywheel without damaging the motor. Use a metal tube to reach beyond the motor shaft's end to set the flywheel to the desired depth.

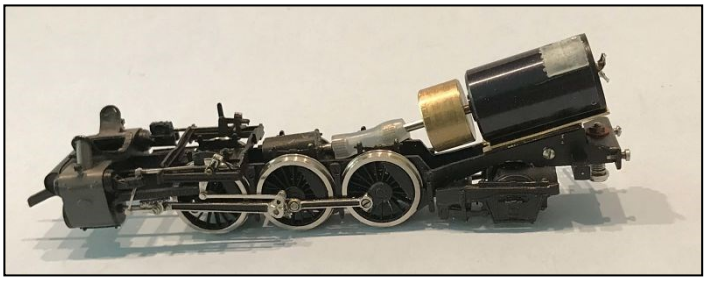
The model has an enclosed gear tower which is connected to the motor shaft using a flexible nylon tube. A bushing is mounted on the gear tower and the motor shaft to engage the nylon tube linkage. The bushing was unsoldered from the original motor and soldered to the new motor. I like the flexibility of the nylon linkage but a Northwest Short Line linkage could be installed instead. Just select a NWSL linkage that matches the gear tower and motor shaft. In this case, both are 2.4 mm.

PHOTO 2: NWSL can motor on brass mounting plate with flywheel & bushing attached.



The model has a sloped motor mount at the end of the locomotive frame. A 0.040 inch brass plate was mounted on the motor using the screws provided with the motor. The plate and motor are attached to the locomotive using the original motor mounting screw. Positioning the motor on the brass plate and then setting the plate on the locomotive takes some trial and error. The assembly wants to be forward to clear the rear of the cab but back enough to clear the boiler superstructure. One approach is to use double sided tape to temporarily position the parts before drilling holes and tapping.

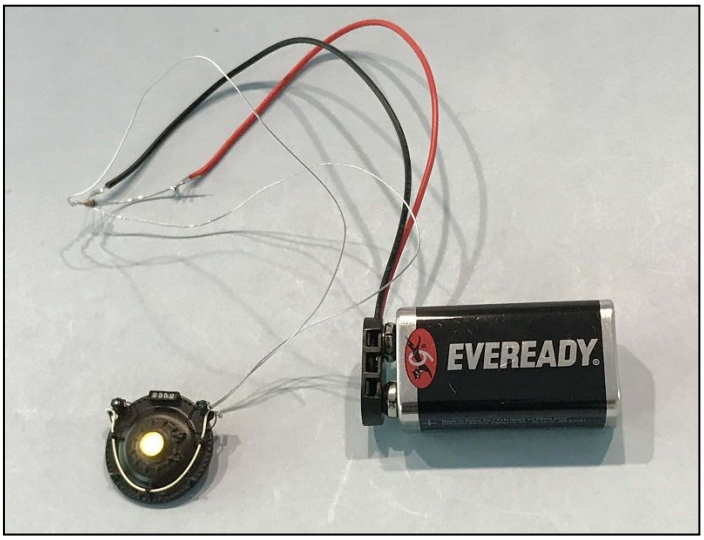
PHOTO 3: Motor & flywheel with mounting plate installed in the locomotive.



Changing the headlight:

This model came with a 12 volt incandescent light bulb installed. While this bulb will operate at 12 volts, it can draw nearly 1 amp when cold. Most DCC decoder lighting circuits can only supply 1/10 of an amp so the bulb was replaced with a tiny LED. The smoke box front was removed from the locomotive and the old lens plus bulb were drilled out. The reflective foil was removed from the back of a new MV Products # 193 lens to make it transparent. The lens was secured with canopy glue. Tony's Train Exchange sells # 603 chip style LED's with dropping resistors. A warm white version was installed in this locomotive. There was a brass tube attached to the back of the smoke box. The LED was set behind the lens and held in place with more canopy glue. The supplied dropping resistor was connected to the long lead (+ lead). The light was tested using a 9 volt battery. The resistor and wire connections were covered with shrink tubing.

PHOTO 4: 603 Chip LED installed in headlight, being tested with 9v battery



Wiring the Locomotive:

Most brass models have the locomotive body connected to the right rail while the tender body is connected to the left rail. These connections were utilized but all other connections were completely insulated to avoid shorts. If the output of the decoder connects to either of the input lines, locomotive or tender bodies, the decoder will be destroyed. A TCS 6 pin micro connector was used to pass electrical information between the locomotive and tender. The locomotive draw bar and tender mechanical pin are only used as a mechanical connection between the two. The following electrical connections were used:

Pin #1: Loco Frame – Right Rail – This line will connect to the decoder RED wire in the tender

Pin #2: Motor Left Lead – This line will connect to the decoder ORANGE wire in the tender

Pin #3: Motor Right Lead – This line will connect to the decoder GRAY wire in the tender

Pin #4: Head Light – Positive – This line will connect to the decoder BLUE wire in the tender

Pin #5: Head Light – Negative – This line will connect to the decoder WHITE wire in the tender

Pin #6: Unused

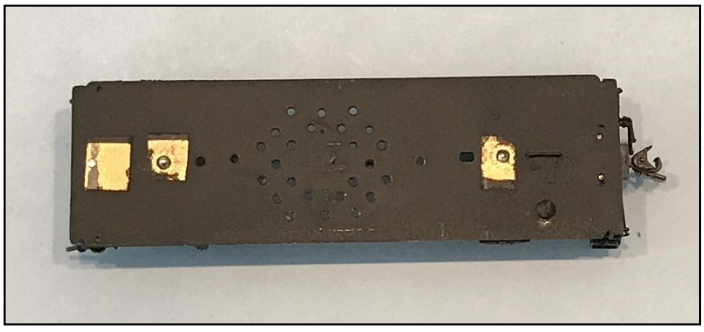
A slot was cut in the back wall of the cab to allow the TCS micro connector to pass through. By making a slot big enough for the connector and not just a hole for the wires, it is easier to work on the wiring inside the locomotive. Engineer and fireman figures were super glued to the cab side walls before the locomotive was reassembled.

PHOTO 5: Slot cut in cab rear wall, TCS micro connector passed through the slot.

Preparing tender for a speaker:

A slot was cut in the tender front wall to allow the TCS micro connector to pass through. There are two brass bars in the bottom of the tender which are used to secure the tender body to the floor. The speaker must be placed between the bars to avoid hitting them. A SoundTraxx 28 mm speaker and 28 mm enclosure were used. The speaker outline was traced on the floor and a series of holes drilled. Two additional holes were drilled for the speaker mounting screws. These last two holes were tapped for 2-56 screws. A third hole was drilled and tapped for a 2-56 screw. This hole was placed near the back of the tender and would provide the electrical connection to the left rail.

PHOTO 6: Tender prepared for speaker installation, note screw mounted to receive left rail power.



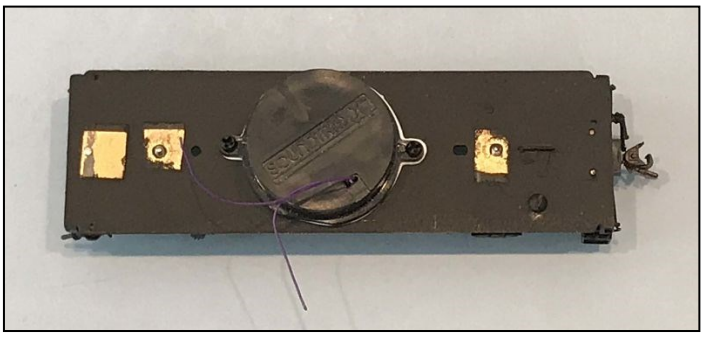


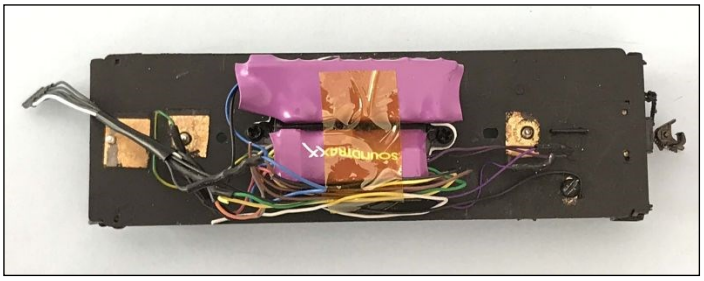
PHOTO 7: Tender with speaker installed. 0.040 inch styrene spacer is mounted between the speaker & the tender floor

A 0.040 inch thick styrene spacer was cut out in the shape of the speaker outer edge. It was placed between the speaker and the floor to provide extra clearance for the speaker diaphragm. Two purple wires were soldered to the speaker. After the wires were passed through the enclosure top, it was glued shut.

Installing the Decoder:

Two pieces of double sided mounting tape were placed across the top of the speaker enclosure. A SoundTraxx Tsunami 2 TSU-1100 part number 884006 decoder was used on this locomotive. A SoundTraxx Current Keeper part number 810140 was mounted next to the decoder. Before everything is wired up, it is always good practice to measure the height of the electronics above the tender floor. Check the height available inside the tender body to be sure the body will sit completely on the floor without hitting any of the electronics. The second half of the TSC micro connector was connected to the decoder wires following the list given above. There were only a few wires left to handle. The decoder BLACK wire was secured to the rear of the tender floor using the third screw installed earlier. The Current Keeper was connected between the BLUE and GREEN/YELLOW wires. The decoder comes with a 220 uf capacitor which can be used but the Current Keeper provides much better protection against dirty track. If the locomotive has enough space, it is always better to use a Current Keeper. Be sure to get the polarity correct. The BLUE wire connects to the decoder Blue wire. The capacitor negative lead (BLACK) connects to the GREEN/BLUE wire. Finally, the PURPLE speaker wires are connected up. Each wire connection is covered with shrink tubing. The wires are grouped together and held in place using Kapton tape.

PHOTO 8: Tender with decoder & current keeper installed



Programming the Decoder:

Today's decoders can have 100's of configuration variables (CV's) in order to control of the functions available. Gone are the days of manually setting each CV and keeping track of the information with paper and pencil. Decoder Pro is free-ware software that was used to program this SoundTraxx decoder. This article will not go into all of the details concerning Decoder Pro, just an overview. It is installed on a Windows based PC. My hardware configuration uses a North Coast Engineering Power Cab throttle to provide the DCC commands. It connects to the PC through a North Coast Engineering USB interface card. It was used to set the decoder CV's for this project. With the locomotive on a test track, all of the CV values are read using Decoder Pro. The values are saved and can be displayed using multiple screens. There are screens showing the address information, motor settings, speed control, speed table, sound function, sound levels, function map plus other control features. Basically all of the functions supported by the decoder are available for review and update. There is a separate screen listing all of the CV's and their values. The address was set to a long address matching the locomotive's road number 2352. The head light was set to be non-directional; it is on when selected and stays on when the locomotive is moving either forward or reverse. Various sound levels were adjusted since the factory default levels are much too strong. Once these values are set, they are stored in the PC which provides a record for reprogramming or a base starting value set to load into a second locomotive. As with most sound decoders, there are many more setting that can be adjusted to match your interests.

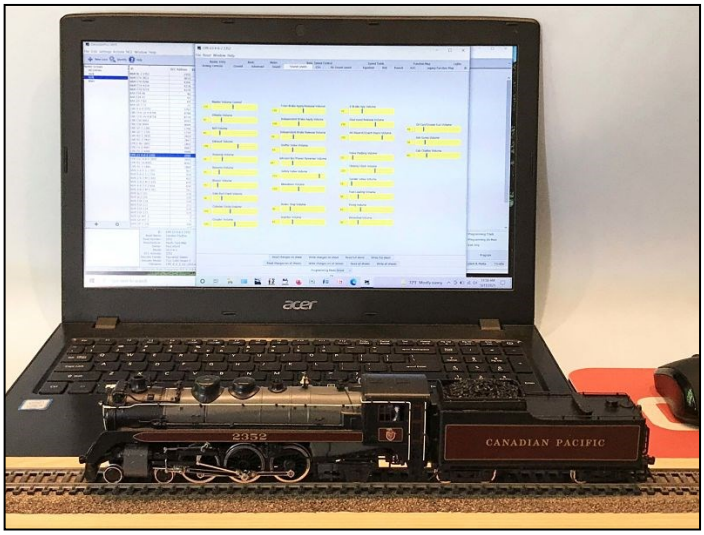


PHOTO 9: Locomotive on the programming track connected to Decoder Pro running on a Windows based PC

Now that the CPR has a new locomotive to power their trains onto the Northern Vermont Railway, it is time to turn my attention to the CNR. There are two brass CNR Mikado locomotives waiting to receive the same decoder installation. While all three Canadian steamers did not travel into Vermont in 1954, on The Northern Vermont, they are welcome visitors.

STAGING TURNTABLE FOR A MODULAR LAYOUT

ARTICLE AND PHOTOS BY BRUCE LECKIE

The Dirty 30 Modular gang has a fluid, point to point layout. One of the interesting features of this layout is the staging turntable. This unit will rotate an entire 4 to 6 car train plus locomotive, a full 360 degrees. This allows us to run trains back and forth over the layout without resorting to the 0-5-0 shifter.

We currently have 4 sets of turntables, all different. Our first design was a three track 40 inch unit on a skinny 48 inch base, built (overbuilt) of Baltic Birch plywood. This was sturdy but heavy. There were numerous power and track alignment (registration) methods that had varying degrees of success. We finally settled on a pair of home-made barrel bolts that lock the table in place and provide power to the active track. It rides on a small lazy susan turntable. This proved to be a challenge to install and subsequent turntables used a 1/4 inch shoulder bolt (a bolt with no threads near the head) as a pivot and several stacked fender washers as bearing plates. This has proven to be easy and reliable.

The base contains a short approach track and the turntable itself. Because we wanted to box the two units together and protect everything, the turntable is by necessity, limited to the overall length of the box minus the length of the approach track.

Version 2 started as a single track turntable built of pine, a similar design to version 1. This is lighter, but the turntable has shown a small amount of warp.

Version 3 was a completely different concept. It was built on an existing 3 foot plywood box. To accommodate a sufficiently long turntable, we made it removeable. The actual turntable is then stored for transport adjacent to the approach track. This allows a 3 foot turntable and a 3 foot box.

Version 4 is a 48 inch turntable and the base is 48 inches. As with Version 3, the turntable is stored adjacent to the approach track and is lifted and set in place to be deployed. The entire unit is fabricated from 1 sheet of 1/2 inch GIS fir plywood. The legs are kiln dried 2x2 that fit into a socket when deployed.

The turntable locks are semi home made starting with a length of piano hinge. This was cut into appropriate sections, the pin driven out, and then polished. When reinstalled, it forms the bolt, locking the table in place and carrying the power from the approach track to the turntable track in use.

PHOTO ABOVE: Turntable installed prior to painting showing the track arrangement.

PHOTO BELOW: This shows where the turntable sits when tucked away for transport.

PHOTO BELOW: Showing the leg socket. A 2x2 leg slides in and is held in place with a keeper pin, allowing the turntable to be picked up and moved during setup. A temporary piece of 2X2 has been inserted to test fit everything .

As with all the designs, these box up, workface to workface, and carry plates are attached to hold the two sections together but separate.

All designs connect to the “mainline” modules with joiner tracks and Anderson Powerpole connectors that hook the layout power bus sections together.

In operation, practice dictates that at least one track be left open at all times to accommodate inbound traffic. The operator pulls onto the turntable, balances as per the prototype and sets a lock pin in place between the rails to keep the train from sliding off. The track locks are released, the turntable is carefully rotated by hand and the desired track is lined up with the approach track. The locks are set, the lock pin in front of the locomotive is removed, and the train proceeds to depart. Longer trains can be handled by using both table tracks, splitting the train into sections and recombining once rotated.

The pictures shown are of Version 4, painted in a glossy black with yellow safety striping to increase visibility.

These turntables have greatly improved our operations and make it possible to have a functioning layout with just a single 8 foot module section and a turntable at each end.

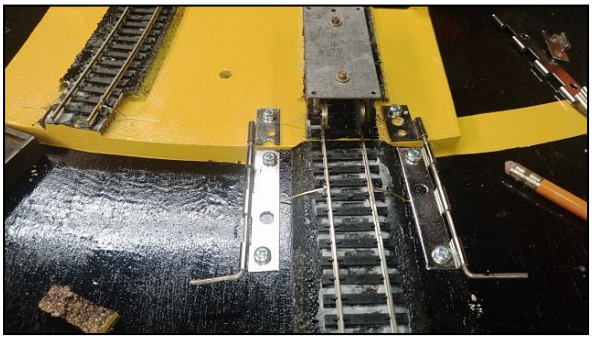


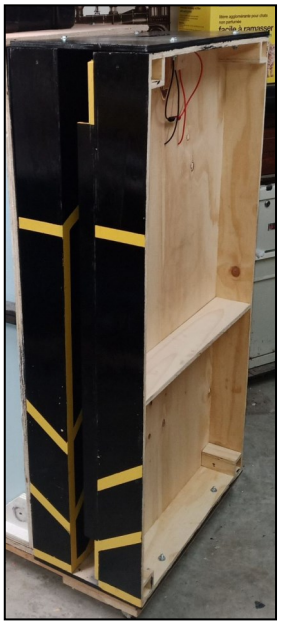
PHOTO ABOVE: The lock mechanism can be seen. This was formed from a section of chromed piano hinge. The approach track pieces are two inches long, the turntable pieces are one inch long. I drilled two extra holes in each piece for screws. The bolt is 4 inches long and bent into an L shape with a 1 inch handle. Track feeders are short pieces of flat brass bar stock, soldered to the rail and pinched under the lock mechanism.

PHOTO ABOVE: The shoulder bolt pivot point is just visible between the tracks. This provides the pivot. There are two fender washers, identical to the one visible under the pivot bolt, between the turntable and the base to provide as smooth bearing surface.

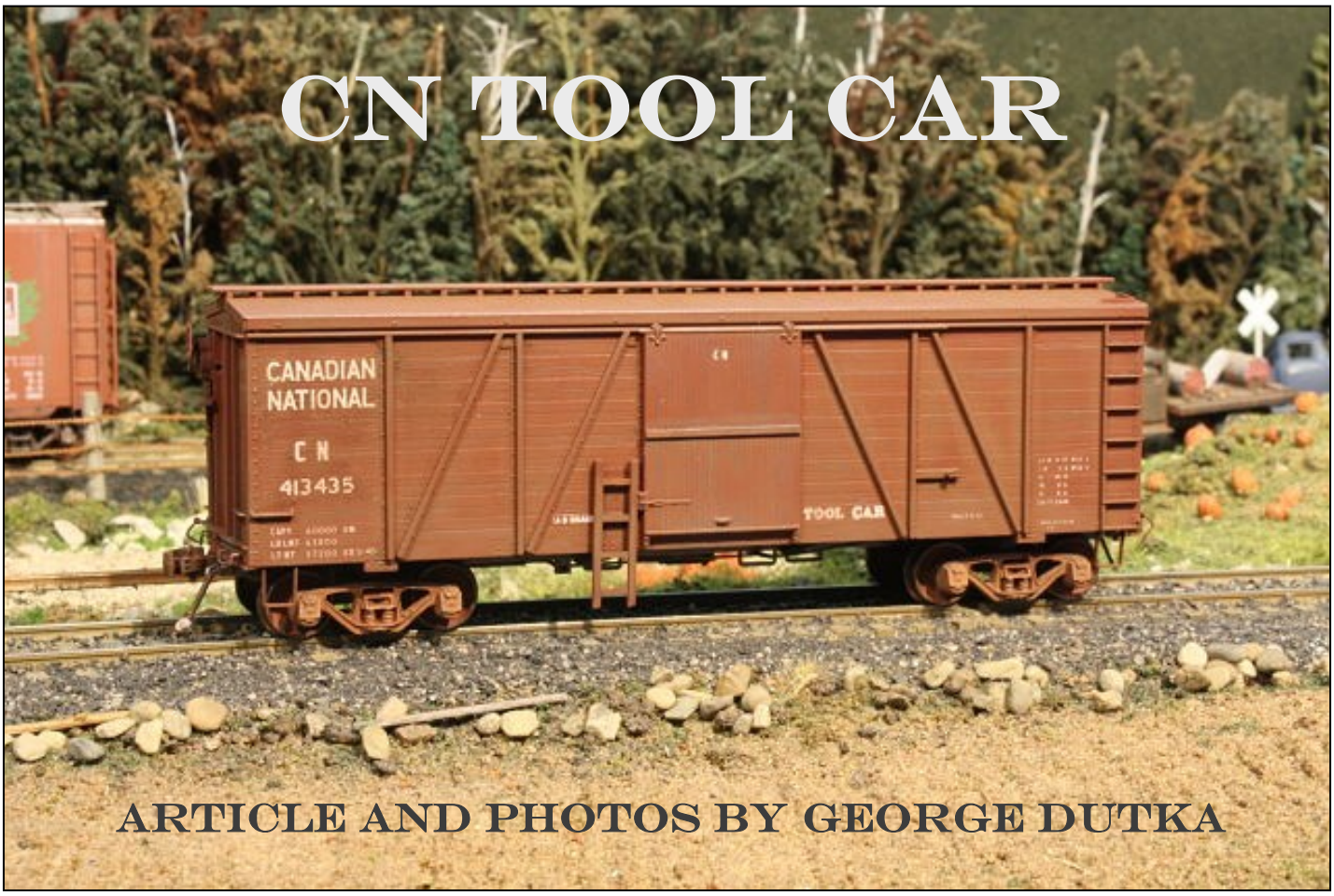
PHOTO LEFT: One turntable has been set up and connected. This is the deployed position, in line with the approach track.

PHOTO BELOW LEFT: The operator’s view of a train on the turntable.

PHOTO BELOW RIGHT: Both turntables boxed up and ready to be transported.



CN TOOL CAR



ARTICLE AND PHOTOS BY GEORGE DUTKA

My CN tool car is a recently upgraded Accurail 36' Fowler boxcar. It came lettered CV which was not correct. I painted out the CV and used a patchwork of CNR decals and dry transfer to come up with my version of a CN OCS tool car.

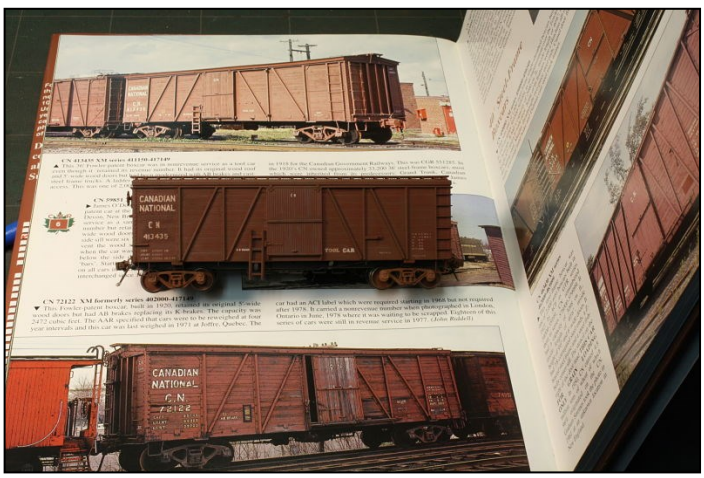
I needed a prototype photo to work from. I took a look through my photo collection for a CN tool car with no luck. Where I found a prototype photo to work from was in John Riddell's Canadian National color guide to freight and passenger equipment, Volume 2. I used the photo of car CN413435 which is still wearing its original number seen in Nova Scotia during October 1966. The car looked freshly painted in the photo. It was scrapped in 1978. Some of these 36' cars were used in locomotive sand service.

I did not want to repaint the whole car as I wanted to use some of the data included on the car. The boxcar colour is a tone between Floquil boxcar red and Floquil tuscan red. I brushed on a Floquil mix of tuscan and boxcar red over the unwanted lettering. Although the colour is a bit darker than the rest of the car it will blend in with the application of Panpastels.

I added Kadee true scale 158 couplers with the pins clipped off. The wheels are changed out with Rapido 33" steel wheels. The trucks are also changed out with a pair from my parts box. Kadee modern brake wheel #2035 is added to a Front Range housing and styrene platform. Wire grabs #2202 from Detail Associates, a bent wire uncoupling lever and Detail Associates #FC6206 air hoses are added to boxcar ends. On the five-foot doors a styrene strip is applied as seen in my prototype photo. The ladder on the left side of the door is a freight car ladder from my parts box. I originally had a better-looking ladder attached but while handling the model during detail application the part came off never to be seen again. There are two style of stirrups included in the kit. I used the set looking closest to the prototype.

I did not have a proper decal so it became a mix of CN bits and pieces. I used CDS dry transfers and various decals for the numbering. The "tool car" lettering is from an old Walthers set XD552. The rest of the printed-on

PHOTO BELOW: The car below the model is also a Fowler 36ft boxcar. In John Riddell's book a view of these cars can be found in locomotive sand service.



data is saved and used. Over the decals I like to apply a gloss coat first then a flat coat second. This helps hiding the decal edges. I used spray bomb paint for this application. The flat finish is also needed for the grab-on of the powders and PanPastels being applied.

I then painted the wheel faces with Dollarama store acrylic cinnamon brown. The trucks and under body are spray bombed Dynamic cast iron from Home Hardware. The trucks got a good coat of Bragdon Powders dark rust which makes them look as if they are painted boxcar red. I ran an AK pencil, graphite along the wood board grooves. The boxcar sides and roof also got a dusting of PanPastel Red Iron Oxide Extra Dark blending in the brush painted areas. The roof and outside bracing got highlights of PanPastel raw umber shade, a dirty looking color. Some kick up on the ends is done with PanPastel Neutral Gray Extra Dark. I also used the gray lightly around the doors.

Once I completed the tool car, I realized that I did not add the end stirrups by the ladder. I had some resin F&C stirrups leftovers in my parts box that are attached. I also did not like how the brake rod looked when complete. I cut down the rod length adding some chain to a portion of the rod. This was done while I added the stirrup. A bit of touch-up paint with a brush and the model is now done and ready for service on my White River Division layout.

PHOTO ABOVE: The decals and details are applied to the model and are ready for painting. A gloss coat and flat finish will be also applied to the car hiding the decal seams.

PHOTO ABOVE: Once competed I realized that I did not add the end stirrups by the ladder. F&C leftovers are used.

PHOTO ABOVE: The end stirrups and brake wheel chain are applied and ready for touch up painting.

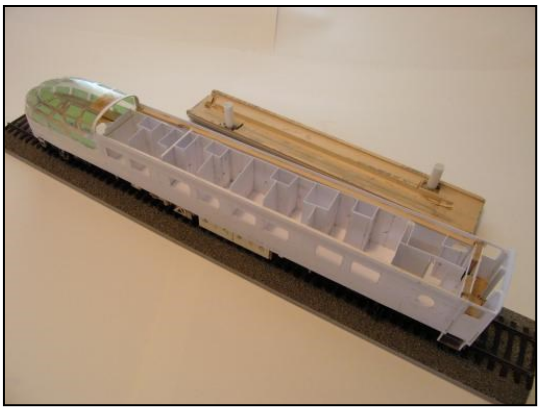
PHOTO LEFT AND PHOTO ABOVE: Finished views of the CN tool car.

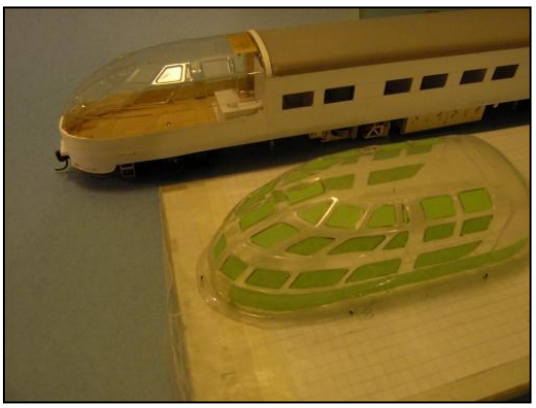
WHAT HAVE YOU BEEN WORKING ON DURING THE PANDEMIC?

CONTENT FROM A WIDE VARIETY OF MEMBERS
PHOTOS BY EACH CONTRIBUTOR

FROM THE EDITOR

I made a request of our Members in the last Issue to send me some information on what you had been working on during this long period of lockdown. A sizeable number of you responded and let me express my appreciation and thanks for your support. Over the next 10 pages, including the back cover, you will see a wide variety of scales and interests. It is unclear if Chapters and Clubs will be starting up until later in the Fall, so once again I would ask you to send me what you are doing over the summer and I will publish it in the Fall Issue. I will send out an email once again closer to the printing deadline.





CRAIG WEBB

PHOTO ABOVE LEFT: My current effort is an O scale model of CN's 8-bedroom skyview lounge cars. CN bought the six cars from the Milwaukee Road in 1964 after the MILW discontinued the Olympian Hiawatha. CN used them mostly on the Montreal East Coast runs, but two spent several years on the Prince Rupert-Jasper train. Parts used on the model were from Walthers back in the '70s when they were still manufacturing 0 scale car kits. Included are the solarium stamping, Nystrom trucks, and some undercarriage detail pieces. The rest is scratch built. Wood floor and roof, .020" styrene for the sides and interior partitions. As shown, the windows in the solarium (all 35 of them) are masked in prep for exterior painting.

PHOTO ABOVE RIGHT: The prototype was taken at Jasper in Aug., 1970. It represents the type of detail shots I used to take of any car I thought I might want to model. The car was assigned to the Prince Rupert to Jasper run. I had just come in on it from Prince George in bedroom H.

PHOTO CENTRE LEFT & PHOTO BOTTOM LEFT: When I ordered the "skyview" piece, Walthers sent me two of them, so I used the spare as a template to cut out the masking for the windows, just in case the X-Acto knife accidently cut through the styrene. It's only about .010" thick. The other shot shows the partly finished interior. It has to be made in three pieces, two drop-in and one slide-in under the skyview piece. I like to get the basic walls fitted before painting the exterior. That way there's less handling later.

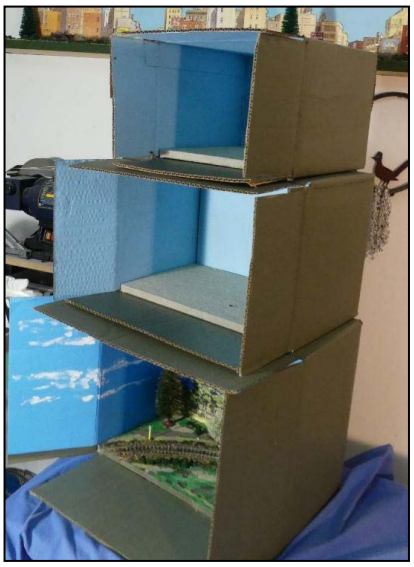
MARC ANDRE GAGNE

I have been participating with the Big Brothers and Big Sisters (Grands Freres et Grandes Soeurs de l'Estrie) in my hometown of Sherbrooke. The photo's show the activity for 5 children. Each child will create a small diorama in a box. I provide the materials and the equipment. They also receive old Model Railroader magazines.

PHOTO RIGHT: Boxes in various stages of construction. Top two painted with blue sky backdrop, bottom box with finished diorama.

PHOTO BELOW LEFT: Box of materials for 1 child.

PHOTO BELOW RIGHT: Finished diorama in a box.



BARRY KELLY

PHOTO LEFT: I model HO and have just finished a number of wheel flat cars.

JEFF HILL

PHOTO RIGHT: I have completed some simple upgrades to two Bachmann Spectrum On30 high-sided gondolas. These come assembled and painted, with lettering on the bottom frame only. I lettered the sides with CDS dry transfers (for a fictitious private railway belonging to a real mining company), added brake staffs from my parts box and scratchbuilt cut levers and air hoses from brass wire. Weathered with artist's chalks and some dry brushing to highlight the "metal" parts.

BRUCE LECKIE

PHOTO RIGHT TOP: Doodlebug #9 is leaving the covered bridge at Wyatt's Copse, one of the Dirty 30 modules. The Doodlebug was kitbashed from a Hawthorne Village car (Bachmann On30 with a fancy paint job and an inflated price) while the bridge is a cardstock model.

PHOTO RIGHT CENTER: Heisler #2 drifts past the Cripple Creek garage. The garage is scratch built using Clever Models textures.

PHOTO BELOW: I just added some marker lights to the Doodlebug trailer car. These were made from Caboose Industries High Level switchstand lanterns with pico LEDs (from GLX scale models). This is powered by a function only decoder from Digitrax. The trailer was kitbashed from another Hawthorne Village combine that was shortened by about 12 feet.

ED FREEMAN

PHOTO BELOW: I completed a Maine Central boxcar which just awaits weathering. The car is an HO Speedwitch Media kit of a 1929 re-roofed AAR box car.

ERIC TEMPLETON

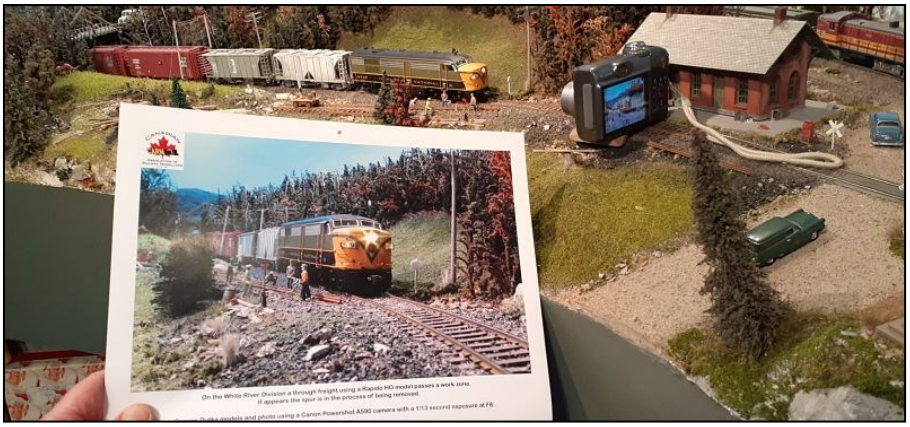
PHOTO BELOW: Here is a photo of a tank car which I kitbashed a short time ago. It would take half a page to describe the whole process, but as someone once said a picture is worth a thousand words.

The model is a Titanium Pigment Division Tank Car for transport of Titanium Dioxide Pigment Suspension to paper mills. Briefly, I removed two sections from an Athearn propane gas tank car, shortened the frame to match, painted and applied decals. Art work for the decals was provided by Jim Baxter.

GEORGE DUTKA

PHOTO ABOVE LEFT: If you are like me one likes to collect more than a single railway's engine fleet. The question is can they be combined. Here is a 2021 example of a CN engine trailing in a consist which was being used regularly this spring between London and Windsor on the CP. The train is CP235 WB approaching Komoka this spring and yes on the return movement CN is leading a CP train.

PHOTO ABOVE RIGHT: One thing I like about going trackside is the opportunity to check out the scenery along the ROW. In this Spring 2021 scene although train CN 148 is the main feature, one can get inspiration from the whole scene. The trackage outside Komoka has a slight elevation from the foreground (something that one can add to a foreground scene on a layout), a farmers roadway next to the tracks or should I say between the tracks and a neat looking fence. This would all look great on a layout, raised trackage, a lightly used roadway and a neat fence in the foreground. At the crossing the sign is also something one can photocopy from a photo and add to ones scene. Lots of inspiration in a single view.

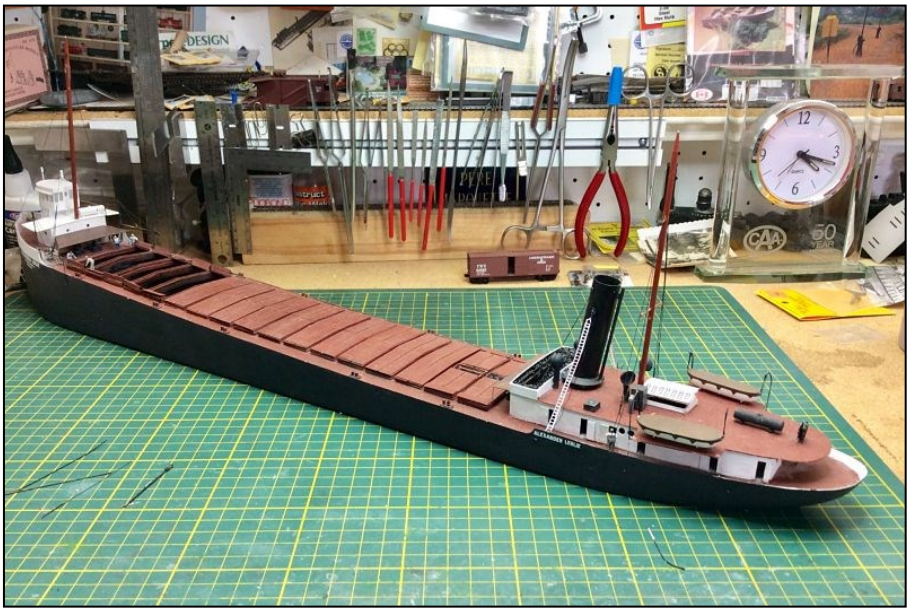


GEORGE DUTKA

PHOTO LEFT: In this photo I have set up the scene once again so one can see what I did to come up with this CARM 2021 calendar view. I used a pocket Canon camera which is at least 10 years old costing about $100 back then, a basic camera. Resting the camera on the tracks gives one a railfan's style of photo.

GEORGE DUTKA:

PHOTO LEFT: A low angle view taken by resting the camera on the layout gives one a different look at this farm scene on the White River Division. When I replaced the farm house, the barn I was using looked out of place, so a new one was scratch-built to better fit the scene. The lady walking to the barn, I added two small pumpkins to her hands. I also added the geese being herded back to the pond by a young boy and his dog. Simple small details add loads of interest to one's modeled scenes.



ART SELBY

NO PHOTO: Art Selby sent a link to the O Scale Resource web magazine which features his Blue Ridge Midland RR this month. He reminded me that the Erie F7's in the following article were covered by CARM some time ago. This magazine is a great resource, regardless of scale, check it out.

https://oscaleresource.com/WP/

IAN MAYNARD

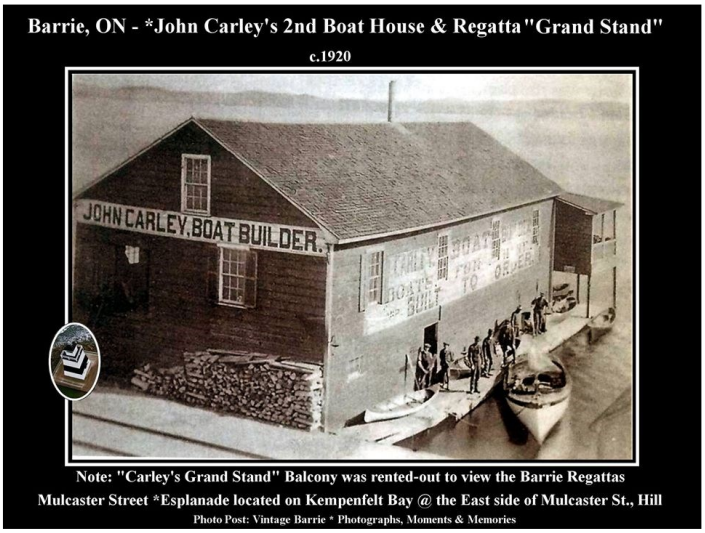
PHOTO ABOVE LEFT: I have been spending lots of my time constructing the N Scale Great Lakes coal fired steamer, the Alexander Leslie, circa 1949. It spent many years transporting coal from Ohio across Lake Erie to Erieau, Ontario on the North shore of the lake.

PHOTO BELOW LEFT: I also spent a fair bit of time creating four N Scale Lake Erie Fish Tugs (boats) which operated from the harbour at Erieau, Ontario.

IAN MAYNARD

PHOTO RIGHT: Covid has also given me more time to further research as well as construct some of the unique items which once frequented this Lake Erie harbour/coal facility located in SW Ontario at Erieau. From the Great Lakes freighter, to Erieau fish tugs, to Pere Marquette coal cars, this scene is taking shape.

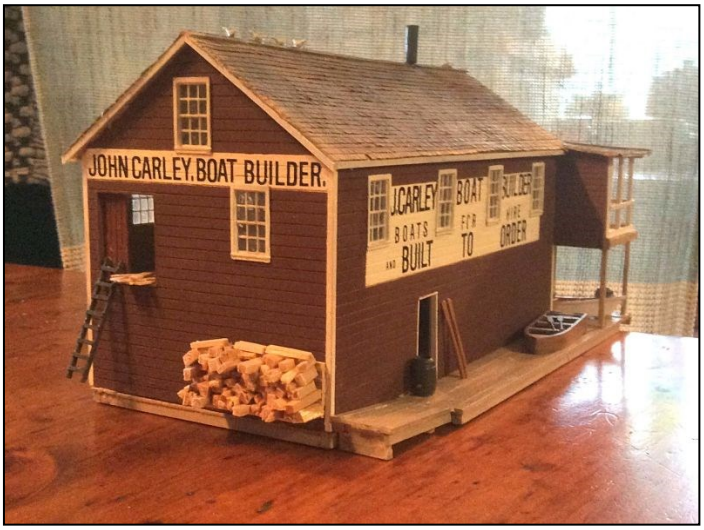
PHOTO BELOW: Scratch building the Erieau Fisheries Building.

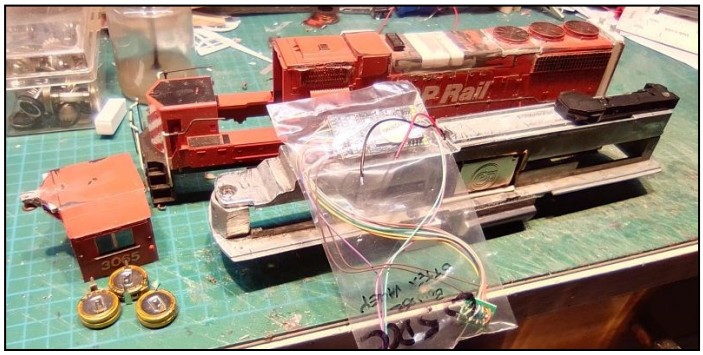


DR. ROBERT CARLEY

PHOTO ABOVE: Here is a shot of my great-grandfather's boathouse in Barrie, Ontario. John Carley started his business in Barrie in 1867, after having done the same in Hamilton previously. He made a variety of boats, even supplying boats to transport troops to quell the Red River Rebellion.

PHOTO BELOW: I scratch built the model using wood that I had, and based it on the photograph. Covid gave me the excuse to complete it. It is in HO scale. I do not have a layout, and perhaps never will, but I have built over a hundred cars and buildings, all of wood craftsman kits. I model the era of 1880-1920 with vintage Canadian rail lines, although it is almost impossible to get decals or pressure applied car markings these days.





JOHN BIGHAM

PHOTO ABOVE: I've been writing code for a double-track crossing and there's not a lot to show. However, I made the mistake of buying a tri-pack of old Athearn GO coaches. I realized one loco wasn't going to make it up the helix at the Railview club, and I've had a silly affection for the old original black GO GP40TC's, so despite never having dreamed I'd ever scratch/bash a diesel shell, I'm trying to get an old Bachmann GP something turned into some semblance of what I recall on the platform at Oakville 49 years ago. I replaced the rubberband equipped wheelset, glued up the cracked universal's, cut down the frame for the smaller fuel tank, rearranged the rad fans and exhaust stack, and dug out some clearance for a decoder, speaker, and capacitor power bank. We'll see what the paint will hide!

IAN MCLEOD

PHOTO ABOVE RIGHT: Here is the HO Rapido Canadian which I am running to check the track quality on my layout. Nothing like the deepend method,eh! There are a number of places needing improvement. The wheels were all cleaned, and couplers extended, as expected. The layout is impure plywood Pacific, 2 levels, 18 feet by 12 feet, with 2 ramps up and down. I have experimented with a number of different materials for the roadbed and ramp subroadbed, over the 4 years of construction!

JIM BENNETT

PHOTO LEFT: Mixing a passion for teaching games and model railroading out west, I am the chief engineer at Oceanside Model Railroaders and I have recently moved my love of model railroading in with my new retail games store, Railyard Games, on Vancouver Island. It's a small 20 ft. DCC railroad layout in HO scale for operating in-store by my visitors with kids and grandkids or just old kids and railroaders on their own.

We took an earlier horseshoe shaped layout at another location and turned it into a linear layout and with a bit of adjustments to the wiring are now at a stage to invite some local railroaders in to help with some scenery and other fine touches.

I help organize the annual Nanaimo Train Show at Beban Park and I helped organize the show at the Parksville Museum during 'RAILWAY DAYS' in the summers of 2018 and 2019. During the one day show they proudly reported over 600 special visitors to the museum in one day and helped the museum raise over $2500 in donations as one of their major fund-raisers in those years.

We're hoping to host another show this August 2021, but need to know that the pandemic has eased first. Meanwhile I'll be running my trains at my new retail games store and hoping to encourage new blood into the hobby or railroading.

SIM BRIGDEN

NO PHOTO: Too much time on my hands during COVID. As with all Model Railroaders, we have our obsessions. My obsession for the cheezy President's Choice Train Sets was starting to take over my life so I thought: "OK, if you're going to do it, DO IT!" Here's a link to what I believe is a World First: Every piece of rolling stock in one (1) train (excluding Vans and Locomotives) from all 11 sets. Rather than post a picture, here's a link to a crummy video that I made: https://youtu.be/tSBx3fe3fJk

WAYNE CAISSIE

PHOTO BOTTOM LEFT: I am an on and off again HO model railroader for the last few years. No time before with work and all. Since both the pandemic and my retirement as of Dec 2020 I now have more time on my hands to devote to the hobby. I have included the first stage of my layout and a couple of present scenes.

PHOTO BOTTOM RIGHT: It is HO code 83 scale. It is fictional. I started with some rocky surroundings at one end and my attempt at a small river flowing through. I am a novice so it may not be as nice as some I have seem on tours but it's a start. I plan to have a small town with a train station in the coming months.

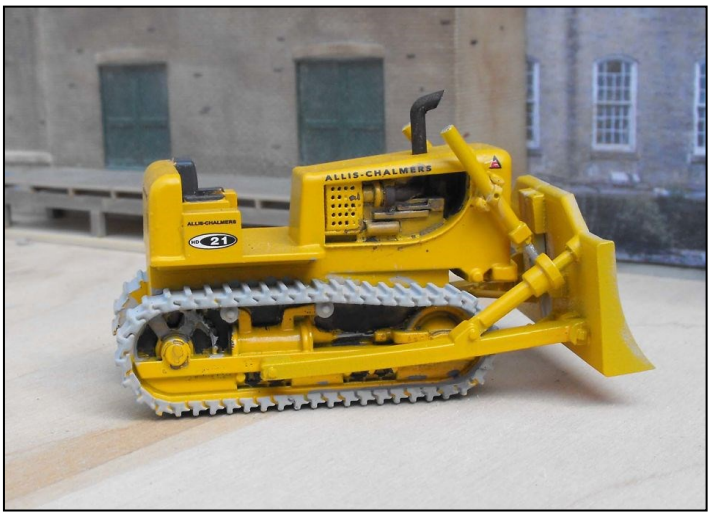
ANDY MALLETTE

PHOTO LEFT: I have been finishing off as many of the structures as possible on the Park Head Ontario section of my layout before I haul out the air brush. The picture I took shows the station, CNR ex-coach 3174, the freight shed, CNR ex-boxcar 322095, the tool shed and twin outhouse. I am working on an article about how I made the station from two On30 short passenger cars. The freight shed was an S Scale double sheathed boxcar shortened from 40' to 36'.

KEN LAYLAND

PHOTO ABOVE & PHOTO LEFT: I have assembled a Central Valley Works 150' bridge kit with some scratch built additions. It is ready for painting, weathering, and then installing over the Thames River on my Forest City Terminal Railway.

PHOTO BOTTOM LEFT & PHOTO BOTTOM RIGHT: I have recently purchased from Tangent a couple of early 60's General American Air-Flo covered hoppers leased by Canadian companies. On the left is St. Lawrence Sugar Refineries, of Montreal, and on the right, Quebec Iron & Titanium Corporation



STEVE HOSHEL

PHOTO ABOVE LEFT & PHOTO ABOVE RIGHT: I've spent some time on the assembly of a Wheels of Time Allis-Chalmers HD-21 bulldozer. The main body and tracks are resin castings and the blade pieces, the exhaust stack, and lift cylinders are 3D printed. The unit I purchased has one of the cylinder mounting ears missing. A piece of .030" X .080" styrene filled in somewhat. The model was assembled with a few changes from the instructions. The track assemblies were glued with epoxy rather than the CA recommended. It was then painted with Tamiya Fine Grey Primer followed by Tamiya's Camel Yellow. It looked close enough for me. Tamiya's Gloss coat finished it. Most of the appropriate decals were applied to make this a later production unit; that is I used the stylized A and C logo versus the Diamond-Gear logo. The only decal that may have been added but wasn't is the gauge cluster decal. I found this decal to be completely out of scale. Most dash gauges are about 2 inches in diameter. The decal gauges scaled out to about 6 inches. I'll try using a very fine black marker to make the gauges.

PHOTO BELOW RIGHT: The Waterloo Region Model Railway Club in Maryhill held its last operating session on November 14, 2020. The club tries to run every train that ran from or through Sudbury on a daily basis during the operating sessions. The 24 hours are squeezed in using a 4:1 fast clock. I was trying to position myself in a good spot near Nairn to catch Train 73 (the Coal Train) but I missed the head end trying to get positioned. I guess the tail end will have to do.

PHOTO BELOW LEFT: On the Coal Train's return trip as Train 74, I was better prepared to catch the power at the crossing in Nairn. 8765 was leading.

PETER MUMBY

PHOTO RIGHT: This little project started with an undecorated Rapido gondola in HO scale. It was airbrushed with Floquil paint, then sprayed with Gloss Cote. CDS dry transfers were rubbed on to blank decal paper, then applied to the car. The interior was detailed with a few ties and some loose gravel. Following an application of Dull Cote, the trucks, carbody, and interior were weathered with powders and PanPastels. A second gondola was similarly completed with a small load of rails.

RICK ASTLE

PHOTO LEFT: I have been working on adding more detail to my scenes on my HO scale Eastern Slopes Railway here in Olds, Alberta. With the closures here in Alberta I have been trying several techniques for tree making. My next project will be to convert my USA Trains CP GP9 locomotive from rail to battery power for operation on the Didsbury, Alberta Museum's G Scale outdoor layout.

GEORGE DUTKA

PHOTO RIGHT: FOS kit-of-the-month. They are actually quite easy to build once you have done one or two. This pool hall is kind of neat looking structure which was inspired by a structure in the mid-west. I changed out the roofing to tarpaper. The signage really makes this structure. Just remember to photocopy your signs first so if an error occurs the sign can be fixed.

GEORGE DUTKA

PHOTO LEFT: The CN tool car described in the article on page 13 is seen in this view on the White River Division layout.