



SPRING 2021 ISSUE #75

75th ISSUE
CHAIRMAN'S REPORT: CHAPTER REPORTS: OBSERVATION PLATFORM
ALGOMA RIVER RAILROAD
CONVERTING THE REAL WORLD TO SCALE
CARDSTOCK MODELLING IN CORALIE COVE
MODEL RAILROAD PROJECTS FROM THE JUNK DRAWER:
INEXPENSIVE TURNTABLE IN HO SCALE
CNR GE 44 TONNER



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

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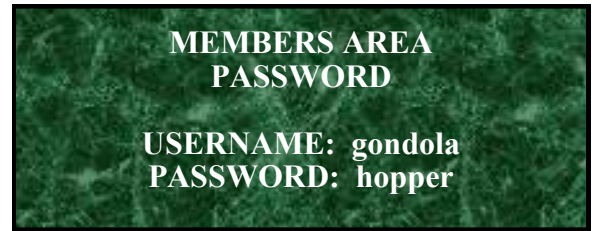
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CHAPTER SUPPORT

Online CARM Meetings

Since the first online CARM meeting in October, featuring Jason Shron's CN and VIA Kingston Sub, his partial mock up of an LRC coach in the basement and a discussion of Rapido Trains, there have been meetings every month:

In November, Bruce Leckie presented his video of Alex Thum's CP St. Lawrence Division Layout and also the flip clock operation scheduling system developed by Alex.

In December, Craig Symington showed his slideshow Railways of Thunder Bay, The Evolution of a City.

In January, Keith Stamper showed a slideshow and videos of his On3 Colorado and Rio Grande Southern Railway using radio controlled battery power locomotives and other projects he has been working on.

In February we have Bob Thompson with a slideshow on Kitbashing Plastic Structures.

We have tentatively scheduled additional virtual meetings all the way up to July. Most deal with modelling but there will be a little bit of prototype railroading.

If you are a CARM member but not getting the meeting announcements, please send your current email address to membership@caorm.org If you're not a CARM member and would like to try a sample meeting, email carmchapters@caorm.org These meetings can be viewed on almost any computer. Also links to videos of some meetings will soon be in the members-only section of the CARM web site.

Ian McIntosh

COVER PHOTO BY GEORGE DUTKA: My CN 44 tonner makes its way along the White River Division with a load for a local industry. Onboard is a WRD crew which adds additional interest to this tiny engine. Bachmann now offers a CN engine in the olive green scheme which can be detailed simply with a few add-ons.

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observation platform john johnston: editor

75th ISSUE OF THE CANADIAN

It seems truly amazing that I am in my 21st year editing and publishing The Canadian. The first Issue came out in January/February 2004, mere 2 months after the formation of CARM. Those early newsletters were printed by me, both the colour and black and white pages, and then assembled in a loose leaf format and stapled together. This photo of Issue #1 shows the headline lauding the formation of the new organization.

JANUARY-FEBRUARY 2004 ISSUE #1

NEW CANADIAN ASSOCIATION OF RAILWAY MODELLERS FORMED

Justin Perry's Double Deck ATLANTIC SUPERIOR TRANSPORTATION

The new Canadian Association of Railway Modellers was formed in St. Catharines, Ontario on October 15, 2003. Present at the inaugural meeting were Peter Moffett MMR, Lex A. Parker MMR, David King, and John Johnston. The goals of the new organization will be to further the hobby of model railroading in Canada with a particular emphasis on Canadian prototypes.

The new organization will be funded through a single dues structure and will be marketing itself to Canadians from coast to coast as well as model railroaders from overseas. Membership in the first two months has created the 140 mark and 6 Corporate Sponsors have come aboard to support this effort. Plans are underway for National Conventions in 2004 and 2005.

"This has been an incredibly exciting two months since Peter, Lex, David and I met to form the Canadian Association of Railway Modellers"

John Johnston: CARM Board Chair

Railfan's Bayview Jet

Over the years I have been fortunate to have had dozens of members who have contributed material to be shared with their fellow members. I thank all of them for their help and contributions. I want to particularly

acknowledge a couple of prolific contributors. Ted Ra-fuse has been visiting layouts and writing articles for almost all of the last two decades and is a major contributor to the success of the newsletter. In recent years, he has been joined by George Dutka who has been sharing his excellent modelling, writing, and photography skills.

NEW IDEAS FOR THE CANADIAN

It has not been possible during the pandemic to visit layouts and as a result, a major source of newsletter material, layout visits, has dried up. That's the negative. The positive can be seen in the efforts of members like James Razor of the Toronto Chapter who is the driving force behind the Chapter newsletter, *WHAT ARE YOU WORKING ON*. What James has done is to use the principles of social media platforms like Facebook and Twitter, short and simple. One or two photos of what you are working on and a brief description. It doesn't require writing skills and detailed explanations of how something was built. It has resulted in widespread participation by Chapter Members.

I'd like to try and duplicate what James has done on a broader basis. Expect to see an email from me before the next newsletter is due asking you to participate in this endeavour.

CRAIG WEBB'S ALGOMA RIVER RAILROAD

I have been fortunate to know Craig for almost 50 years. As a newly married 23 year old, my wife and I moved into an apartment on Main St. W. in Hamilton. Also in that apartment building was a school teacher by the name of Craig Webb. I can't recall how we hooked up, perhaps through the HOMES Club, but in any event I was invited to see the Narrow Gauge layout he had built in one of the apartment's bedrooms. That layout opened my eyes to what could be accomplished in model railroading.

In 1975, Craig joined the O Scale Club which would become the famous Aberfoyle Junction. Craig earned his MMR in 1996 and is renowned for his well researched scratchbuilt passenger cars, rolling stock and structures. Craig purchased a home in the west end of Hamilton and in addition to his activities at Aberfoyle Junction, he built the Algoma River Railroad which would be featured in Model Railroader's Great Model Railroads 2003. Unfortunately, Craig is at the point where he is uncertain how much longer he will choose to remain in his own home and so the decision was made to take the layout down which was accomplished with the help of a number of friends. Craig sold off most of the rolling stock and structures and donated the proceeds of the sale to Aberfoyle Junction to assist it in continuing to meet its rent obligations in these trying times. I always loved the model of a

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

Muskoka Lakes steamer that Craig built for his home layout (see photo on back page) and I was happy to hear that it is being preserved and on display at Aberfoyle Junction. To recognize this wonderful layout I have reprinted the article from Issue #2 of the Canadian, starting on page 7.

Craig won't be sitting idle however as he has decided to join our N Scale fraternity and build a small N scale layout in his home. He has also acquired some equipment, designed a trackplan and as soon as the restrictions lift will be looking to get the materials for his small layout. In the meantime, Craig, who is a prolific scratchbuilder decided to see how easy, or difficult, it would be to scratch-build in N Scale. He shared with me this photo of his first N Scale scratchbuilt structure.



**ON THE WRIGHT TRACK
BY BONNIE SITTER**

I was contacted by author Bonnie Sitter who has written a book about a family and their experiences with CPR School Car #2 in Northern Ontario over a 40 year period in the middle of the 20th century. A description of the book can be found these excerpts from a review by a local author and historian from Chapleau, William E. "Bill" McLeod.

"On the Wright Track: Memories from C.P.R. School Car # 2" is a delightful, well written and eminently readable account of the lives of William and Helen Wright and their four children . From its inception in September of 1928 to its retirement in June of 1967, Mr. Wright taught in the railway school car that ran between the C.P.R. Divisional Points of Chapleau and White River in Northern Ontario.

The school cars (there were seven of them that ran on the C.N.R., C.P.R. and the T. & N.O.) were railway cars converted into a school room and living quarters for the teacher and his family. The cars were conceived in the mid 1920s by J. B. MacDougall of the Ontario Ministry of Education. Their purpose was to deliver education to the children of railway workers, mostly track maintenance men, who lived and worked at isolated locations along the railways of Northern Ontario. The children of trappers, prospectors and lumber jacks were also welcome.

**ON THE
WRIGHT TRACK**

MEMORIES FROM C.P.R. SCHOOL CAR # 2

BONNIE SITTER

**WHITE RIVER ~ CHAPLEAU
SCHOOL CAR ROUTE**

Map Courtesy of Teacher Bill Wright

C.P.R. School Car # 2 ran from Chapleau to White River serving the remote whistle-stops of Esher, Nicholson, Bolkow, Carry, Grassett and Amyot. The car would be pulled by a freight train from one stop to the next where it would be shunted off the main line for a week

during which time the children would be given a week of intensive teaching. They would then be given homework assignments to be completed before the train stopped again on its return trip. One cycle from Chapleau to White River would last about a month.

Teaching on the school cars required a very special person and his wife. It was a very remote existence and, if the couple had children, those kids would have to be raised without the benefit of interaction with peers their own age. They made their own fun doing puzzles, playing board games, snaring rabbits, fishing and scavenging pop bottles that had been thrown from passing trains. In season they picked blueberries which they sold to their grandfather in Campbellford. They did very well on the Grade Eight high school entrance exams that were required in those days. Most went on to post secondary education.

To tell this story the author chose to invite the four Wright children to write a chapter describing their lives before they went off to high school. Shirley was born in 1935, Harvey in 1936, Nancy in 1938 and Chris in 1943. They had nothing but good things to say about their experience. Two former pupils were also asked to make a contribution and they too were very positive.

If you are interested in this book you can contact Bonnie Sitter in Exeter, Ontario by phone at 519 235 1909 or by email at bonnie.sitter@gmail.com The book is soft cover at a cost of \$25. Shipping to a Canadian address is \$6 with no other taxes. You can e-transfer to Bonnie's gmail address. She says feel free to contact her if you have any questions.

HOBBY WORX

I recently decided that I wanted to purchase a gluing jig which is marketed by Micro Mark in the U.S. I contacted my local hobby shop and unfortunately Robin at Dundas Hobbies doesn't deal with Micro Mark so it looked like I would have to order it online through Micro Mark with the resulting exchange, customs, postage, etc.

I remembered seeing a tool dealer at local hobby shows, doesn't that seem a like a long time ago, so a quick Internet search led me to Hobby Worx at www.hobby-worx.ca who are located in Whitby, Ontario. David Goodhead, the owner/operator was excellent to deal with. They carry most of the Micro Mark catalogue. Three days after I ordered it from David, there it was in my mail box. The price with shipping was slightly less than it would have cost me through Micro Mark.

Bottom line, I still say check with your local hobby shop first, but if you need tools or parts, check out Hobby Worx, good prices, first rate service, and for the record, I have never met David and hadn't dealt with him previously. Once Train Shows start up again I will be checking out his booth our more closely.

WALTER REID

My good friend and fellow club member Walter Reid sent me the following photo's to share one his accomplishments during this pandemic and included a tip.

Walter made this O scale 1912 Ford Model T Flat Bed

Truck from a kit issued by Canadian company InterAction Hobbies. They offer a range of kits from N, TT, HO and O scale. This kit is a laser cut wood kit with 3D printed detail parts. This is a craftsman kit, so some forming of parts, the fenders and the roof, was required to get the curves and angles right, but most of the kit was laser cut with only the need to glue together layers to make the correct thickness and strength. An example is the seat, which is actually 5 layers of plywood in total. I built it off and on for 2 weeks, figuring it was about 15 hours of build / paint time in total. Nice addition to the layout.



In case you don't have some already, these mini clothespins from Walmart's craft area are really handy for holding the layers of laser wood kits together.



JOHN JOHNSTON: EDITOR



CHAIRMAN'S REPORT

Recently my youngest grandchild asked me if I would like her to read me a story, a big breakthrough as she had been resisting learning to read for a while. So obviously I encouraged her by saying yes. She appeared with "Thomas the Tank Engine", and proceeded to read it to me with a mixture of expertise and memory. I was thinking about whether she chose Thomas because she liked it and found it easy to read or because she was trying to appeal to me. Either way I can see her as a potential new CARM member when she is a quite a lot older. Even without her I am pleased to report that our membership continues to creep up slowly. Given the pandemic and lack of conventional promotion of the Association this is even more encouraging. I think much of it reflects on the ZOOM programs that our Chapter Director has launched, which have been very well received and are being attended by 60 – 90 people each episode. Congratulations Ian on the success of your program; and keep it up. For all those who have attended one or more of those ZOOM sessions please tell your friends about them and encourage them to join. While we don't want to turn people away, we would prefer it if they became members. As all the "e" members know it is not an onerous membership requirement or obligation and does provide a lot of useful information on modeling.

While you are considering joining or rejoining or renewing your membership give some thought to whether the additional nominal cost of an "e" membership with calendar isn't a fantastic deal at \$12 per year. How many of us do not buy a trains themed calendar each year for our train room/office/work room/basement or wherever. Most of the commercially available calendars are now in the \$20 range while ours is only half that. A fantastic deal and it combines six excellent pictures of layouts with six of prototype trains on Canadian rail lines. We still have a few calendars available for 2021 so you can still buy one or plan ahead by upgrading your membership format.

I suspect our ZOOM sessions will continue as a permanent feature of our CARM offerings even after life has returned to whatever will be the new normality. There are several other informal model railroading groups with chat rooms combined with ZOOM presentation sessions and in the absence of real live operating sessions and gatherings they provide a very supportive environment to keep ones modeling adrenaline flowing. I am a member of several of them and they are all planning to make them a long-term permanent feature as they actually offer a

greater convenience in many respects than making a trip to a meeting room somewhere.

As I write this it looks as if we have reached bottom in the decimation of our normal lifestyle and we have started the climb out of the hole. Vaccines are beginning to be jabbed and as manufacturers gear up the job rate will accelerate and move from the essential workers to the oldest people and then the not so old people, which I suspect will include a good number of our membership. So maybe next fall and winter we can look forward to a more traditional modeling winter, with shows, flea markets, operating sessions, Chapter meetings and face to face conversations. However there are still side effects and variants to contend with which will make the recovery more bumpy. So please all stay safe and practice good masking, distancing and hand washing.

The island of Fodor where Thomas and friends operate is apparently off the west coast of the United Kingdom, near to the Isle of Man. I have often thought that it would make a good modeling theme as it is essentially a short line with an interconnect to the mainline at the peninsula that connects it to England. One could make it whatever gauge one wished, including narrow gauge, for the narrow gauge fans, and could run a delightful assortment of motive power and consists that serve an eclectic set of industries and passengers services. There is also a lot of material available for researching the details of the railway before launching into construction. As we know from that literature it was a busy operation so the switching lists would become quite complicated. We have a historical record of the employees too and the management policies of the various controllers. All of which provides a key part of designing the story of a layout to go with the physical features of such a layout.

Whether you are heavily involved in building a layout, having one person operating sessions or still doodling track plans on scraps of paper I hope it won't be too long before we all get a chance to see a bit more of each other and look forward to learning more about all your exploits, whether they be great skills improvements or frustrated rants about complex plans that went awry. Enjoy this issue of The Canadian and I look forward to seeing many of you as names on a ZOOM screen at the next virtual layout tour.

GERALD

ALGOMA RIVER RAILROAD

ARTICLE BY JOHN JOHNSTON, PHOTOS BY PETER MOFFETT MMR CRC

EDITOR'S NOTE: During recent conversation with Craig, he advised that his masterpiece Algoma River Railroad had been disassembled. (see Observation Platform page 3). This is a reprint of an article first published in Issue #2 March April 2004.

The Algoma River Railroad is the home layout of Craig Webb MMR CRC. Craig is also a member of the fabled Aberfoyle Junction O Scale Club. Craig's On3 masterpiece was featured in Great Model Railroads 2003 and will be open to visitors during the 2004 CARM National Convention. The railroad is located in the area north of Lake Superior in the late 1920's and early 1930's and features several mines where ore is hauled by the narrow gauge Algoma River RR. to a standard gauge connection at Algoma City. A prolific modeller of passenger cars, Craig's railroad would also feature above average passenger service.

The equipment on the layout is a variety of narrow gauge stock bought on the "used equipment" market and represents scale models from narrow gauge lines ranging from Pennsylvania to the Yukon. All are painted for the Algoma River Railroad or its subsidiary the Northern Mines Railway. The layout features scratchbuilt equipment, locomotives, and structures. A lakeside scene with a beautifully detailed and scratchbuilt mail steamer greets visitors to the layout.

The layout measures 22' x 20' and Craig has installed both a fast clock and a day/night sequence to enhance the realism of its operation. Three brass Consolidations of D&RGW heritage join four scratchbuilt diesels to power the railroads trains. Track is handlaid code 100, code 83, and code 70.

The layout showcases numerous scratchbuilt

structures from the waterfront at Alvandale to the mine structure at Northern Mines. The latter was built for a contest and Craig wanted a full interior, which could be seen, and so the structure was built as if it was in the process of being re-roofed thus allowing the viewer to see all of the equipment inside. On a recent visit Craig showed me the new Hotel that will be located adjacent to the wye at Northern Junction and the muskoka chairs which he had scratchbuilt and which have 21 parts. All of the structures are lit and many have full interiors.

Craig loves to have the railroad operated and there is a regular group, which comes over twice a month. The layout runs with a timetable on a 12:1 fast clock. The schedule has numerous mine runs, passenger trains, a barge transfer and branch turns. Cars are moved according to a car card system. One of the unique features of Craig's layout is the use of "shadow boxes" to increase the size of the layout by bringing hidden track out into the open. Cutting view sites into the fascia, Craig scened the hidden tracks and these miniature scenes are a highlight of the layout.

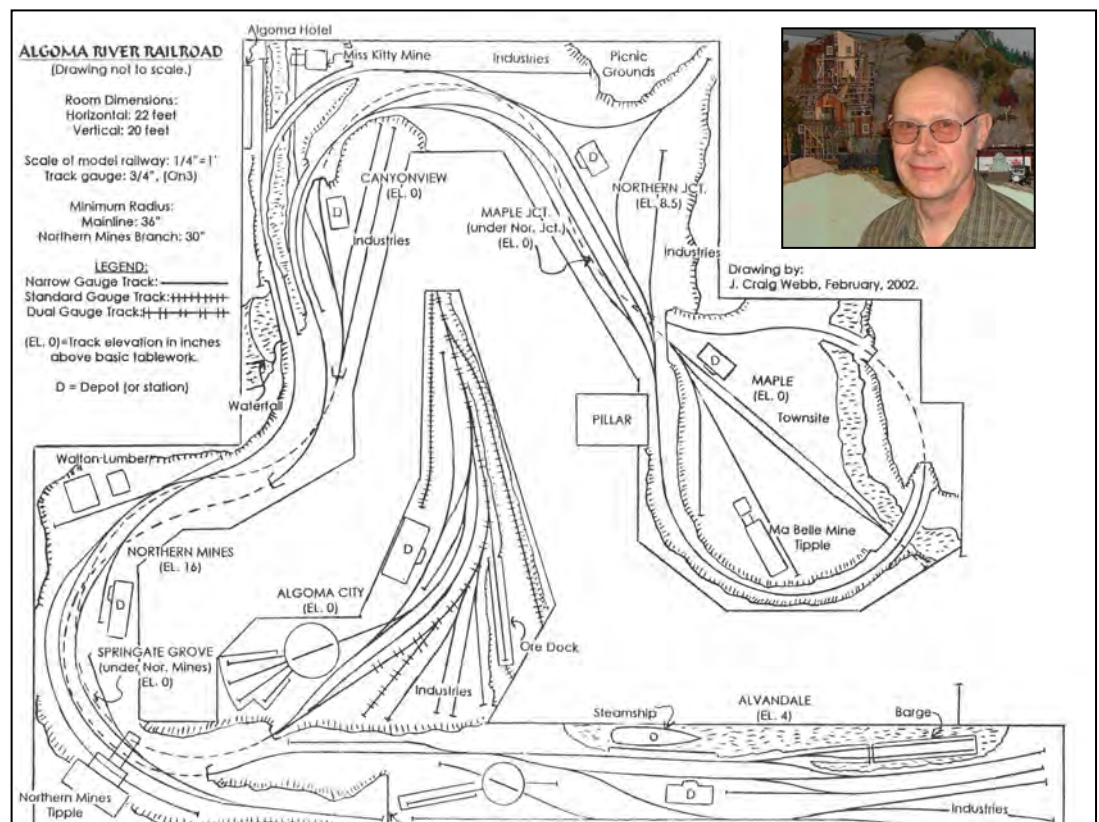




PHOTO ABOVE: At the town of Northern Mines a scratchbuilt diesel switches the scratchbuilt mine, which has a fully detailed interior.

PHOTO BELOW: An overview of Craig's layout shows it is well lit and chocked full of detail. The layout operates by timetable and has a day/night transition so that crews have to operate by the light of the moon and any other light available from the buildings, a challenge to say the least.





PHOTO ABOVE: One of Craig's scratchbuilt diesels is switching in the town of Northern Mines. The chassis of this diesel is an HO mechanism. Craig widened the wheel gauge and scratchbuilt the cab.

PHOTO BELOW: Craig scratchbuilt this railroad ferry. It provides interesting operational headaches for the operators here because they have to load the ferry evenly to prevent tipping



CONVERTING THE REAL WORLD TO SCALE AND BACK AGAIN

BY PAUL MACALLUM AND PAUL HURLY

Recently, we were both faced with a modeler's challenge. How can you easily determine if a model accessory will fit the scale of your layout? Similarly, if you have a photo of a trackside industry or structure, but nothing else, is there a way to scale it to your layout?

What Scale is this Vehicle?

Paul Macallum had acquired a number of vehicles and pieces of farm equipment to add to scenes on his layout. The question was, were they the correct scale?

Paul's Popleford to Preston layout is OO scale. True to his origin, OO scale or OO gauge, is the most popular model railway standard in the United Kingdom. This scale is virtually unknown in Canada or the USA. It is one of several 4 mm scale standards (4 mm to one foot, or 1:76.2 i.e. 1/76) for UK model railroads but it is the only one to be served by major manufacturers.

Sometimes the base of die cast toy models provides helpful information to assist in the process of determining its scale. This could be the name of the manufacturer of the model (to source catalogues) or the basic name of the vehicle (e.g. Ford). In some fortunate cases, the manufacturer provides the scale. But not always.

The first vehicle Paul decided to assess for his layout was a model of a 1938-1953 AEC Swansea Festival of Wales lorry (**Photo 1**). Since he would need the dimensions of the prototype, the lorry was a good project to start with. AEC (Associated Equipment Company) manufactured lorries were used extensively by the UK and its allies during WW II. So, lots of prototype information is available today.

Research on the internet provided Paul with the length of this truck – 20 feet, 10 inches. Paul knew there are 25.4 mm to the inch. So, he converted the prototype length and got 6350 mm. He divided this by the length of his



PHOTO 1 ABOVE: A 1938-1953 AEC Swansea Festival of Wales lorry.

scale model – 83.5 mm – and determined it was 1/76 or OO scale.

Identifying the car (**Photo 2**) was a bit more challenging. It appeared to be way too small for OO scale. The front was stamped faintly with "Austin" on the bonnet grille and Oxford on the underside, but nothing more. Eventually, by comparing what was on his desk to pictures on the internet, Paul determined his model car was a 1923-1932 Austin Seven RN van Primrose. This then provided more information about the length from the manufacturer. The prototype car was 9.9 feet long. This converted to 3017.5 mm.

Since the model was 39.5 mm long, the scale model worked out to also be 1/76. It would fit perfectly on his layout.

His final challenge was a model of a steam tractor (**Photo 3**). The bottom was stamped with the name "Lesney", a well-known British toy maker. This allowed Paul to search online. Comparing images, he determined this model was a 1925 Allchin. The only reliable



PHOTO 2 ABOVE: A 1923-1932 Austin Seven RN van Primrose.

dimension he could find for the prototype was the rear wheel diameter. The actual size was 6 feet which converted to 1828 mm. The model's rear wheel is 22 mm which, when divided into 1828, produced a scale size of 1/87. Perfect for HO!

Dimensions For a Structure from Photos.

Paul Hurly had a similar but different challenge. Robin Hood Flour mill in Port Colborne was perfect for a corner of his layout. He also determined that the Toronto Hamilton & Buffalo Railway's Welland Subdivision, the theme of his second HO layout, had serviced this industry during the 1970s. Unfortunately, a search of the internet and the TH&B Historical Society archives produced no structural dimensions or drawings.

The first time he saw the mill in Port Colborne was in 2017 on a field trip with his friend Roy. He couldn't get any closer than the security fence would permit. Using some electrical equipment in front of the silos as a benchmark, they estimated each silo was roughly 8 feet wide. Otherwise, the photos they took provided little else to estimate the size of the structure.

Paul's next visit in October 2019 was completely different. Rail service had resumed and Paul was able to photograph hoppers on the mill spur waiting to be loaded (Photo 4). Paul turned to John Wagner, who is a more knowledgeable railfan, for help to identify the type of hoppers he



PHOTO 4 ABOVE: The former Robin Hood flour mill in Port Colborne, in October 2019, was once again shipping via rail. Hoppers waiting to be loaded provided a possible benchmark for estimating the huge structure's dimensions.



PHOTO 3 ABOVE: A 1925 Allchin steam tractor.

had photographed. The correct prototype would provide an accurate measurement reference. Initially, they both estimated that standard cylindrical flour hopper had a length of 55 feet.

To confirm this, Paul tried to read the dimension markings on the far-right hand hopper, but with no luck. While the image was enlarged, he tried to interpret the partially blocked road number for the next hopper (Photo 5). A Google search for "CAGX, cylindrical hopper" took him to the RR Picture Archives web site. It described that CAGX is an MHC Incorporated Subsidiary of ConAgra Incorporated.

While the road number in Paul's photo was partially obscured, a process of elimination took him to this screen for CAGX hopper number 95233 (Photo 6). It appeared to be a match. Now he had the hopper's length, 65 feet 10 inches (790 inches).

Using Photo 4, despite the problem with parallax, he estimated the hopper was 8 silos long. This would mean the silos were just over 8 feet wide. He then discovered that the Google Maps satellite view of the Robin Hood Flour mill hid in the shadow hoppers waiting to be loaded (Photo 7). Paul tried to determine if these might have been NSC or ACF cylindrical hoppers. But that search proved to be inconclusive. Counting that the hopper (blue arrow) has 7 silos along its length, and assuming it was 65 feet and not 55 feet long, each silo along its length would be roughly 9 feet, 4 inches wide.

Left potentially with a 12-inch discrepancy between



PHOTO 5 ABOVE: An enlargement of the detail in the lower right of Photo 4.

these two sources, Paul decided that the 'just good enough' principle would suffice, and he stuck with 8 feet.

Paul found the silos in HO were just over 1 scale inch wide (hopper = 790" / 7 silos long = 112.857" per silo; 112.857 / 87 = 1.3" in HO scale). To model the silos, Paul selected 3/4-inch PVC electrical conduit (he compressed the sizes 40 percent).

Next, he had to figure out how long (tall) each silo should be. For his first attempt, he tried using the hopper's length to estimate the height of the structure in Photo 4. A Google search stated that industrial structure stories are generally 14 feet high. Divided into the estimate us-

PHOTO 7 BELOW: Paul discovered these hopper cars waiting to be loaded in the shadows of the Google Maps satellite view. The superimposed white lines are how we estimated the number of silos per hopper. The arrow points to the hopper that we used to measure. Since he was uncertain of the type of hopper, this benchmark was inconclusive.

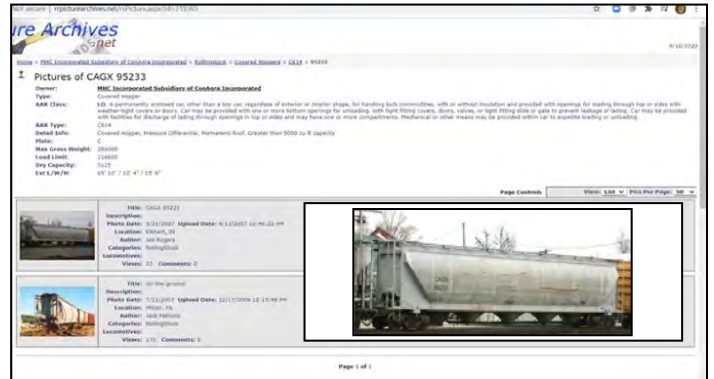


PHOTO 6 ABOVE: This screen capture and photo insert shows Hopper CAGX 95233 as photographed in 2007 and posted to RR Picture Archives, providing the length needed to determine Robin Hood Flour Mill's dimensions.

ing imaginary hoppers stacked on end, the resulting height seemed unrealistic. For his second approach, Paul used a Google feature which converts 2D satellite images into 3D graphical images. He counted the stories in the brick structure alongside the silos by focusing on the smaller windows (**Photo 8**). The result (12 stories x 14' = 168' or 2016" / 87) gave him a scale height of 23 HO inches.

In the end, partially to fit the available space and partially to prevent the model from over powering one portion of the layout, Paul compressed the silo components by 40 percent. A portion of the initial scratch-built structure is shown in (**Photo 9**).

The End Justifies the Means

In their effort to model to scale, both of us have relied on finding one or more accurate dimensions in a real structure to determine the accurate scale of items they needed for their respective layouts.

Paul Macallum's next goal is to develop a handy guide which he can use at train shows, swap meets and markets to determine if future "finds" will complement his OO gauge layout. Paul Hurly is sourcing windows and junk box details he can use to construct the distinct cyclones on the mill's roof. Both will be great ways to while away time during the winter because of pandemic-restricted social activities.

Acknowledgment

Our thanks to Gary Shurgold, MMR, and John Wagner, for their help to create this article. Paul and Paul also previously published this article in the publication "Model Railroading Inspirations", Fall 2020, of the NMRA Western Ontario Division. Back issues of their e-magazine are available via the WOD website. This has been reprinted with the consent of the publishers of Model Railroad Inspirations.



PHOTO 8 ABOVE: An enlargement of a Google Globe View image (a 3D graphical rendering from the 2D satellite image) made it possible to count the floors (white highlighted windows) in the brick milling structure alongside the silos.

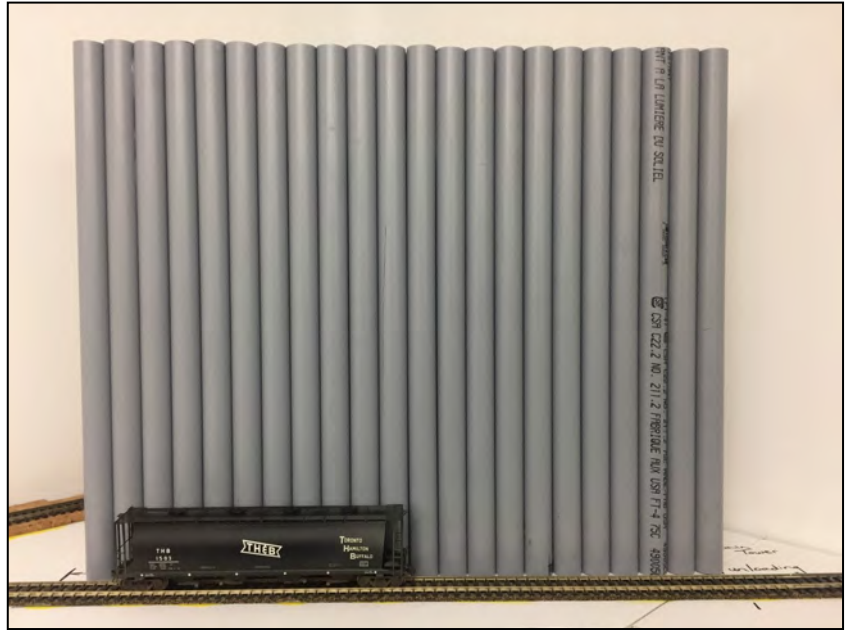
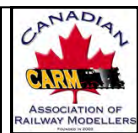


PHOTO 9 ABOVE: TH&B Hopper #1503 is spotted alongside part of the scratchbuilt Robin Hood Flour Mill bank of silo's. The hopper is the Rapido model of the distinctly Canadian 3850 cu. ft. cylindrical hoppers which were manufactured by National Steel Car and Marine Industries.



CHAPTERS

TORONTO CHAPTER:

Thanks to a government mandated lock down, those of us in the Toronto Chapter have had little to do but work on our layouts. I urge all modellers, whether CARM members or not, to phone a fellow model railroader, ask them how they're doing and listen to the answer. I have found the second wave of the pandemic to be more irritating than the first but at least I have a loving family. Not everyone does. The least we can do is to reach out to each other. If you can, try to support your local hobby shop. In the Toronto area there is George's Trains in Markham, and Panther Hobbies and Credit Valley Railway Co. in Mississauga. In the city of Toronto, modellers should also buy something from John's Hobbies and the nearby Wheels and Wings Hobbies, both on Danforth Ave. Order online or phone ahead to arrange for curbside pickup delivery. And ask them how they're doing.

While Toronto was in another COVID-19 lockdown over the winter, with no layout operations or layout tours possible for awhile, the Toronto Chapter members have continued to stay in touch with their *What Are You Working On?* email letter. The letter features a picture and short description of each contributing members' various latest modelling efforts. In

the latest letter, Sim Brigden showed us his latest efforts to run trains remotely via the internet using his *First Person Video (FPV)* and then gave us a link to a video of his first virtual run on YouTube at <https://www.youtube.com/watch?v=nDjG0E7v3bE&authuser=1>. Many of the Toronto Chapter members have also been attending and enjoying the CARM ZOOM Presentations that Ian McIntosh Chapter Support has been coordinating. At this rate, we just might be having an operation session one day with everyone at home using CARM ZOOM meetings to run trains on Sim's layout using his remote First Person Video (FPV) system - now that would be an interesting way to beat the current pandemic lockdown!

Reports from Richard Morrison and James Rasor

WHAT MODEL RAILROADING PROJECT HAVE YOU WORKED ON DURING THE PANDEMIC?

SEND A PHOTO(S) AND A BRIEF DESCRIPTION TO THE CARM NEWSLETTER AT

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

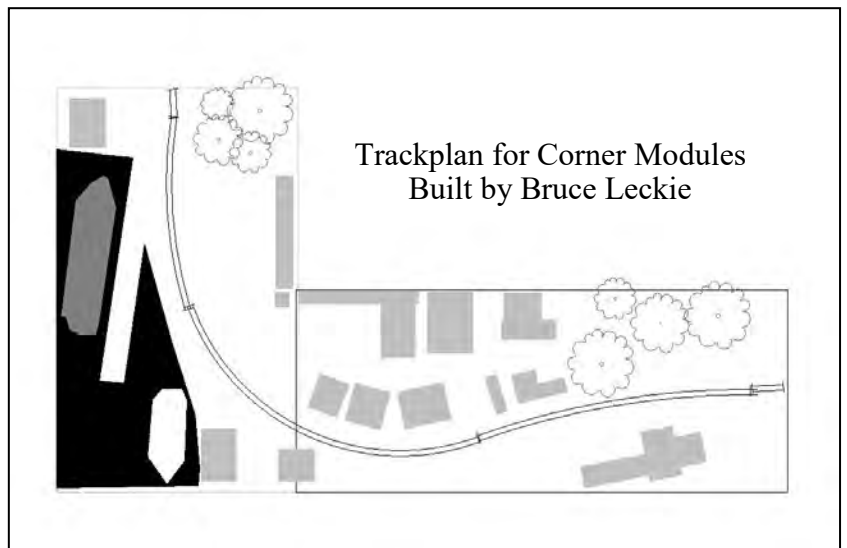
CARDSTOCK MODELLING IN CORALIE COVE

ARTICLE AND PHOTOS BY BRUCE LECKIE

The Dirty 30 modular gang of Ottawa has a large flexible layout that we display at several train shows, including the show at Springfield in Massachusetts. The modules are somewhat open design but have a common connection point at each end, allowing us to set them up in many configurations.

Because most modules end up being a pair of 2 foot by 4 foot modules joined in a straight configuration, I decided to do a corner module (L shaped) and add some vertical elements for interest. A harbour scene intrigued me and that set the tone.

I had discovered a company called Clever Models from the States that produced cardstock kits in O scale that were highly detailed and preweathered. I had sampled a few of their kits and really liked the results. They also offer two CDs of "textures" which included roofing materials, several types of stone, many sheets of windows and doors and many types of siding, from brick to board and batten. I decided to use these to build all the structures on this module. You can view their products at www.clevermodels.net



The module followed typical construction with a wood frame and foam scenery base. I handlaid the track on homemade ties sitting on cork roadbed.

The structures are mostly dollar store foamcore board for the "core" of the models, and the walls, roof and details are printed on heavy cardstock and glued to the core. Since I used textures printed on a laser printer, it was necessary to spray them with a matt spray once done.

This allowed me to mock up the town, make changes as needed and then work on the model proper. When done, the scene is very realistic and extremely light, perfect for a module!

PHOTO LEFT: The Calabogie Clipper, a mixed freight creaks by on its way to the next town.



Photo Above: Overview of the town.
Photo Below: Harbour view including tug under construction.
Photo Inset: Harbour view including finished tug.





Porch at Imper's Fish & Chips
Muskoka Chairs by Miniprints



Clever Models "O" Scale
Cannery Kit

MODEL RAILROAD PROJECTS FROM JUNK

PROJECT 1 DIESEL FUELING FACILITY

PROJECT 2 SAND TOWER, DRYING / TRANSFER HOUSE AND BIN

ARTICLE AND PHOTOS BY ERIC TEMPLETON

PROJECT 1: DIESEL FUELING FACILITY

Being in a pandemic lock down provides one with more time to ponder as to what might be missing from one's model railroad layout. In my own case it did not require much scrutiny to realize that the engine terminal in West Pearl needed a diesel fueling facility.

Taking inventory of my plastic "bits and pieces" box produced sections of a storage tank, piping, structural shapes in ABS, a chunk of covered conveyor, parts of a fire escape kit and a boxcar ladder, which was a pretty good start.

I assembled the storage tank and painted it aluminum. I trimmed the ends of the section of covered conveyor, fashioned end walls from scraps of corrugated metal sheet, cut a door opening in one side which was then covered on the interior with a piece of sheet styrene for the door. These bits when glued together became the pump house. Some roof trim and a coat of paint and it was finished.

After a lot of measuring of the available space, a base was cut from styrene sheet to accommodate the tank and pump house as well as the piping and hose rack.

Hoses were fashioned from black heat shrink tubing with bare 20 AWG wire threaded through to allow for shaping and provide nozzles for the delivery hoses, while the wire in the fill hose was cut short to leave space for a fitting resembling a "quick connect" to be glued on the end.

Piping was added from the dome to down behind the pump house, and the access platform, railings and ladder were affixed and painted. The piping supports and hose rack were cut from structural shapes and installed with the delivery and fill hoses being glued to the appropriate pipes. NO SMOKING signs were printed with my computer and affixed appropriately.

Two final details were required to keep the accountants happy – flow meters, so they could write down how many gallons of diesel fuel were being transferred to the units. I

cut out two small rectangles of frosted window plastic, painted a white stripe across each piece closer to one end, and when that had dried I painted the other side with brown paint leaving the white strip visible. Once dry these were glued at the junction of each delivery hose and pipe, brown side out so the white appears to be within as would the face of a meter.

Time to completion, approximately one week.



Project 2: Sand Tower, Drying, Transfer House and Bin

West Pearl Engine Terminal needed a sand tower for both steam and diesel locos. The main challenge was to find a cylinder of a reasonable size such that the tower would fit between the two roundhouse leads with a minimum of support. I finally settled for a small plastic pill bottle. The first order of business was to remove the child-proof locking ring, which proved to be quite easy with the cap in place and resting the razor saw blade against it as a guide while cutting through the bottle.

I fabricated the support channels from styrene strips, and with the help of a scale ruler determined the height for the finished structure from the plywood layout top. The base was made from two pieces of square tube (ABS) and a flat piece of styrene sheet with holes cut to allow the support channels to pass through. Two horizontal braces were added across the support channels to support the transfer pipe (a piece of sprue). A roof made from cardstock and covered with aluminum duct tape was added to the tower. Two holes were drilled in either side of the bottom of the tower to accommodate delivery hoses made from heat shrink tubing with bits of 20 AWG wire glued into the lower ends for nozzles.

The drying/transfer house was made from a chunk of covered conveyor with ends being made from scraps of corrugated metal sheet. An access door was cut in one side, and covered on the interior with sheet styrene for a door. The sand bin was made from leftover doors from a roundhouse kit. With both structures completed the only chore remaining was to align them so that the delivery pipe could be attached to the transfer house, and that



clearances for locos on both tracks were adequate. This proved to be rather tricky as the lower end of the delivery pipe had to be bent to align with the hole in the wall of the transfer house, which was accomplished by holding the sprue over (not touching) a hot soldering iron and bending it as the heat softened it. The result was close but not exact. So rather than try additional bending, I chose to shim up the transfer house, and then by running my largest loco by the structure on both sides was able to mark the location of both sides, and then glue both tower and house – bin in place with DAP Alex Plus caulking.

Author's note: I have no clue as to how the engine terminal personnel were able to maneuver the hose over to the sand dome of a steam loco or the sand hatches of a diesel, since any pictures I have seen of models of these structures have not depicted such detail.



BUILDING AN INEXPENSIVE TURNTABLE

ARTICLE AND PHOTOS BY RICHARD MORRISON

About 10 years ago I built a nine-stall roundhouse and turntable for my layout, but despite extensive and repeated repairs and modifications, the old Walthers turntable kit was still unreliable. As well, I had built the engine facility on a part of the layout that was too high to reach comfortably. A few years ago I tossed out everything, replaced the engine facility with a town, and stored my locomotives in foam-lined boxes in a cabinet.

In January of this year, I reached in the cabinet to retrieve a loco but lost my grip and dropped it. As the parts flew across the floor, I remembered the old model railroading adage that "trains belong on the track." It would be nice to build a new roundhouse, which meant expanding the layout into the aisle, which I could do easily enough. Turntables, however, have not gotten any cheaper.

The new Walthers assembled, motorized turntables get good reviews on model railroad forums but the only Walthers turntables I could find online came from the United States. After shipping and import charges, the basic 90-foot motorized turntable will cost a Canadian well over C\$400, with another C\$100 or so for a control module. The larger turntable is even more expensive.

I briefly considered disassembling a cheap record player turntable and making adjustments to make it run at a low speed, as was posted in a November 2014 Model Railroader forum. Stuck for an idea, I Googled "turntable" and was guided to another tech giant, Amazon. There I found my solution: an assortment of cheap turntables, called "rotating display stands" used by retailers. The stands rotate slowly under the counter to display watches, bracelets and other products and cost anywhere from \$20 to \$50, depending on how many speed settings the shopkeeper wants and whether or not he wants it to rotate in both directions.

Along with being cheap, the display stands already rotate, handy when building a turntable. One plan for a scratch built turntable I saw calls for stepper motors, bushings, slip rings, brass plates, rubber motor mounts, flexible couplings, pillow block bearings, shafts and parts I've never even heard of. Since the display stand supports the bridge, there is no need to carefully scratch build a pit rail or to attach any bridge support wheels.

There is one drawback. If you decide to make a turntable from a retail display stand, the stand itself will rotate along with the bridge while the outside ring around it stays in place. While unrealistic, it's not that noticeable

PHOTO BELOW: Building a peninsula into the aisle allows for layout expansion as long as you don't worry about realism too much. This 12" turntable hole was cut around an old LP record; lids for large kitchen pans also work. Rotating display stands come in all sizes, so modellers who want a turntable big enough for UP Big Boys need only cut a bigger hole.

PHOTO BELOW: Track will be laid on this 1/2" thick Schluter foam board, used under shower stalls. The Schluter board is as expensive as cork and doesn't hold spikes as well as Homasote but it will do in a pinch.





PHOTO ABOVE: This \$36 rotating display stand, mainly used by retailers to show off watches and other jewellery, is one of many available at Amazon. The \$50 versions have three speeds and rotate in both directions. Mine sits on wood cross members and is simply taped in place for easy removal in case it needs to be replaced.



PHOTO ABOVE: The turntable bridge is made from 0.80" thick styrene glued into a longitudinal box sturdy enough to hold any loco. The vertical bracing on the sides was cut from thin 0.20" styrene while I scribed two long pieces of scrap stripwood for the walkways. The railings are Tichy fencing.

if both the top of the display stand and the fixed ring around it are painted the same colour. I extended the layout into the centre aisle of the room and supported it with braces, then used an old LP record to mark a 12" circle and cut the hole for the turntable with a jigsaw.

I could not find Homasote or cork so I bought 1/2 inch thick Schluter foam board which is used under shower

stalls. The Schluter board's orange surface has lines for cutting but it's as expensive as cork and doesn't hold spikes as well as Homasote.

When my 7" diameter, \$36 rotating display stand arrived, I built a 7" square frame under the layout to hold the turntable in the exact centre of the circle. Since the pit is 12" in diameter and the stand is only 7", that left a 2 1/2" wide



PHOTO LEFT: The mirror top of the rotating display stand was painted flat grey, with a strip of double-sided tape stuck down to accommodate the turntable bridge. Everything comes apart easily for repair or replacement. The tracks will radiate at 10 degree intervals, allowing for a 9-stall roundhouse and a few more outdoor spots, with enough details to eventually resemble John Allen's famous Gorre & Daphetid engine facility. (Hey, I can dream.)

space that I filled with a doughnut shaped piece of scrap wood.

The rotating display stand came with an on-off-on slide switch that I didn't want to have to go under the layout to reach. I used a Dremel to cut the plastic on the side of the stand, removed the on-off-on slide switch, then ran the wires to a toggle switch I had mounted on the layout fascia. This turntable is made to support only watches, necklaces and other jewellery and the top might tilt under the weight of a locomotive, so I shored up the sides with a plastic strip.

The turntable bridge was built with thick 0.80 styrene. Since the centre of the bridge must be in the exact centre of the turntable, I used tape to temporarily affix the bridge to the table and set both into the pit. With the power turned on and the bridge rotating, I made tiny adjust-

ments before marking exactly where the bridge should sit and gluing it down with CA.

Power for the bridge rails comes from the main track power, through a Digitrax AR1 reversing module, then to two circles of copper foil tape stuck to the bottom of the turntable pit. To get power from the foil tape to the bridge rails, I ran the bridge rail wires down to a pair of copper foil brushes held against the bottom of the pit with springs.

I painted everything grey except for where the **brushes** slide against the foil, which I left in their original copper. I may buy conductive paint **to cover the copper** but it only seems to come in black.

Next step is to build the roundhouse itself, but heck, I've done that before.

PHOTO BELOW: The finished turntable made from a \$36 rotating display stand. At left is a Digitrax AR1 auto reverser module that automatically matches the bridge rails' polarity when a loco rolls on or off the turntable. The AR1 module will be hidden beneath a lift-off shed. The copper foil circles in the turntable pit carry power from the AR1 to the bridge rails. The background shows the bases for the Walthers Roundhouse kit soon to be built.



CN 44 Tonner Model - Detailing a Bachmann Engine



Article & Photos by George Dutka

When it comes to smaller engine, my favourite little locomotive is the 44 tonner. There have been various modeling options available over the years for this neat little engine. My first was a Keystone kit which I built as a B&M engine. A really good option came in the 1990's offered by Bachmann. Their ready to run, detailed, painted and lettered model of the 44 tonner made it really easy to get a pretty good running engine in your favourite roadname. I immediately purchased an undecorated 44 tonner which became CN number 5 painted in CN's olive green scheme. About the same time I acquired a good prototype 8" by 10" photo to work from. Using my photo I detailed my 44 tonner as best I could using details from that era. Since that time Bachmann has come out with a DCC version finished in CN olive green and numbered as their number one. What I did back in the 1990's to my model can be reproduced on the current Bachmann offering.

Since then my friend Peter Mumby has acquired my CN model as a trade and after a couple of decades at his home it has made a return visit for a railfan event on the White River Division (layout seen in the September 2016 RMC issue). I recently purchase one of Bachmann's newer versions including DCC and in B&M colours, which is a better fit for my current layout. Comparing the two engines there does not appear to be any distinguishing differences.

The CN Prototype

Since I modeled CN number 5, I asked my local diesel expert Don McQueen for a bit of its history. CNR GE 44

Tonners 3, 4 & 5 were all part of the same order #AEM4857 and were initially assigned road numbers 1502, 1503 & 1504 and were shipped Oct 1st, 1956 as GE 44-ton phase Vc #32654-32655 & 32656. The builder's plates are stamped 9-56, under CN ER-4b 3, 4, & 5.

Prototype photo – I picked up this photograph just before I purchased my Bachmann 44 tonner. I used this view as my inspiration for detailing CN number 5. One can tell this unit is near its last days on the CN as the green colouring is almost non-existent. Photographer unknown, George Dutka collection (no data or name on the back purchased about 25 years



On Oct. 5, 1956, the trio of 44 tonners were sighted passing through Toronto, Ontario on their way to the GE Peterborough facility from Erie, Pennsylvania for Canada Customs clearance, (UCRS/N:11-56). These engines were used in Port Ellice, British Columbia in 1961 and by 1967 worked in the Calgary, Alberta area or other words western Canada. CN number 5 was sold on June 1969 to Stelco's Page-Hersey Tube Division and worked as STELCO 5.

Detailing Number 5

I am writing this article probably two decades after building this model so some of what I did I may have forgotten. Also to figure out what detail parts I used I looked through my parts drawer for numbers. Scanning my drawer some of my detail parts I think are older than me. Here is what I came up with.



Comparing the Bachmann 44 tonner to my prototype photo I found there was a good amount of detail that one could add. Engines 4 and 5 (have never seen a photo of 3 to date) had number boards, something I had not seen on other CN 44 tonners. They are a steam style number board which is offered by Miniatures by Eric as N3. Eric's number boards are a metal offering that needs to be cut in two so the stack fits in-between. Instead I used resin castings of the number board styled by my good friend Don Janes. Two are needed and are cut in half before attaching. Under the engineman's side of the cab is a filling spout. I drilled a hole in the location seen in the photo and applied a Details West FF167 fuel filler which looks a lot like on the prototype. On the cab I added Detail Associates sun shades No. 1301 on both sides. I also added a really fine brass etched wind deflector also from Detail Associates, CB2304. The Bachmann models cab comes with windshield wipers attached. I left them as is but if I was to do it again I would replace these with current finer brass wipers.

On the body I changed out the couplers with Kadee No. 5. Today Kadee's prototype number 58 couplers would look better. Under the frame I applied Juneco re-railers number C-33. On the lead end of the body I applied Precision Scale Markers #31334. Once painted Juneco clear

jewels are applied.

Moving onto the cab ends the prototype has dual headlights while the model has a single. I cut off the moulded on single beam headlights from both ends. I glued on a dual beam headlight offered by Detail Associates #LT1012. The Bachmann's lighting did not shine through at all or at least not well so I decided to add headlight jewels at both ends. Today LED's would do the trick. On the body end to the right of the headlight is a MU connection receptacle. I used a receptacle found in a MU coupler set located in a Detailed Associates package.

Paint and Lettering

The Engine is painted Scalecoat CN olive green. Today this paint is offered by Minuteman Scale Models. The paint has a gloss finish so the decals can be applied right over the paint without any other coating. I used Accurail CN set No. 5808H which is good for many other engine types. This line is not available anymore but one might want to check out Microscale for a similar set. If you are beginning with a new CN Bachmann offering no painting or decaling is required. One can just change the number if needed. Once the decal is set a coat of flat finish is applied. The handrails are painted with Floquil DRG&W yellow which is a very good match to the Accurail gold lettering. If one had a problem with the decal as these older sets have a tendency of falling apart, this paint works well for touch ups. On both ends the grills are also painted yellow using the Floquil DRG&W paint. Some light powders are used to weather up the trucks and ends.

To Finish Off

With the engine finished the last detail I like to add to all my engines are an engineman and brakeman. This detail adds as much if not more than any other detail does. The two figures added to the 44 tonner are both White River Division employee's which have been pulled away from their regular assignments at my Westboro Engine facilities. The brakeman out front is a Woodland Scenics model while I think the engineman is a Juneco offering. Woodland Scenics has a good package of engine service employees that will work well in any engine. If you acquire a newer CN 44 tonner offering by Bachmann you are well on your way to completing a nice looking model.





PHOTO ABOVE BY PETE MOFFETT: Passengers unload from the steamboat Nameigos at Alvalde on the On3 Algoma River Railroad of Craig Webb. Craig scratchbuilt the boat using styrene and brass with a fully detailed interior. This wonderful model can now be viewed at the Aberfoyle Junction Railway in St. Jacobs, Ontario.

PHOTO BELOW LEFT BY BRUCE LECKIE: Cardstock buildings in Coralie Cove on Bruce Leckie's On30 modules.



PHOTO BELOW RIGHT BY WALTER REID: Completed O Scale 1912 Model T Flat Bed Truck. Built from a craftsman kit put out by Canadian company, InterAction Hobbies.

