THE SEMAPHORE
Official publication of the North County Model Railroad Society

Issue No. 59, July 2020

A new Siemens SC-44 Charger locomotive at the point of a Northbound Pacific Surfliner makes a mid-day stop at Oceanside. Russ Smith reports on the ultra modern locomotive beginning on page ??

In this issue ....

Table of Contents **Issue 59, July 2020**

THE SEMAPHORE

The Semaphore is published quarterly as the official publication of the North County Model Railroad Society. The next edition of *The Semaphore* will be published October 1, 2020. Please submit articles and pictures to the editor at rhbale@aol.com by September 15, 2020 The North County Model Railroad Society is a not-for-profit public benefit corporation whose objectives are 1) to hold and manage property and funds for charitable purposes, 2) to provide public displays of model railroads in order to present and teach the history and operation of railroads, and 3) to promote and teach railroad safety. Donations are welcomed. For reference the NCMRS tax ID is 33-0478444. NCMRS is located at Oceanside Heritage Park, 230 Peyri Drive, Oceanside CA 92058. Please send all correspondence to PO Box 22, San Luis Rey, CA 92068.

Visit our website at www.ncmrs.org

A Word From Chairman John Burrow

The year 2020 is not a year on which I shall look back with undiluted pleasure. In the words of one of my more sympathetic correspondents, it has turned out to be an 'Annus Horribilis'.

I'm stealing those words, but I think it's obvious now that we didn't know how good we had it, and 2020 will go down as one of the worst years on record.

At last, we were able to return to the club, and although things are different, we can start to move forward again with all our projects. A revised budget has been created, and each department head will know the state of their finances, and will modify their expenditures accordingly. We will not be able to accomplish as much as we planned to this year, both because we have lost three months of access, two months of income, and some members, more at-risk than others, are not be able to return unless the virus re-transmission rates drop ($R < 1$) or a vaccination and/or cure becomes available.

It is hoped that with appropriate precautions, little-by-little the club will return to a new 'normal'.

In case this has not been said elsewhere, thank you all for your support.

John

President's Message

After a lengthy process involving the City of Oceanside Property Management and Oceanside Parks and Recreation Department, it was decided we could open our model railroad club facility to members only. Due to the coronavirus restrictions placed on us, we will not be allowed to have any visitors for the foreseeable future. The important restrictions for opening our facility can be found in another article on page 8 in this issue of The Semaphore.

Following release by Oceanside Parks and Recreation to reopen our facility, Rich Blankinship, Eddie Perez, Rick Keefer, John Burrow, Kevin Harper and Harold Helland went to the club to start up the computers and tablets and clean the track. Yes, the track was plenty dirty from all the dirt that blows under the doors. We also discovered numerous spider webs and spiders. We enjoyed returning to the club and making everything work again. On Saturday, June 13, NCMRS held our reopening session and all trains ran great.

NCMRS is blessed with some very capable electrical engineers and technicians. We are moving forward with our signaling project. Eight more signals were built during the coronavirus shutdown and will be installed in the next few weeks. Rick Keefer also took the time to install on/off switches for the diesel yard. Engines can now be parked in the diesel yard without them running all the time. The next project is on/off switches for San Diego yard. There is plenty of work ahead for the electrical team and if you would like to help, please contact John Burrow, Nick Ruddick or Rick Keefer.

Some members used the coronavirus restriction time to build a wide range of outstanding models at home. Several of them share the results of their modeling efforts in a series of reports that begins on page 12.

Rich Llewellyn has been working with an embroidery company to have the new club logo sewn on our club shirts. Information for ordering the updated shirts can be found on page 9.

I urge all members to feel free to talk to any of the NCMRS Directors and Officers with any concerns or ideas for improvement. We are always looking for new ideas. We are looking forward to seeing everyone at the club in the near future.

Harold Helland

About our July cover photo

Our cover photo this month shows one of the new Siemens SC-44 Charger diesel electric locomotives pausing at Oceanside. NCMRS member Russ Smith provides a detailed report on the new state-of-the-art locomotive beginning on page 21. DB

Timetable of Selected Events

Due to the coronavirus all events originally scheduled through July have been cancelled or postponed. Check the NCMRS web site at www.ncmrs.org for the latest information.

NCMRS Mission Statement

The North County Model Railroad Society is a not-for-profit benefit corporation whose mission is to share the hobby of model railroading, encourage awareness of railroads both yesterday and today, and to provide rail safety education to the northern San Diego County community

Oceanside's Heritage Village Park, home of North County Model Railroad Society

---

Contributing to the Semaphore

Material appropriate for publication in the NCMRS Semaphore is always welcome. As your editor, I'm constantly looking for articles, photographs, humor, and other ideas that might be of interest to NCMRS members.

If you have been thinking about submitting something to the Semaphore, please don't hesitate to contact me. We can discuss your idea and I'll be happy to offer any assistance, if needed, in working out a final version suitable for publication.

You'll be surprised how easy it is to join the ranks of NCMRS members like Joe Kirkpatrick, Harold Helland, Leo Valley, Bob Kale, Ryan Llewellyn, Rich Llewellyn, Rich Blankinship, Pete Steinmetz, Rick Keefer, Bill Jones, David Ford, Jim Gillie, and John Burrow who have all contributed one or more articles for publication in the Semaphore.

Contact me anytime at the club or at home. My email address is rhbale@aol.com.
Dick Bale

Department Heads & Committee Chairs

Effective April 1, 2020

Decoder Pro and Track Test	John Burrow
Chaplain	Bill Pope
E-bay Sales Manager	Open
Electronics/Electrical	Nick Ruddick, Rick Keefer
ETC Team	Chris Davis, Leonard Barone
Facility & Railroad Construction	Harold Helland
Maintenance	Bob Kale, Kevin Harper
Membership	Bob Kale
Member Support (swag)	Rich Llewellyn
NMRA Liaison	Pete Steinmetz
Operating Sessions	Jim Gillie, Rich Blankinship
Operation Lifesaver	Laura Reese
Planning and Design	David Ford
Program Chairman	Pete Steinmetz, Dick Bale
Public Relations	Dick Bale
Scenery	David Ford, Eddie Perez
Semaphore Editor/Publisher	Dick Bale
Semaphore Proof Reader	Sue Ruddick
Signal Master	John Burrow
Swap Meet	Rich Llewellyn, Eddie Perez
Training	Rick Keefer
Visitors Programs	Open
Web Master	Nick Ruddick

NCMRS 2020 Officials

Board of Directors

John Burrow, Chairman
Dick Bale, Director
Rich Blankinship, Director

Officers

Harold Helland, President
Eddie Perez, Vice President Operations
Jim Gillie, Vice President Administration
Bill Jones, Treasurer & CFO
Jeff McClain, Secretary

NCMRS Club House Reopens

City allows limited access effective June 19

Reported by Harold Helland

Following the coronavirus stay at home rules that went into effect in March, NCMRS was finally allowed to reopen on Saturday, June 19, 2020. During the lockdown we stayed in close communications with Oceanside Parks and Recreation and Oceanside Property Management and were eventually able to reach a plan for reopening. Here are the basic rules we must follow:

1. NCMRS is open for Members Only ---- No Visitors.
2. If you are sick, please stay at home.
3. You must bring a face mask and wear it at all times.
4. Social distancing of 6 feet is required. When you pass another member, just pass and return to the six foot separation.
5. We are limited to 10 members running trains.
6. Wednesday is our normal work day
7. Thursday, Friday and Saturday will be train running days.
8. In order to maintain the 10 members running trains restriction, members must sign up using Sign Up Genius which is available on the NCMRS website. Just pick the day you would like to run trains and follow the directions. You do not need to fill in the comment section unless you have a special request.
9. Please drive through Heritage Park and park your car in the back lot. Please do not park on the street in order to reduce the chance of visitors wanting to see the model railroad.

Now that we have successfully reached agreement to reopen, please follow these simple rules so we can continue to be open. **HH**

NCMRS members (L to R) Terry Kirkpatrick, DJ Edwards, Leonard Barone, and Harold Helland wear face masks and maintain social distancing on the first day the club facility at Heritage Park was reopened. DJ flashes a V sign which we assume stands for victory over the virus lockdown? NCMRS nember Bob Behm took the photo.

New NCMRS Club Shirts Available

By Rich Llewellyn

The NCMRS Board has recently adopted a new club logo as shown above. Over the next few months we will be transitioning all NCMRS stationary, web sites and such over to the new logo.

We are now in the process of updating our club shirts. All new shirts will have the above logo embroidered over the left pocket. There is no requirement to immediately replace your existing shirts but as they wear out new shirts will have the new logo embroidered on them. Accordingly, we will be placing orders for both short and long sleeve club shirts as you request them.

Club short sleeve and long sleeve shirts are the same style as we have had for the past five years. The short sleeve shirts are Port Authority Silk Touch Polos in Royal Blue available in youth sizes XS to XL, and adult mens sizes from XS to 6XL. Ladies Y-neck polo shirts are also available.

Long sleeve shirts are Port Authority Long Sleeve Denim Shirts available in sizes XS to 6XL. Special orders for short sleeve shirts other than the standard club shirt can be made as long as it is in the club colors of Royal Blue. Please contact Rich Llewellyn if you have any special requests. Note that any deviation from the club standard above will be at some extra cost.

To order a new shirt(s), contact me, Rich Llewellyn, the Club Shirt Guy. You can contact me in person at the club or email me at kymric@roadrunner.com. Let me know which shirt style you want (short or long sleeve) and the size. I will handle the order which usually takes 2 to 3 weeks. Shirt delivery is normally made at the club.

Pricing for the shirts is $25 each for short sleeve shirts, and $40 each for long sleeve shirts. Payment can be made in cash or by check made payable to North County Model Railroad Society. Payment is due on or before deliver of the shirt to you. **RL**

NMRA Report

By Pete Steinmetz
PSR San Diego Director

With members locked at home, the National Model Railroad Association decided to host some Virtual Meets.

A sub group was formed called NMRA-X. It started on Facebook as the NMRA has a very prominent Facebook presence. Their Facebook group has almost 23,000 members.

The first NMRA-X was world-wide and ran 24 hours. It consisted of a wide variety of clinics. Presenters started in Australia, came across the Pacific, across the US and Canada, then across the Atlantic with presentations from the UK and concluded in Europe. Quite an undertaking from a technical standpoint.

Recent NMRA-X have been only 12 hours long with the same geographic footprint. With so many clinics, clinicians are able to present some very specific topics instead of the more general topics a shorter format would require.

They also have Q&A sessions with Master Model Railroaders.

The NMRA has really stepped up to give their members value for their dues. There is another NMRA-X scheduled for July where they will spend five days doing clinics presented by some very talented modelers. This event is the Gateway-X convention in place of the canceled St Louis Gateway Convention. I am honored to be asked to give clinics at many NMRA and non NMRA events.

A modeler from Texas, James Knabb and I, have been running some Zoom meets. We invite different NMRA divisions each time, usually between four and six depending on membership. We have been doing one or two a month. Format is discussion, a layout tour, 30 minute clinic, discussion, and another clinic or layout tour. We have had good responses and will continue to present one or two a month

Finally, the PSR San Diego Division has switched their monthly layout tour to a Zoom meet using the same format James and I use.

If any NCMRS members want to participate or just sit in, let me know and I will send an invitation. For security reasons, invitations are sent out one or two days before the event. **PS**

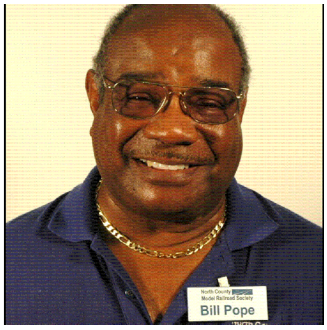
From the Chaplain's Corner…

A Prayer for The Times

Our heavenly Father, these uncertain days of news conferences and quarantines tempt us to assume the worst for our loved ones and our communities. We are relying on you Lord, to lead and guide us to put our anxiety in its proper place as this country begins to reopen for business.

May we who are merely inconvenienced, remember those whose lives are at stake. May those who have the luxury of working from home remember those who must choose between preserving their health or paying their rent. May we who have to cancel a trip remember those who have no safe place to go. May we who are losing our margin money in these tumultuous economic times, remember those who have no margin at all due to job loss. May those who settle for quarantine at home remember those who have no home.

And Father, be with the leaders of all nations, give them the wisdom and foresight to act with charity and true concern for the well-being of the people they are meant to serve. Heal us from our fear, which prevents nations from working together and neighbors from helping one another. Lord, bless North County Model Railroad Society and protect us as we begin to mingle once again with club members and friends. Help us to obey the rules that are set by our local officials for the safety of all.



As fear grips our country, let us choose love during this time when we cannot physically wrap our arms around each other, let us find ways to be the loving embrace to God and our neighbor.

This we ask in Jesus precious name, Amen.

In His Service, Rev. William (Bill) Pope.

Roster Building During Lockdown

By Kevin Harper

How I did my part to help the economy during the COVID crisis

During the coronavirus pandemic, I was able to add four new models to my locomotive roster. As a kid I watched a lot of trains roaring through Oceanside. One of my favorites was the Super Fleet FP45 decorated in Santa Fe's Warbonnet paint scheme. I kicked myself for not buying one when Athearn released an HO scale model a few years ago.

I've been watching for one and during COVID I spotted an Athearn model with DCC and Tsunami sound on eBay. My bid won and I am really happy with it. Athearn Genesis does not disappoint. I added a new radio antenna and installed two LEDs to replace the 1.5v light bulbs. My new Genesis FP45 is the flagship of my Santa Fe diesel fleet. It reminds me of when I was just a kid back in the '90s watching the real one run up and down the Surf Line. I can't wait to see it pulling a train past the Oceanside depot on the NCMRS club layout.

I needed another locomotive for my Southern Pacific roster and during lockdown I found a GP38-2 and an SD50 at Arnie's Trains. They were both Proto 2000 models decorated for SP. The SD50 had SP speed lettering which I've always liked, so that was my choice. It was a DC model, so after it arrived, I replaced the 8-pin plug with a 9 -pin version and added a DCC decoder. I also installed new LEDS in front and in the back.

My new PK2 SD50 does not have sound which is not a problem because it will be part of a motive power lash up. I've tested this Proto2000 diesel and it is a really smooth running model.

I've been looking for a rare Athearn SD40 decorated for Pacific Harbor Line No. 71 for some time and finally found a beauty on eBay. You may remember the article some time ago about the screwball who tried to ram the same locomotive into the U.S. Navy Hospital Ship in Long Beach. My new SD40 lacked sound so I installed a SoundTraxx economi decoder which worked out just fine. This is my second local switch engine, my first being my San Diego Imperial Valley Railroad Genset.

There were few on eBay and most were Rivarossi brand, but I wasn't interested in those. Everything on eBay was high priced *Buy It Now*, but I finally found a new MTH HO Big Boy No.4014 for a low bid price. The bid went up on the final day I thought I would have no chance of getting it, so I let it go.

I guess the winner backed off, because the next day I got an email from eBay saying the seller was willing to sell it to me at about half what it was worth because of a broken holder on the number plate of the locomotive. With the cost cut almost in half I couldn't resist. So I finally got my Big Boy No. 4014. One unique thing about this locomotive, which has regular smoke, the whistle lets off a little steam (smoke) as you blow it, which I thought was a pretty cool feature on MTH engines. All in all, I think I got a pretty good deal.

I look forward to this COVID-19 restriction lifting so I can run my new models on the club layout. **KH**.

COMD19 LOCKDOWN PORJECT

Although John Burrow started this project more than a year ago, the COVID-19 lockdown provided an opportune time to complete it.

Fig. 1

Building a

Great Western Railway 'County' Tank Engine

By John Burrow

Why would anyone build their own locomotive? Because in the scale I model (UK O scale) there's a limited amount of ready-to-run, but there's a vast array of kits. For some time I have wanted to build a model of the GWR (Great Western Railway) County Tank engine that operated out of London Paddington station from 1905 to 1930, so when a kit was announced, I ordered it.

The Kit: The kit consists of many sheets of etched nickel silver. Each component must be removed from the sheet, cleaned up, and soldered together. Also in the kit are many additional parts such as chimney, safety valve cover, buffers, pipes, etc... Separately you need to purchase wheels, motor/gearbox, electrical pickups and a DCC decoder. And don't forget you have got to paint it, and put glass in the windows.

The Chassis: So, let's jump ahead by a week, and look at what we have so far. This is a rolling chassis [2] – no motor, no pickups, no connecting rods and no cylinders, but the independently sprung wheels and 6'8" drivers all roll smoothly through my turnouts and curves. Then add rods, pickups, motor/gearbox and decoder [3], and discover a serious problem. The

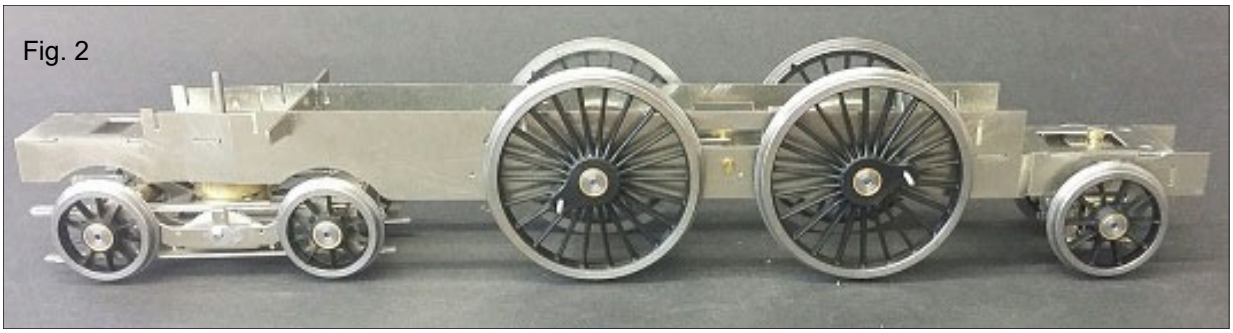


Fig. 2

cross head comes too far back, and is about to fall out of the slide bars. After consulting the kit manufacturer, it appears I had a test etch that had not been updated. Two weeks later a new etch arrived from the UK and the problem was fixed with new connecting rods.

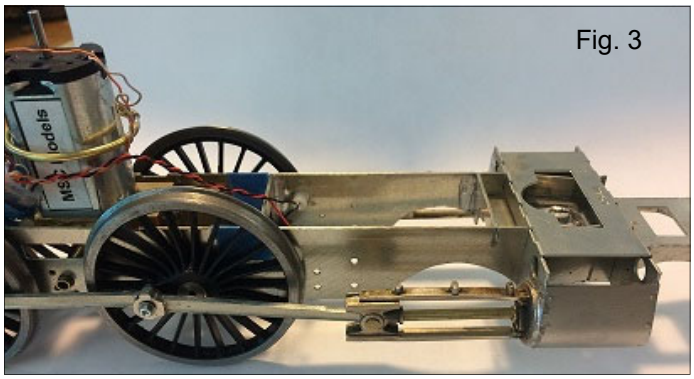


Fig. 3

The Body: Switching to building the locomotive body, and jumping forward several weeks, here's the front of the locomotive

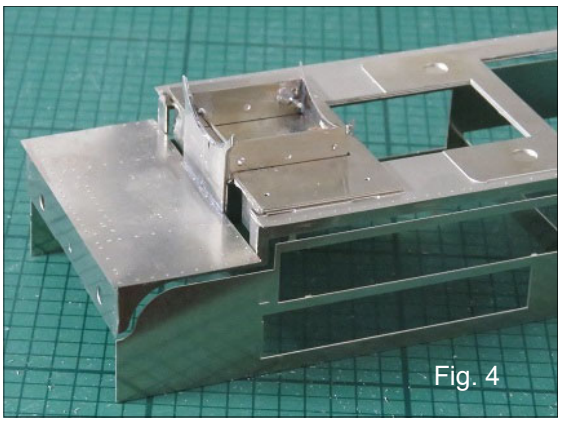


Fig. 4

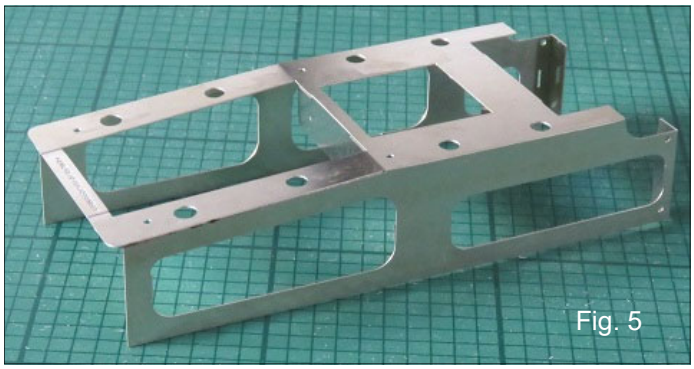


Fig. 5

starting to take shape [4]. The folded assembly on the right [5] fits on top to form the tanks. Next comes the fuel bunker sub-assembly [6] that will go on the back of the locomotive. After another month's work, it's starting to look like a steam locomotive [7].

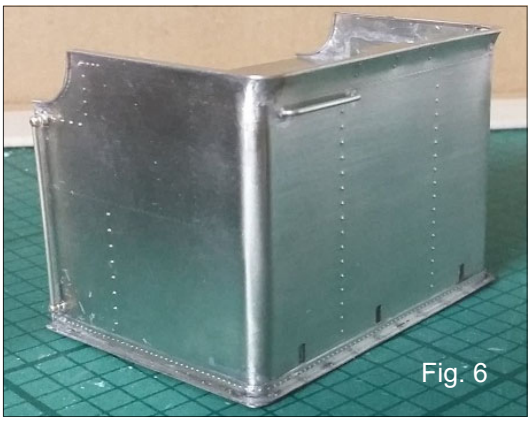


Fig. 6


Fig. 7

Paint: Ah yes, what about the paint. Well, to paint it, the model has to be disassembled. Here are all the bits that don't get painted, and have to go back in later [8].

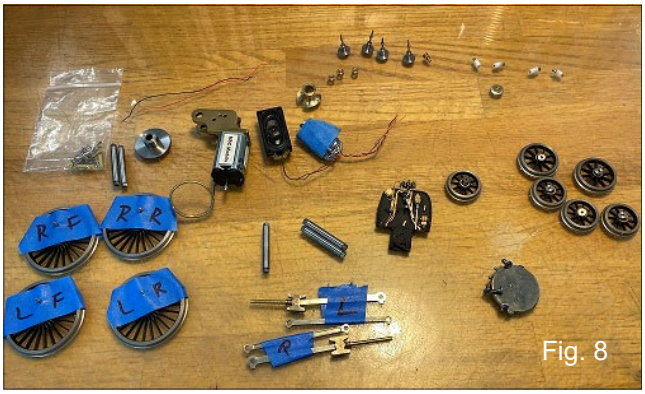


Fig. 8

The parts that are to be painted get a trip through my grit blaster, as a roughened surface allows paint to adhere more securely. After blasting they get primed immediately [9].

So, leave the primer for a day, so it hardens nicely. Then spray GWR Pre-1928 green all over, and again leave for a day for the paint to harden. Then mask off everything you want to remain green, and spray the rest of the body with matt black [10]. And wait for a day…

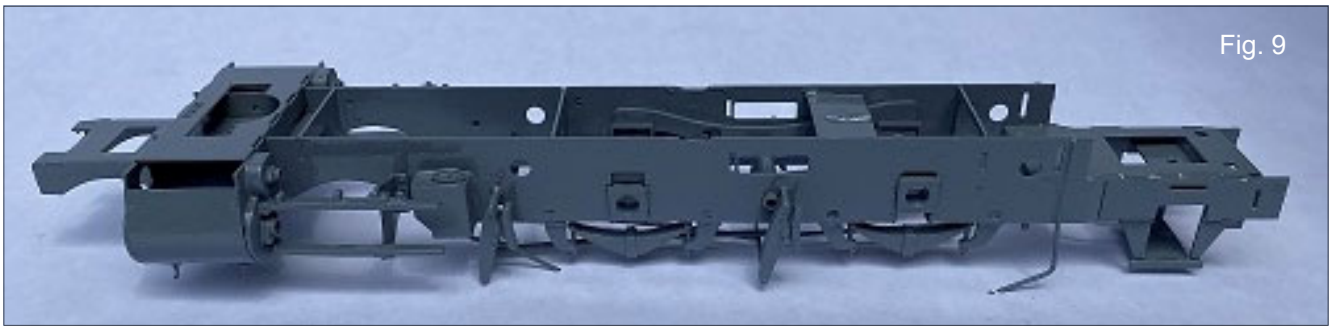


Fig. 9

Final Details: Almost there! Reassemble everything and make sure the locomotive still runs OK. Now is a good time to rerun the ESU motor auto-tune, and check that the steam chuff is still correct. Add decals, lamps, crew, hose pipe, couplings, glass windows, etc. Spray with final sealing coal of semi-gloss polyurethane [1], and my GWR County Tank Engine is done. **JB.**

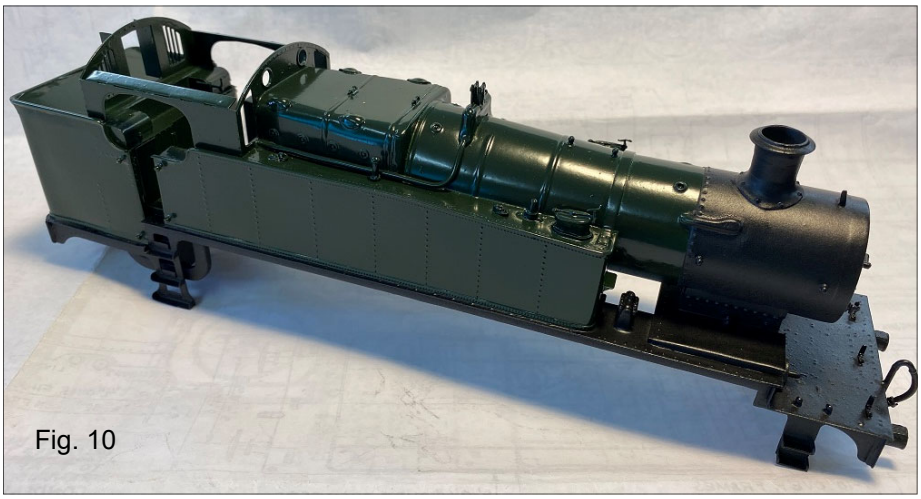


Fig. 10

ACKNOWLEDGMENTS

Kit	88D Models	https://88d.uk/
Wheels	Slaters Plastikard	https://slatersplastikard.com/
Motor/Gearbox	MSC Models	http://www.mscmodels.co.uk/
Paints	RailMatch & Krylon Chalkboard	
Lamps and Crew	Tower Models	http://www.tower-models.com/
Decoder	ESU Loksound V5	http://www.esu.eu/en/start/

COVID19 LOCKDOWN PORJECT

MAKING A REALISTIC COAL LOAD

By Bill Jones

Fig. 1

I recently acquired a string of hopper cars and decided to make coal loads for all of them. I studied the project and decided it was something a rookie in this hobby like me could accomplish. It was an ideal modeling project to occupy me during the COVID 19 shutdown.

Fig. 2

Fig. 2 shows the supplies I assembled for the project. They include white glue, a mixture of 50% white glue/50% water, a mixture of 50% alcohol/50% water, Woodland Scenic lump coal, 1/8-inch plywood base, and lead weights. Not shown is an electronic postal scale and the model.

NMRA recommends a car weight of 1 oz. plus .5 oz. per inch of car length. With the added weight of the coal and plywood base, my car needed another 1.25 ounces to bring it up to the NMRA recommendation. Don't forget to include the coal and plywood when you weigh your car. The weight of the coal load varies, so experiment.

Fig. 3

Fig. 4

I cut and trimmed the plywood base [Fig.3] to fit snugly in the hopper car. You may need to notch the underside of the plywood because of internal bracing. I trimmed the base to leave about 3/16 –inch of "free board" from the plywood to the top of the hopper. Once I was happy with the fit, I painted the base black [Fig. 4] and positioned it in the car [Fig.5].

Fig.5

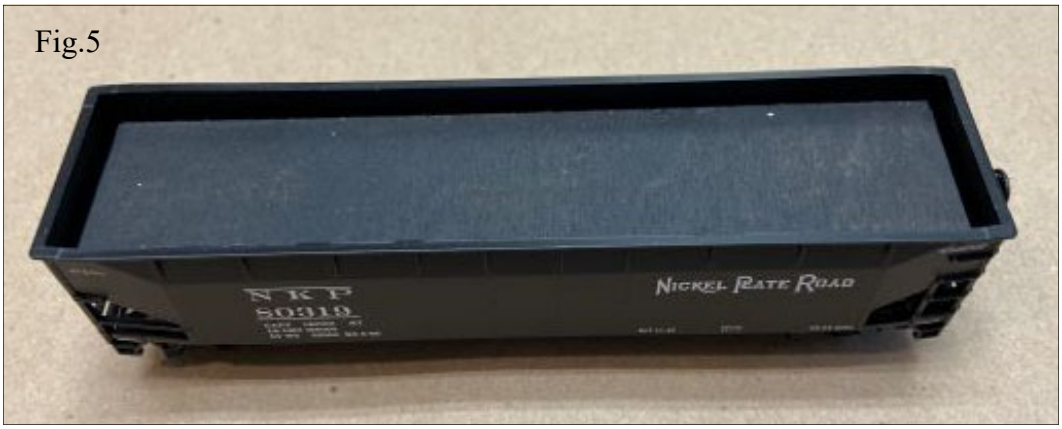


Fig.6

Fig.7

After the base was covered with full strength white glue [Fig.6], I added the coal [Fig. 7]. You can vary the piling of the coal. Generally, the nearer to the loading facility, the more it will be heaped in piles. Travel over the rails tends to even out and flatten the load

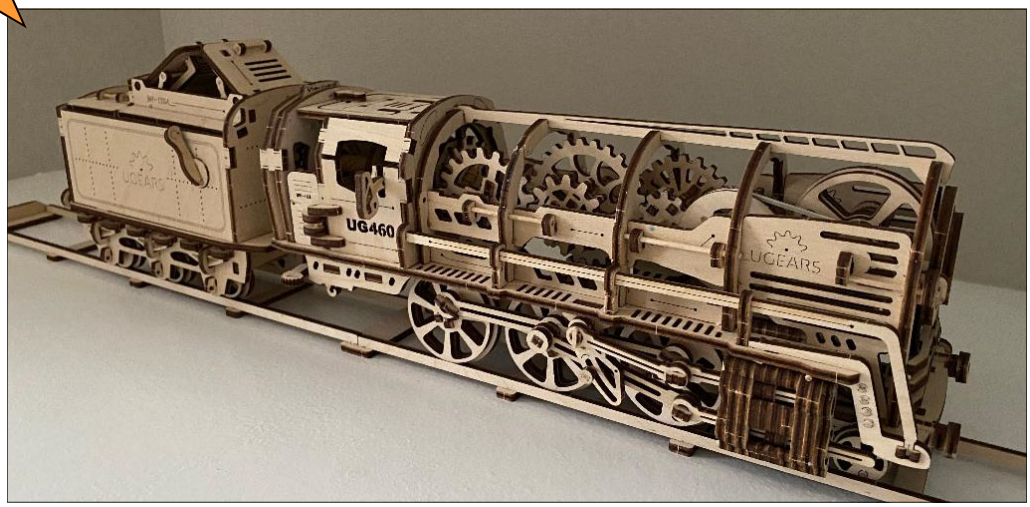
Fig.8

Once the coal was in place I saturated it with the alcohol/water solution [Fig 8]. The alcohol allows the thinned white glue to permeate throughout the coal load

Fig.9

Next I added the 50% glue/50% water [Fig. 9] being careful to keep it from spilling over the top edge of the car.

My finished model is shown in Fig. 1. The next time I plan to build three or four coal loads at the same time. **BJ.**



Modeler's Madness

By Rich Llewellyn

It's all wood, assembled without glue, and runs with gears, rods, and wheels spinning everywhere.

Let me start by saying I had a lot of fun building this unusual model. It's a 4-6-0 steam locomotive and judging by the front bumpers, it models a European style engine. The all-wood kit is designed to be press-fit together without any glue. Well... except for a little glue on a couple of pieces I broke during assembly. OK, maybe I ended up breaking about four or five parts before I got it all figured out.

The completed model is powered with about 20 rubber bands all ganged together. With a full windup, the locomotive will traverse about 15 to 20 feet with or without track. It is really fun to run with all the action of gears, rods and wheels spinning. It also has a number of articulated doors, and hatches that open and close.

The kit is produced by UGears. They make a number of 'Kenetic' models, but this steam engine is the most interesting. If the lockdown continues, I may try my hand at a UGears all-wood Jeep!

I also worked on a couple of Bar Mills structure models during COVID-19. The first structure was the two-story 'Alvin Hat Co.' shown on the previous page This building gave me a rough start as the kit was missing the wall battens and roofing materials. I called Bar Mills not knowing if they would even answer the phone as this was during the first part of the shut down. Luckily they did answer and sent me the missing battens and replacement shingles for the roof.

With materials in hand I was able to complete the green and white building shown on the previous page. I found that the "taskboard" material used for the structure was hard to work with and paint but, in all It came out reasonably well. Now I just need a place for it on the home layout.

The second Bar Mills kit I completed during COVID-19 is called 'Whistlestop Junction'. This kit went together very well and produced a nicely finished building. Whistlestop Junctioin replaces a plastic model that I had for the last five years. Happy for the plastic one to be gone. I placed the station on the home layout as seen in the above photo. In these times it is good to be working on something, and an Ideal time to have a home layout. **RL**

Sean Martin Constructs DCC System

During the coronavirus pandemic, NCMRS member Sean Martin reports that he was able to complete assembling a DCC++ system being controlled by a Raspberry Pi using JMRI.

COMD19 LOCKDOWN REPORT

Meet the New Siemens Charger Locomotive

By Russ Smith

There is a brand new state-of-the-art locomotive in town.

Amtrak's Pacific Surfliner, which travels through North County every day, is now being pulled by Siemens new SC-44 diesel electric locomotives. Although officially identified as model SC-44, its nick name, Charger, seems perfect for San Diego.

The Charger locomotives head the Pacific Surfliner, the popular Amtrak train that hugs the coast from San Luis Obispo to San Diego; one of the most scenic railroad routes in the world. Expansive beaches, cliffs, and palm trees are all in view along the 351 mile run. If you time it right, you'll also witness the sun setting on the edge of the Pacific Ocean.

Before the arrival of the Chargers, the double-deck coaches of the Pacific Surflliner were handled by EMD and GE locomotives, which were more than due for replacement. And replaced they all will be. The EMDs were sold to Metra in Chicago, with the GE Genesis 42DCs remaining in use until all of the Chargers are ready.

Built in California at a factory 80 percent powered by renewable energy, each of the 14 Surfliner Chargers will be owned by Caltrans, not Amtrak. They're the first passenger locomotives to pass the EPA's Tier IV emissions standards. Plus, according to Siemens, they're much quieter than the GE and EMD models they're replacing.

A door at the rear of the SC-44 cab leads to the business end of the train. While the cab is air conditioned the rest isn't. Or maybe it is, since underway the huge vents on the side let in quite a breeze, especially along the Pacific coast.

The next compartment holds the diesel engine, a huge red beast of a thing built by Cummins in Indiana. The model QSK95 Cummins diesel engine is a 16-cylinder 4-stroke high-speed monster designed to meet EPA Tier IV emissions standards mandated in 2015. The SC-44 is rated at 4,400 hp (3,300 kW). The diesel electric locomotive is effectively just a generator, creating electricity to power the four AC traction motors that actually move the train. The

SC-44 Chargers are capable of operating at 125 mph, though in Surfliner service, they'll cruise at a maximum of around 90.

A walkway loops around the engine in a "Y" shape. The tail of the Y is the machine room, where the power from the engine gets converted to the electricity the motors need, as well as an inverter that supplies power to the passenger cars for lights, air conditioning and so on.

Climbing up into the cab, you will see a distinctly modern look -- perhaps because my experience in train cabs tends to be of the significantly older variety. Three iPad-sized LCD screens line the console. A light sprinkling of levers and buttons show a smart simplicity in design, which likely works perfectly with the rote muscle memory of an engineer looking out the windscreen and not at the controls.

If you've been to Europe in the past few years, you might have traveled on something that looks a lot like the Charger. That's because it's based on Siemens Vectron, widely used across the Continent.

Update on the NCTD Coaster

In June 2018, the North County Transit District Board of Directors approved the purchase of five Semens SC-44 diesel electric locomotives for its San Diego-Oceanside COASTER commuter rail service. Deliveries are expected to begin in August, 2020 and conclude in the spring of 2021. Earlier this year the NCTD Board approved the purchase of two additional SC-44 units (pending funding) to allow increased service levels. **RS**.

For a more information and pictures https://www.pacificsurfliner.com/blog/a-look-inside-the-locomotives-powering-our-trains/

Fig. 1

Building a 76-foot Thru-Timber Bridge

by Dick Bale

During the COVID-19 lockdown, I built a Campbell Bridge kit. The complex wood kit was given to me more than 50-years ago by my friend Leo Campbell. I had looked at the kit on many occasions but each time I put it back on my shelf. I was determined to build it someday when I had the time, and the hours confined at home during the coronavirus pandemic turned out to be the perfect time.

The first step was to sort and identify the 186 pieces of wood in the kit [Fig. 1] . I treated all except the ties to a light gray stain. The ties were given a darker stain to simulate creosote. All of the stained pieces were spread out on a newspaper to dry. To keep the parts from sticking to the newspaper, after about one hour I flipped them all onto a fresh piece of newspaper and let them dry for 10 days until they were bone-dry.

Actual construction began with building the sides of the bridge . The Campbell kit comes with full size drawings. I pinned wax paper to the drawing and glued the side together using the drawing underneath as a guide to placing the parts in the correct position. Before adding

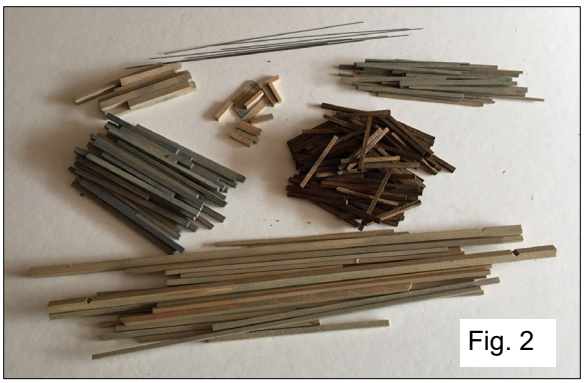


Fig. 2

Fig. 3

the braces, the main side frame was allowed to dry under weight so it would be straight and not have a twist in it.

I learned that the tricky parts were the tension braces which are made up of two pieces crossing the outside of the compression braces [Fig. 3] . Building each side was a slow process that took about two hours. I built the second side the following day. I used Aleene's Tacky Glue sparingly applied with a toothpick.

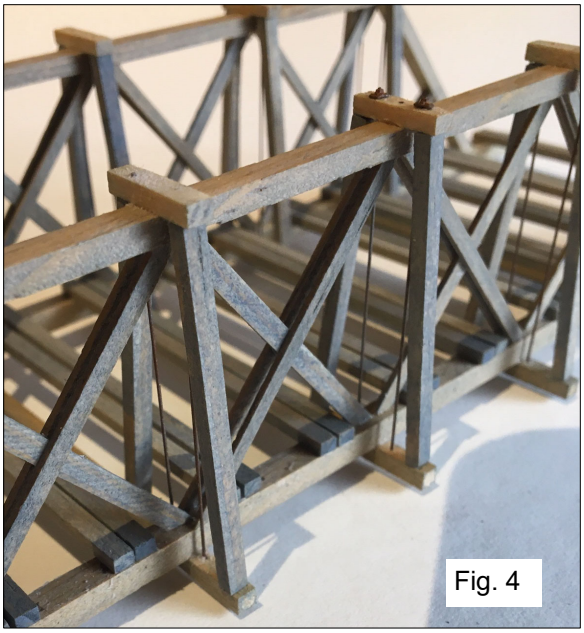


Fig. 4

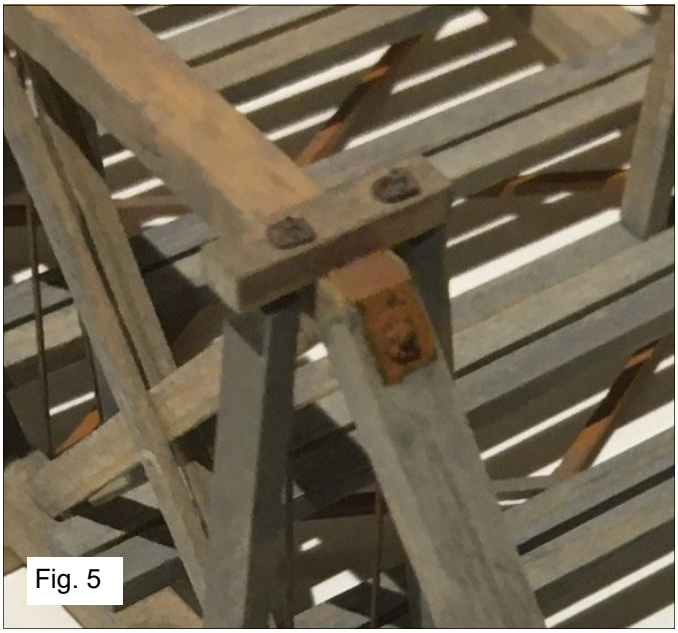


Fig. 5

The five bottom Cross Timbers that support the bridge were glued to the bottom of the two assembled Side Frames. My project was starting to look like a bridge, but it was very delicate at this point. I used a square to be certain that the Side Frames were vertical and then placed weights on top of the assembly to keep everything in place while the glue dried. The next step was to add the 14 pairs of floor beams that rest on top of the lower chord of the side frame . Once they were in position, they were weighted and allowed to dry. They added needed stability to the assembly.

The five Cross Timbers at the bottom of the bridge are suspended from the upper chord of the Side Frame by iron (wire) rods [Fig. 4] . To minimize sway and keep the bridge stable, each pair of rods is stabilized by an A Frame. Drilling the 40 holes for the rods and assembling the ten A Frames turned out to be one of the more challenging (frustrating) steps in building the bridge. After the ten A Frames were completed, I added nut-bolt-washer casting to the top of the iron rods [Fig. 4] . Although they were not part of the kit, I thought they would be a nice detail. I didn't add them at the bottom of the rods because they would not be seen and they are easily knocked off. I added bolt heads and the reinforcing plates I cut from brass shim stock [Fig. 5].

Figure 1 shows the bridge finished except for trimming of the tie stringers and placement of the ties which well be decided after it is determined where the bridge will be installed on the NCMRS layout.

I logged my modeling time on this project and in the final tally the assembly time totaled 16 hours and 45 minutes spread over 11 modeling sessions. I added 40 detail pieces to the Campbell kit which came with 186 pieces. **DB**

Building Models Solves Boredom During COVID-19

By Harold Helland

During the three month coronavirus sequestering, I spent a lot of hours keeping from going crazy by building several structure kits. The models helped me through the last couple months since I can easily get bored when I have nothing to work on to keep me busy.

Here is a look at five of the HO scale wood structures I built.

This two-story home, known as the Dubois House, is now located in the residential area of my home model railroad. I built it from a kit by Laser Art Structures of Branchline Trains.

This Dairy Queen was originally identified as a Velvet Freeze. While building the kit from American Model Builders, I changed the name to Dairy Queen and placed the finished model on my home model railroad.

I built this structure from a kit put out by J L Innovative. The name of the kit was Little Dutch Store, but I renamed it Solvang Groceries & Bakery. I found a good spot for it on my home model railroad.

This somewhat more complex model was built from a Bar Mills kit titled T J Reilly's. Although I have not decided on a name for the industry, the building is now located on my home model railroad.

This Esso Gas Station is from another Branchline Trains Laser Art Structures kit. The model will probably end up somewhere on the NCMRS model railroad. **HH.**

During the COVID-19 lockdown, Bob Kale converted some of the tired old models sitting on his shelf into useful freight cars. Here's a look at a few of them.

Some Older Models Get a New Look

By Bob Kale

This Athearn model began life as a 40' double plug door grain boxcar decorated for Soo Line. I removed one of the plug-doors on each side and replaced them with Youngstown sliding doors. I also added the running board. I painted and lettered the model for Rock Island using Microscale decals. I also gave it a little weathering. The Rock Island Railroad took delivery of 150 of this type of car in 1960.

I installed eight Lindberg Line tractor trucks to this 60 foot InterMountain flat car. Securing the trucks in place took some work. Chains and wheel chocks were added and I lightly weathered the flat car and hand painted some details on the load. I've had the trucks stashed away always intending to make them into a flat car load. The day finally arrived and I'm happy with the results.

I built two of these Northern Pacific stock cars with the unique radial roof. The Central Valley kits had been sitting around in my "To Do" pile for many moons. After putting the bodies together, which was a challenge, I added weights and installed couplers and trucks with metal wheels, I painted the cars and lettered them with Champ decals. I am very happy with how they turned out. Thank goodness, because they took a lot of work to complete.

The 40' trailer is an Athearn model. I added a refrigeration unit and painted and lettered it for Frisco using Odd Balls decals. The Union Pacific flat car carrying the trailer was a trashed junker given to me by a club member. To revive the old car and make it useful I added weights, Kadee couplers, metal wheel sets, and a little weathering.

The Illinois Central flat car in the front is a vintage 1956 Revell model that I completely reworked with added weight, Kadee couplers, and new trucks with metal wheels. I used Champ decals to letter the model.

The 40' ATSF plug door refer is an old AHM model. The car received Kadee couplers and new trucks with metal wheels. I added weight, a new running board and roof hatches. The ATSF car was painted and decorated with Champ decals.

This Missouri Pacific 50' boxcar is an Athearn Railbox type. I replace the original sliding doors with 10' plug doors from Details West. I used a combination of Odd Ball and Microscale decals to letter the car.

The two covered hopper cars were painted, decaled for Missouri Pacific, and given Kadee couplers and metal wheelsets. The car with 8 roof hatches was an Atlas model decorated for D&RGW. The middle car was an old Con-Cor model of an Airslide hopper.

The 50' RMDX car in faded orange is an old Golden Spike mechanical refrigerator model from the club's scrap heap. I cleaned it up and added new ladders, stirrup steps, hand-holds and running board. Some decaling was done and also some touch up painting. Kadee couplers and new trucks with metal wheel sets were added. With weathering applied the car actually looks pretty good considering its original condition. **BK**

Walthers' New Economy Priced GE ES44 Evolution Series Diesel

By Dick Bale

Walthers is scheduled to begin releasing its new GE ES44 Evolution Series GEVO diesel locomotive to dealers this month. The BNSF version of the HO scale ready-to-run model represents the type of contemporary locomotive seen hauling freight trains through North County.

The economy priced Mainline Series model lacks individual grab irons, however the body is cast with drill starter points to assist modelers wanting to drill and install grabs. Preformed grab irons are available in an ES44 Detail Kit (#910-250) sold separately by Walthers.

The all-wheel drive and electrical pickup on this Mainline model has the same cast metal chassis, helical-cut gears, and dual flywheels as Walthers more expensive Proto series models.

Additional features include constant and directional LED headlights, and working front ditch lights. DCC versions (MSRP $199.98) have an ESU Sound decoder. DC versions (MSRP $139.98) will have a 21-pin DCC plug to simplify installation of an after-market decoder. DB

THE PROTOTYPE

Introduced in 2003, GE developed the ES44 (Evolution series, 4,400 horsepower), to comply with tough federal emission standards. Nicknamed GEVOs by railroaders and rail-fans, the ES44 has become one of the most popular modern diesels worldwide. Prototype variations in North American service include locos with DC or AC traction motors. Some railroads have specified center idler axles, as well as high adhesion or steerable trucks.

Semaphore Index

Train Watching in Oceanside

A high point of the 1915 Panama-California Exposition for cities located between San Diego and Los Angeles, was the opportunity to view a full-size replica of the Liberty Bell. A special rail car was outfitted to transport the bell so that it was both protected and visible. On November 12, 1915, a sizable crowd of North County citizens gathered at the Oceanside depot to view the symbol of American liberty as the special Santa Fe train carrying the Liberty Bell to the Exposition paused for several hours at Oceanside. Both photos courtesy Oceanside Historical Society.