



# NEWSLETTER

Public Website: [www.rcgrs.com](http://www.rcgrs.com)

Rose City Garden Railway Society

August 2021

## President's Message

By Rusty Baumberger

Another great month!

Bull & Breakfast (BnB) meetings were held for the first time in over a year both on the Eastside (Elmer's on Sandy Boulevard near I-205), and the Westside (Elmer's on Waterhouse Avenue in Beaverton). And the Vancouver layout tours were great! Hope everyone got a chance to see them. Thanks to Bill Derville for organizing the event, and the host layouts for graciously sharing.

BnB's are now back on a monthly schedule so will be held again this month. The second leg of the club layout tours will be held on the Westside on August 28th. See the schedule for more information.

An additional thought on club events, be sure to wear your membership badge to help us all remember names after over a year of inactivity! If you can't find it after all this time, check with Alan Olson for a replacement.

For the current event schedule information and registration, see "Events" on the club website,

[rosecitygardenrailwaysociety.wildapricot.org](http://rosecitygardenrailwaysociety.wildapricot.org).

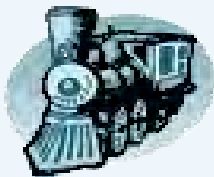
We're still looking for a possible site to hold club movie nights, a popular event where "train theme" movies were shown since the former Fanno Creek Brew Pub has changed management and is no longer available. If you have any suggested locations, please let the Movie Czar Jan Zweerts know.

Fall is not far away.

Put the first Saturday in November (November 6) on your calendar for the Club Fall Social. We will have dinner, multiple clinics, and a silent auction.

More details to follow.

Now it's time to get out and work on my train!



### NEW CLUB MEMBERS

#### Welcomel

Robert Fredrick  
Salem, OR

Devin Peterson  
Jefferson, OR

### Inside this issue:



- ⇒ In Memoriam, Future Events
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- ⇒ BR86 German Locomotive
- ⇒ Building a Control Panel in a Box
- ⇒ Club Business



## In Memoriam

**Merlene Helen Rogowski-Bacon**  
**June 10, 1936 - June 11, 2021**



Photo above: Ron and Merlene Bacon - 2018 Great Train Show (Portland Expo) set up for the RCGRS G scale Module

Photo right: A scratch-build replica of the Pratum Co-Op



Merlene grew up on her Grandparents farm in Pratum, Oregon

Obituary information: Donelson Funeral Chapel, Fir Lawn Memorial Park

<https://www.donelsonfh.com/obituaries/Merlene-Rogowski-Bacon/#!/Obituary>

## FUTURE EVENTS

### West Side RCGRS Garden Railroad Tour & Picnic

**When:** August 28, 2021  
10 AM to 5 PM

**Where:** RCGRS Member Homes

**Register now!** <https://rosecitygardenrailwaysociety.wildapricot.org/>

This event is an internal equivalent of the Summer Tour and is limited to garden railroads located on the West Side of the Portland area. These railroads will be open for viewing on the following schedule.

1. Hal Beighley's Camp Creek Railroad Open 10 AM – 11 AM
2. Bill and Brenda Derville's Coeur d'Alene branch of the Northern Pacific Open 10:15 AM to 11:45 AM
3. Dennis and Carolyn Rose's Blueberry Mountain Railroad Open 11:30 AM to 12:15 PM
4. Garry and Judy Jantzen's G & J Garden Railroad Open 11:45 AM to 12:30 PM
5. Kathryn Warrior's Burlington and Missouri River Railroad 12 PM to 5 PM.

Limiting the hours for each railroad will allow the hosts at these railroads to also participate in the tour by visiting the other railroads that day.

This will be the final time the railroad built by Allen Warrior will be operated. Bring your own battery-operated train to run on this layout for the last time.

There will be a picnic lunch at Kathryn Warrior's house. Bring your own chairs. Following lunch, there will be an auction of all pieces of this fine railroad to include buildings, engines, cars, and supplies. At the end of the auction, there will be a work party to remove the track. Allen is in an Alzheimer's Home, and so will not be present. We prefer he not be aware of this event as it would be distressing for him, but since he can no longer go home, it is time for the railroad to be removed. Only a few members will be needed to remove

**Continued on next page**



the track, so don't think if you come you will be asked to remove the track. We need a great turnout as we have a lot of items to sell. Bring your split jaw track tool if you would like to be involved in the track removal project.

Please register for this event on the club website. This will be the final tour of layouts for this year. We will return next year with more tours of club layouts.

# July Events

## The Return of the BnB's

Oregon officially opened on June 30th, granting restaurants the opportunity to operate at capacity and paving the way for our monthly BnB's to resume. A shout out to Alan Olson, Club VP, for keeping communication open with the two Elmer's these past few months thus, securing last-minute reservations. Because of time constraints, the BnB - East met one week later than the "old" norm and will resume its regular first Tuesday of every month schedule.



BnB East: July 13th, 2021 - 25+ attendees



BnB East

*photo by Bill Derville*



BnB West: July 15th

*photo by Bill Derville*



BnB West: 12 Attendees

*photo by Jan Zweerts*



## Just Run Trains - July 11, 2021



TJ Meyer running a Santa Fe NW-2 consist at Staver Locomotive  
*photo by Jan Zweerts*



Love this photo! 2-4-2 Steam Engine  
*photo by Jan Zweerts*

## Just Run Trains - July 25, 2021

This "Just Run Train" event was paired with the Slab Town Makers Market adjacent to Staver Locomotive. Larry Staver, owner and RCGRS Member, is always looking to share our hobby with the public and opened on both days. The Portland Area Steamers ran on July 24th to 105 visitors. RCGRS club members ran on July 25th to around 300 visitors.



Larry Staver steaming up (alcohol fired) his Accucraft Mikado 2-8-2



Larry's Accucraft Mogul 2-6-0 butane fired steam engine



A BNSF Dash 9 with a long (I lost count at 17 cars) consist owned and powered by Dave Stratton



This Flatcar caught my eye - nice load! This was part of Mike Darrig's consist



# Vancouver RCGRS Garden Railroad Tour & Picnic July 24, 2021

A long awaited tour developed by Bill Derville to feature layouts (by region) that were featured during the 2019 NGRC held in Portland, Oregon. This event was opened to RCGRS Club Members and their guests.

## Crooked River Railroad

Engineers: Alan and Nola Olson  
9:30 AM to 11:30 AM

2019 NGRC  
Layout #26



Club Members and their guests enjoy the first tour stop

*Photo by Bill Derville*



Business as usual in the town of Mapleton  
*Photo by Don Erikstrup*



The Mining operation...Did you spot the Rattlesnake?  
*Photo by Bill Derville*

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# Mt. Hood & Columbia River Railroad

Engineer: Richard Wilkins  
Scheduled access due to limited parking



What an awesome place for a garden railroad! A view of the Portland landscape, Airport, Columbia River, a REAL train, and a Garden Railroad



Top: Looking East at the railyard

Top Right: Club members viewing this garden railroad for the first time (this RR was not on the 2019 NGRC tour)

Bottom Right: Hood River area industry... Note the landscape tunnel

*All Photos on this page by Don Erikstrup*



**Continued on next page**



# Chicago & Far Western Railroad

Engineer: Jay Burke  
11:15 AM to 12:30 PM

2019 NGRC  
Layout #27

The Chicago and Far Western Railroad (C. & F.W. Railroad) nestled in the foothills of a great mountain it is the lifeblood of the two communities it serves. The railroad crosses waterfalls, canyons and through farms. The trains are controlled via radio controls by individual operators. The tracks carry both Passenger and Freight and all engines are battery powered.



Photo by Bill Derville



Remaining photos on this page by Don Erikstrup



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# Rockwood & Western Railroad

Engineers: Phil & Kathe Yokers  
11:30 AM to 12:45 PM



This is the club's first visit to Phil's Garden Railroad  
(This RR was not on the 2019 NGRC tour)

Above Photo: Phil Yokers does maintenance on a  
passenger car while his Grandson, Xan Hertel  
controls a consist as club members and guests  
enjoy the sights

*Two Bottom Photos by Bill Derville*



**Continued on next page**



# Serrano Creek Line

Engineers: Jim and Linda Loudon  
12:00 PM to 1:30 PM

2019 NGRC  
Layout #28



Fence access from  
Front yard to Backyard  
Margaret Robbie at the  
controls  
*Photo by Don Erikstrup*



Margaret Robbie at the controls as Jim Loudon re-rails the Santa Fe GP 38-2 USA Diesel



Last stop before the picnic...good shady rest stop after a full morning of touring layouts



Point-to-Point trolley stop adjacent to the Santa Fe Depot with Graceland B&B in the background *Photo by Don Erikstrup*



Serrano Creek Freight Co. Note the 2019 NGRC Center Beam car with the RSG lumber loads *Photo by Don Erikstrup*

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# Lakeview and Boulder Railroad

Engineers: Jeff and Dianne Lange  
1:30 PM to 4 PM (Picnic)

2019 NGRC  
Layout #29



Train Crossing Signals  
at the entrance to Jeff  
Langes Trains... A  
warning to train  
addicts to enter with  
caution  
*Photo by Don Erikstrup*



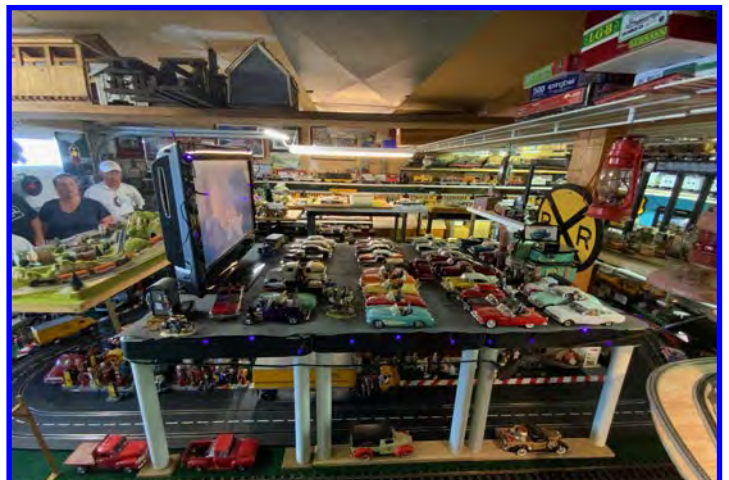
RR section outside the garage - train crossing warning  
signal...enter at your risk! *Photo by Don Erikstrup*



Santa Fe freight consist passing on the outside track  
adjacent to the station platform *Photo by Bill Derville*



The All scale table ( Scales from G to Z) Note all of the  
train-related memorabilia *Photo by Don Erikstrup*



So much to take in - Looks like a busy night at the elevated  
Drive-in theater *Photo by Don Erikstrup*



# It's Just Railroad Talk



One of our favorite parts of the (NGRC-Nashville) convention was the Jack Daniels distillery tour, and not just because of the tasting session! We had a great tour guide who told wonderful stories about the history of Jack Daniels whiskey. The convention committee did a stellar job with the special events and tours. Contributed by Gary & Pamela Everitt

**THE 47<sup>TH</sup> GREAT TRAIN SWAP MEET**  
 Saturday, September 25<sup>th</sup>, 2021  
 9:30 am - 2:30 pm

**RAILROAD CROSSING**

Trains and material in all scales  
 Collectibles & Memorabilia

Admission:  
 \$10 Best the Crowd (10:00am)  
 \$3 Adults (9:30am)  
 \$3 Students  
 Under 6 years FREE with adult  
 \*Current COVID Protocols will be enforced

**FREE Parking** - Use N Parkway Ave. for  
 Battle Ground High School Gymnasium  
 200 W Main Street  
 Battle Ground, WA 98604

From I-5 take Exit 11 Battle Ground Highway/SR 202 east & north to BGHS.  
 DON'T BE FOLLOWS BY GPS! Go north on S. Parkway Avenue for Easy  
 Access to Free Visitor Parking and the gymnasium's north entrance.

**Six Foot Tables \$25**  
 Contact: Larry Sprekel  
 Phone: 360-619-8899  
 Email: larry.sprekel@gmail.com

Registration Period: 8:00am - 9:00am

The Southwest  
 Washington Model  
 Railroaders are on  
 Facebook.

Links: [https://  
 www.facebook.com/  
 Southwest-  
 Washington-Model-  
 Railroaders-  
 147237705342435/](https://www.facebook.com/Southwest-Washington-Model-Railroaders-147237705342435/)

**THE 47<sup>TH</sup> GREAT TRAIN SWAP MEET**  
**Vendor Registration Form**

To reserve table(s) for The 47<sup>th</sup> Great Train Swap Meet,  
 contact Larry Sprekel at (360) 619-8899 or by email  
 at Larry.sprekel@gmail.com

Complete form below and mail with check made  
 payable to SWMR:

Larry Sprekel  
 14210 NE 26<sup>th</sup> Avenue  
 Vancouver, WA 98686

NAME \_\_\_\_\_  
 ADDRESS \_\_\_\_\_  
 CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_  
 PHONE # \_\_\_\_\_  
 EMAIL \_\_\_\_\_

Can we share your info with other swap meets? ☐ Yes ☐ No

# TABLES REQ'D \_\_\_\_\_ @ \$25 per 6' TABLE = TOTAL \$ \_\_\_\_\_

Vendor Setup: Fri 6:30pm - 8:00pm; Sat 7:00am - 9:00am  
 Vendor Parking/Unloading area in South Lot off Main Street  
 Comments or special requests \_\_\_\_\_

How did you hear about us? \_\_\_\_\_





## Buy/Sell/Trade

This feature is open to club members that would like to utilize the RCGRS Newsletter as a marketplace to buy, sell, or trade rail-related items. Send all postings by email to Linda Loudon, Editor at [rcgrs.newsletter@gmail.com](mailto:rcgrs.newsletter@gmail.com) or [newsletter@rcgrs.com](mailto:newsletter@rcgrs.com)

RCGRS Forum - was set up for topics to include buy, sell, or trade among club members. You can access and post your items by following the Club Forum Guidelines. [rosecitygardenrailwaysociety.wildapricot.org/](http://rosecitygardenrailwaysociety.wildapricot.org/)

## LGB Garden Railway Items for SALE:

(items never used outside...most never used...some used a few times around the Christmas tree) all circa 1990-1991

Prices: (OBO)

LGB 2090 N diesel switcher (in box) \$50

LGB 4065 Rio Grande caboose (no box) \$25

LGB 4072 P 02 Colorado Midland Refrigerator line (in box) \$40

LGB 4068 Rio Grand Stock car green (in box) \$35

LGB 12X11000 circle track (used around Christmas tree) (in box) \$15

LGB 50031 transformer (in box) \$25

LGB 1 piece of straight track 11.8" \$4

LGB 1 piece of straight track 23.6" \$8

Contact info: Beverly Perttu  
akp1994@comcast.net



## Upcoming Events (non-club)...

<b>Fall Steamup@ Staver Locomotive</b>	September 23 -26, 2021	2537 NW 29th Ave Portland, OR	<a href="http://staverlocomotive.com/home/">http://staverlocomotive.com/home/</a>
<b>The Great Train Swap Meet</b>	September 25, 2021	Battle Ground High School	Larry Sprenkel <a href="mailto:larry.sprenkel@gmail.com">larry.sprenkel@gmail.com</a>
<b>2022 National Garden Railway Convention</b>	June 20 - 25, 2022	Denver, Co	<a href="https://www.ngrc2022.org/">https://www.ngrc2022.org/</a>
<b>2023 National Garden Railway Convention</b>	July 3 - 9, 2023	San Francisco/Bay Area, CA	<a href="https://ngrc2023.com/">https://ngrc2023.com/</a>





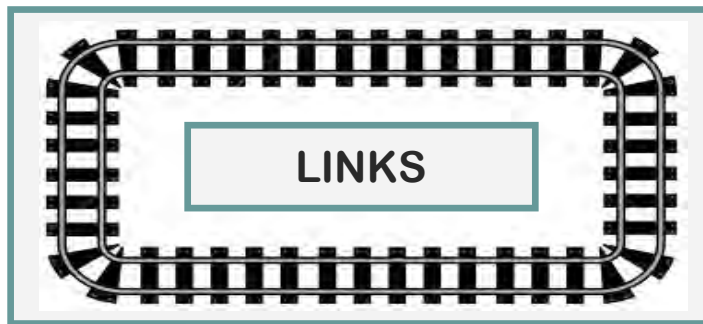
## Club Calendar of Events...

Interested in attending the following club events? Event registration is strongly recommended unless otherwise specified. Registration instructions are described in the "Club Business" section.

BnB East	August 3, 2021 9:30 AM to 11 AM	Elmer's 10001 NE Sandy Blvd Portland, OR	Register Now!
BnB West	August 19, 2021 9:30 AM to 10:30 AM	Elmer's 1250 NW Waterhouse Beaverton, OR	Register Now!
West Side RCGRS Garden Railroad Tour & Picnic	August 28, 2021 10 AM to 5 PM	5 member layouts - See page 2	Register Now!
BnB East	September 7, 2021 9:30 AM to 11 AM	Elmer's 10001 NE Sandy Blvd Portland, OR	Register Now!
Just Run Trains	September 7, 2021 12 PM to 4 PM	Staver Locomotive 2537 NW 29th Ave Portland, OR	Register Now!
BnB West	September 16, 2021 9:30 AM to 10:30 AM	Elmer's 1250 NW Waterhouse Beaverton, OR	Register Now!
BnB East	October 5, 2021 9:30 AM to 11 AM	Elmer's 10001 NE Sandy Blvd Portland, OR	Register Now!
Just Run Trains	October 5, 2021 12 PM to 4 PM	Staver Locomotive 2537 NW 29th Ave Portland, OR	Register Now!
BnB West	October 21, 2021 9:30 AM to 10:30 AM	Elmer's 1250 NW Waterhouse Beaverton, OR	Register Now!
Fall Social	November 6, 2021 10 AM to 5 PM	Canby Adult Center 13th and Ivy Canby OR	







RCGRS club members! If you would like to see a link to your business, your website, or a garden railroad resource then send your contributions to the RCGRS Newsletter Editor.



June 19 - 25, 2022

<https://www.ngrc2022.org/>



[www.eckardtdesign.com](http://www.eckardtdesign.com)



July 3 - 9, 2023

<https://ngrc2023.com/>



miniforest.com

Natural miniature plants for garden railways, fairy gardens and more.

"Open by appointment 503-632-3555. 10% discount to club members."



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A Digital Magazine

Growing the Garden Railroad Community

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# Upgrading Emily - Part 2

By Tom Gaps

*Part 2 of a 2 part series, part 1 is published in the July 2021 RCGRS Newsletter*

At this point, I proceeded to connect all of the components on the bench for a test. There is a single four-post connector block at one end of the G4. Two posts, labeled BAT IN (+/-) are the input from the battery, with the other two posts labeled MOT (+/-) being the output to the motor. Along the side is a two-post connector block labeled DCC. These two posts are used to connect the G4 to the Bachmann card using the connection points on the Bachmann card labeled "RAIL". The only other connection is between the speaker and the Bachmann card speaker ports labeled Sp (+/-). The Bachmann card supports several CV values that can be programmed to tune the card. One of them, CV115 specifies which locomotive sounds to produce (Thomas, Percy, Edward, James, Henry, Gordon, Toby, Spencer, or Emily), the default being Thomas. I used a T5000 AirWire throttle to program the correct CV115 value for Emily (CV115=8) and then tested the various function keys. Everything worked as expected so I put Emily on some test rollers, connected the G4 motor output to Emily, and turned up the speed control on the throttle. The locomotive wheels turned so the G4 was providing power but there was no chuffing sound. I contacted AirWire Support to verify the connections for the G4 – all OK. I contacted Bachmann Support. They referred me to Bachmann parts. I contacted Bachmann Parts (email), they referred me to Bachmann Sales. I contacted Bachmann Sales, they referred me to Bachmann Support. The Bachmann documentation that comes with the card is extremely limited but it does say - "DCC Sound Technology by SoundTraxx" so I checked the SoundTraxx WEB page but could find nothing about the Bachmann card. None of the pictures of the various SoundTraxx cards looked even close to what the Bachmann card looked like, so I contacted SoundTraxx Support (email). After several days I received an email from AirWire support. The person who had initially responded to my email had continued to look into the use of a Bachmann Sound Module with an AirWire G4 or Converter. He had a

"buddy" that worked for SoundTraxx and was able to confirm that I needed to set CV217 = 0. The Bachmann card depends on the back EMF coming from the motor to tell it what the chuff rate should be. The higher the back EMF, the higher the chuff rate. With no motor connected to the card (the motor is connected to the G4), there is no back EMF to measure and thus no chuffing. There is no mention of this in the Bachmann documentation that came with the card. Setting CV217=0 got the chuffing to work by switching from monitoring the back EMF from the motor to monitoring the DCC speed steps from the throttle. However, the chuffing rate was not correct, but I figured I would work on that later.

Shortly after getting the CV217 information from AirWire, SoundTraxx support finally contacted me. He was not aware of the Bachmann card because the OEM division of SoundTraxx was separate but he would do some investigation. A few days later he came back with the same CV217=0 information. At that point, I had still not received any information directly from Bachmann.

With everything working on the bench, I proceeded to program the G4 CV2 starting voltage, the CV5 max voltage, and the CV6 mid-point voltage going to the motor. This would ensure that the locomotive started moving on the first speed step vs the default of not starting to move until speed step 4 or 5 and it would limit the maximum voltage and thus the maximum speed so that Emily could not be run like a slot car racer. When the min and max voltage is adjusted the mid-point voltage also must be adjusted to ensure a smooth power curve. I generally set the mid-point voltage a little below the midpoint between CV2 and CV5 to give finer control at the slower speeds. F6 is the default Cruise Control button for the G2 decoder and had become my standard. The G3 and G4 decoders have the Cruise Control default set to F5. To maintain my standard, I move the G3 and G4 Cruise Control from F5 to F6 so that ALL of the throttles are the same. The default setting for CV11, the loss of signal timer, is zero, which means there is no timeout if the throttle signal is lost. I set this to 25 seconds on all of my locomotives to avoid a run-a-way situation should the decoder stop receiving throttle signals, i.e. throttle batteries die, throttle gets out of range, throttle signal blocked by "something", like being in a





tunnel, etc. With this setting on CV11, if the locomotive goes 25 seconds without hearing from the throttle, it will come to a full stop until it starts receiving a signal again. I also specified a different frequency than the default by setting CV200. I put every one of the locomotives on a different frequency (there are 17 frequencies to choose from) to avoid a conflict when throttles are physically too close together. Note: In earlier AirWire decoders CV58 is used to specify the frequency.

At this point, I turned my attention to adjusting the chuff rate. Both AirWire Support and SoundTraxx insisted that this was controlled by CV114 but I could not get any change in the chuff rate when changing the value in CV114, so I left that for a later project and proceeded to move the components from the

Photo 14

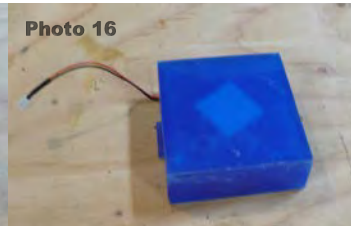


bench into the tender. The Li<sub>ion</sub> battery pack is held in place by sticky back Velcro pads on the bottom (see Pic 14).

Photo 15

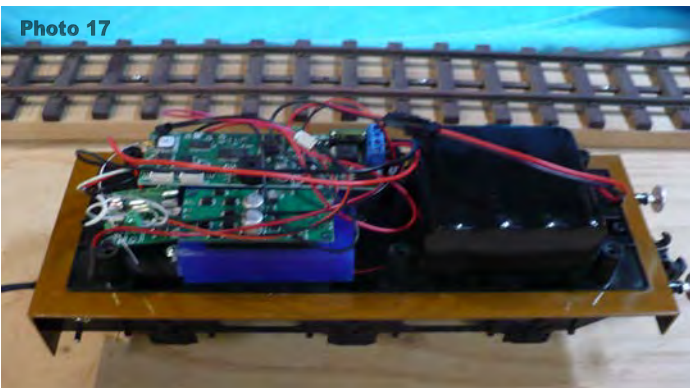


Photo 16



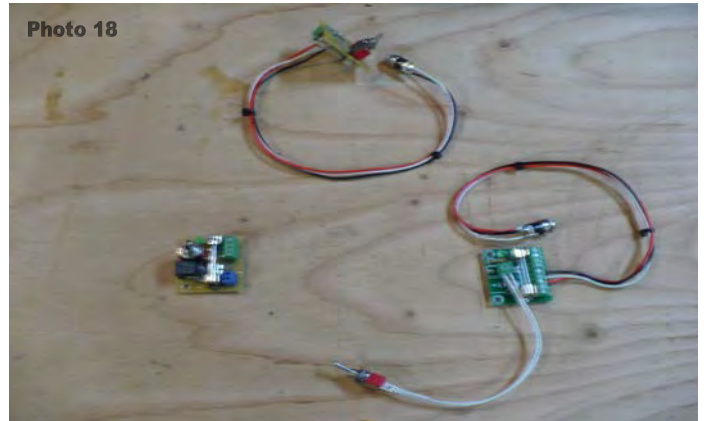
To produce better sound, I built a plastic box around the speaker to redirect sound coming out of the back of the speaker back toward the front (see Pic 15-16).

Photo 17



This box is secured to the floor of the tender with self-tapping screws. It also provided a flat surface on top for mounting the G4 and Bachmann sound card (see Pic 17).

Photo 18



In front of the speaker box is a circuit card from G-Scale Graphics that provides on/off control, a charging port, and a protection fuse. There are three variations of this circuit card (see Pic 18).

Photo 3



The first variation has the switch and charging port mounted to the PCB and is used where there is easy access available to the PCB, such as removing the roof of a trailing passenger car (see Pic 3) or opening the door of a trailing boxcar.

Photo 19



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The second configuration has the charging port mounted remotely, connected to the PCB by three wires. This variation is generally used where the switch can be mounted in an easily accessible bulkhead with the PCB behind the bulkhead and the charging port mounted at a remote location. For Emily, I used the third configuration in which the on/off switch and the charging port are both mounted remotely from the PCB location. Emily's power control PCB sits on the floor of the tender in front of the speaker box. The on/off switch is located on the side, just in front of the left side wheels (see Pic 19) while the charging port is located on the opposite side of the tender, just in front of the right side wheels (see Pic 20).

This completed the upgrade for Emily (see Pic 21). All of the electronics and the battery are now in the tender so no more trailing car is needed. In addition, the battery now provides almost twice the

run time of the previous configuration and Emily's throttle looks and acts like all of my other throttles (excluding James, which will be converted to AirWire and Li-Ion batteries later this summer).

After getting everything fully assembled, I received an email from AirWire Support. It seems that the chuff rate is only controlled by CV114 when back EMF is used to measure the speed of the motor. When back EMF chuff rate control is disabled by setting CV217 = 0, the chuff rate is controlled by CV2 (starting chuffing), CV5 (max chuff rate), and CV6 (mid-point chuff rate) in the sound card. It was unclear what values to use for these three CV settings. The G4 also uses these same CV values for controlling the voltage going to the motor. With the DCC output of the G4 directly connected to the Bachmann sound card, any programming change to the G4 CV values would also be applied to the same CV values on the sound card. That means at some future point in time if I find that the chuff rate is too far out of alignment with the actual wheel rotation rate I will need to program these three CV values so they are correct on the sound card, then disconnect the sound card from DCC input coming from the G4 and reprogram the same three CV values on the G4 to their original values to get the correct locomotive speed. If I'm not too lazy, I'll do this the right way by inserting an on/off switch on one of the DCC lines between the G4 and the Bachmann sound card. But that's another project for another time.





## BR86 German Locomotive A TRUMPETER - Kit

By BRUCE MCKINNEY

*This build is reported in a "diary" style to demonstrate the detail and many hours it takes to complete a kit model. Bruce McKinney has been modeling for years and has earned and won several modeling competitions. Bruce participated in the 35th (RCGRS Newsletter November 2019) NGRC model contest and won two categories, Structures - Water Tower and Diorama - Derelict Engine.*

Friday, May 14, 2021

Work in Progress - TRUMPETER's BR86 German locomotive in 1/35th. Trumpeter kits can be hit or miss - some XLNT - some - not so XLNT. This one fits in the XLNT category. Fit is PERFECT (so far). Detail PHENOMINAL - no need to even consider one of the many after-market details upgrade kits out there.



Friday, May 21, 2021 5:26 PM

Still - an absolutely stellar kit - fit is like a Swiss watch....



May 31, 2021

Trumpeter did a very nice job of back head details. I added a few pipes, feeds and doo-dads to spruce it up a bit - but not too much. The example I use as a reference sits in a museum in Neuenmarkt Germany. I had my decal guy match the locomotive number. From my reference book - I noticed most examples of this locomotive sported a removable shroud covering the water preheater (the recessed "tube" in front of the smokestack). The kit did not include this and I thought it was a nice detail....so I fashioned one out of brass sheeting. Of course - it will be painted black. Turned out fairly decent.

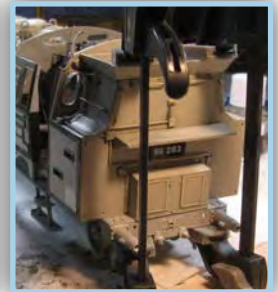
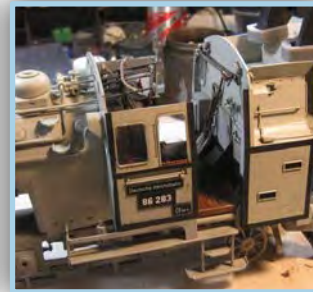
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Sunday, June 6, 2021

Back interior cab wall was lacking some detail - so, added a coal chute, a locker next to the coal chute and tools - switches and conduit as well. All based on my reference photo's. Shovel was scratch built. Cab roof detailed as well - all this will probably not be seen too well once the cab roof and cab doors are placed - but I know they are there. Cab rear and coal bunker glued and clamped in place - starting to look like something. Fit is still EXCEPTIONAL and details are overall superb. Getting close to putting some wheels on.....



Saturday, June 12, 2021

Highly detailed undercarriage is done. A bit finicky - but the sand tubes are set (but not in place in these photo's), wheels and side rods on. Still, an exceptionally detailed kit with exceptional detail. Plan to get a second kit to do a black and red version.



Continued on next page

Friday, June 18, 2021

Starting to add some needed details.....strangely, the compressor (yep- German spelling) on the side of the smokebox had holes for the piping - but no piping parts to add from the kit. Based my brass detailing on real examples - close but not 100% - will all get painted black. Can't see it - but under the smokebox are two pipe outlets with electrical wiring coming out. The left side water tank is in place and I ran the electrical conduit for the front headlights - again - based on my reference photo's. Getting close to done me thinks.



Tuesday, June 29, 2021 2:33 PM

DONE with the scratch built added details for the BR 86. Actually - officially done with the overall build - now on to some paint touch ups - a coat of semi gloss and some very light weathering to pop some details.

As EXTREMELY detailed as this kit was - surprisingly - they provided no steam whistle - PROMINATELY displayed on every example in my book. Luckily, I had a period correct whistle in 1/35th in my stash box. Added the needed hinges and lock down handles on both the steam and sand domes as well as a safety valve situated right behind the whistle.



Of course - added the control wiring for the sand dome valves - TONS of fun doing that - but certainly adds a nice detailing touch

Friday, July 2, 2021 9:29 AM

Callin' this one DONE - sensational kit - XLNT FIT - great detail - although, yes, I did additional detailing to set it over the top a bit.

This is technically a G scale model - 1/35th in scale and measuring nearly 16" in length. Kit made by Trumpeter - a Chinese company. Their kits can be hit or miss - this was a hit.

So - just why is this locomotive grey and not black? I decided to do something a bit different, This locomotive is finished in the fotografieranstrich or PHOTO PAINT. In Germany, this light grey paint was used mostly when introducing publicly a new locomotive fresh from the shop. The paint worked well for the photographers - showing off the lines and detail on the locomotive as intended. The paint was water-soluble and simply washed off after the photo session to reveal the black finish. In WW2 the locomotives were actually painted a dark charcoal grey as they discovered a black locomotive showed up prominently in aerial recon photo's, but the charcoal grey blended better with its surroundings.

**Continued on next page**

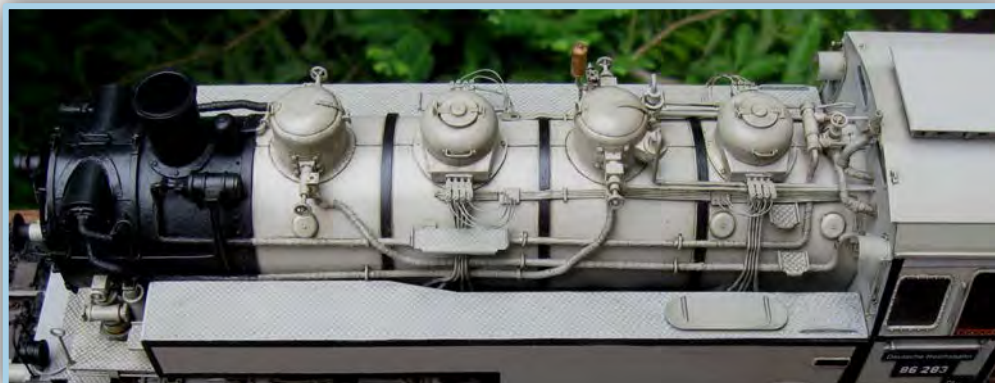


775 of these were built from 1928-1943 and served primarily on branch lines and in marshalling yards. During the war, the BR 86 served in the Central Uplands area as a light express locomotive. The example I used for modeling sits in a museum in Germany. I had my decal guy match the road number.

**Resource photos used as reference for a BR 86 that sits in a museum in Neuenmarkt Germany**



**TRUMPETER's BR86 German locomotive in 1/35th - COMPLETE!**





# Building a control Panel in a Box

By Warner Swarner

Though my railroad is entirely “dead rail” (no power in the track), I prefer train crews to manually operate track switches as their trains progress along their route. Electric control is still required to operate switch machines in four difficult to reach areas. There are pneumatic switch control systems, but I am “old school” and still like to use LGB switch machines to throw the switch direction. LGB switch machines are simple, durable, reliable, and easy to service. Four screws hold on the cover, two wires go to a single electromagnetic coil and with only two moving parts. That’s a machine that even I can service!

DC electricity in one direction flips the coil, reverse the current and the coil snaps back. If you don’t use electricity to the coil you can still move the switch points by hand, and they stay put. A “DPDT” toggle switch allows you to reverse the current direction and the switch position can “show” you which way the switch was recently positioned. It’s best to not leave the current running through the coils so a push-button to energize the pulse through the wires to each machine is the most efficient method to control changing the switch throw.

Depending on space and the desired size for a control panel you will want to select the size and type of electrical switches you will use. The size below the panel will determine the width and spacing of your panel lines.

<https://www.amazon.com/>

Clear Acrylic Plexiglass Sheet - 1/8" Thick Cast - 18" x 24"

Brand: Acrylic Mega Store  
★★★★★ 1,033 ratings | 130 answered questions

Price: \$14.06

Size:  
18" x 24"

• The linear dimensions of our sheets are nominal and they have a tolerance of +/-1/8" in each direction (length and width) for each special cut please purchase : ADDITIONAL CUTS PER SHEET ... B0184HQ075 tolerance of the cut will be +/-1/8"



For most panels, a convenient material is 1/8" thick Lucite acrylic plastic sheets. These come in conveniently sized small panels at Lowe’s Hardware or on Amazon. For a track diagram panel spray paint the entire panel gloss white. Get a roll of 1/4" wide masking tape in the paint section at any good hardware store and layout your diagram with the tape. (This is what “masking tape” is used for.)



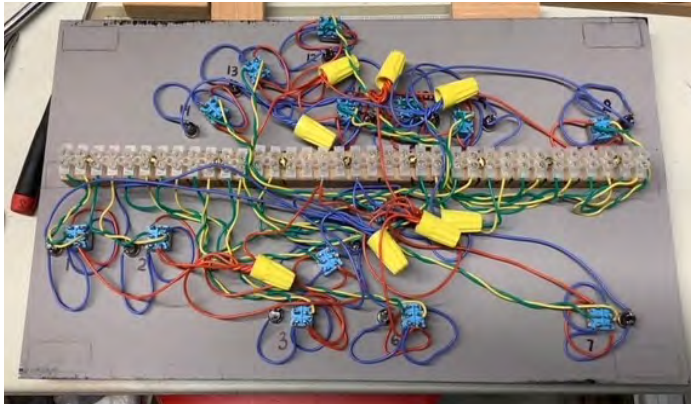
Spray the whole panel gloss black and when dry remove the tape. This produces an easy custom track diagram panel! Measure the size of your electrical switch throat using an accurate measuring tool such as a digital micrometer. Electrical switches come in odd sizes and you might need to buy a custom-sized bit for this step to drill the right sized holes for DPDT and push buttons of your choice.



With the addition of some lettering or panel plates from Petersen Specialty you can whip out a sharp-looking control panel fairly quickly.

Continued on next page





Wiring the backside will be easier with the switches attached to the panel board but require a bit more patience than the front. (I hate soldering wires but it is easier when the components are firmly held in place.)



store it under more protective cover during winter months but this case provides enough protection to grab and go for quick action.

The inside dimensions allow for a panel at least 15" x 8-1/2" and almost 4" deep, plus extra space on either side of the handle to permit easy storage for 18volt 1amp power supply units. (By the way, 18-volt power supplies are available on Amazon for about \$9 and work great for momentary power to throw LGB switch motors.) Keep the high voltage 110-volt wiring out of the panel for safety. 18 volts will give you a tingle but isn't dangerous.



9X6X3 Extreme Broadband Heavy Duty Weatherproof Multi Purpose Enclosure IPE963-LTC

Brand: Extreme Broadband  
★★★★★ ~ 694 ratings  
Amazon's Choice for "extreme broadband heavy..."

Price: \$18.75

Item Package Quantity: 1

1	3	4	5
\$18.75	\$156.00	\$208.00	\$260.00

Whether or not you use this system you might like some of these ideas for outdoor weather-resistant electrical boxes. There is a wide variety of weatherproof boxes to select if you just need tightly sealed enclosures. I was searching for an easy to open, somewhat transparent, relatively inexpensive enclosure. I stumbled upon a Harbor Freight large parts storage case which I use to keep assorted screws and parts handy in my workshop. I don't think it is weather "proof" but for \$14 it seemed like a reasonable starting point for a control panel case. I have my panel on a long enough cable so I can



I cut some "standoff" legs about 2" tall which will support the panel away from the bottom of the case and leave clearance for the switches from the case lid.



For the wires to gain access to the case I found that

**Continued on next page**

wood cutting spade bits of the needed diameter will make very clean round holes through the plastic case side without tearing it up. Zip ties around the group of wires on either side of the wall will hold the wires tightly in place if you estimate your diameter close to the combined bunching of your wires in a cable. I glued a strip of 1"x1" wood down the middle back of the panel where there were no switches to add support and to give a mounting base for barrier strips to connect my switch wires to the cable wires that run to a junction box on the railroad.



This is not as hard as building a ship in a bottle.



These are “spade bits” which cut a smooth large hole in the plastic storage box for cable insertion. round smaller blue ones fit my needs for this panel better.







## Club Business

### How To Register for Club Events

- ♦ Go to the club Website: [www.rcgrs.com](http://www.rcgrs.com)
- ♦ Log in at the top right corner
- ♦ Run your Cursor over the "Members" menu item to activate a pulldown menu
- ♦ Locate and click on "Events"
- ♦ Scroll through and select the event that you are interested in attending
- ♦ Each event has a button, "Register" which will take you to the registration page. By registering here, the host can see how many are coming as well as who is coming. In addition, you will receive a reminder of the event.

### How to Edit your Profile

Your club profile is located in the Log in area. If you need to edit your profile (name, address, email address, spouse, family, RR interests) follow these simple directions.

- ♦ Go to the society Website: [www.rcgrs.com](http://www.rcgrs.com)
- ♦ Log in at the top right corner
- ♦ Locate your name and click on [view profile](#)
- ♦ Locate and click 
- ♦ Make necessary changes and 

### From the Yardmaster

Did you know that the RCGRS has a dual rail bend-er and Jig stone molding set for use by the club members? All you have to do is request the item from the Yardmaster and then make arrangements to pick the item up. Or it can be shipped to you with you paying the freight both out and back. For more information contact - Jay Burke

## RCGRS Officers and Staff

**President & Education Chair,**  
Rusty Baumberger 503-512-7857  
[President@rcgrs.com](mailto:President@rcgrs.com)

**Vice President,** Alan Olson  
360-896-2462 [Vice-President@rcgrs.com](mailto:Vice-President@rcgrs.com)

**Secretary,** Jill DeGarmo  
503-648-3041 [Secretary@rcgrs.com](mailto:Secretary@rcgrs.com)

**Treasurer,** Steve Cogswell  
503-501-8630 [treasurer@rcgrs.com](mailto:treasurer@rcgrs.com)

**Yardmaster & Track Committee Chair,**  
Jay Burke 360-254-8701 (H),  
503-867-2725 (C)  
[Yardmaster@rcgrs.com](mailto:Yardmaster@rcgrs.com)

**Summer Tour Chair & Immediate Past-President,** Bill Derville  
503-645-1771  
[past-president@rcgrs.com](mailto:past-president@rcgrs.com)

**Webmaster,** Tristan Loomis  
503-522-1594, [webmaster@rcgrs.com](mailto:webmaster@rcgrs.com)

**Event Coordinator/Calendar Manager & Op-Sig Chair**  
Tom Gaps 503-659-8893  
[calendar@rcgrs.com](mailto:calendar@rcgrs.com)

**Module SIG Co-Chair,** Dave Stratton  
503-654-2469, [mod-sig@rcgrs.com](mailto:mod-sig@rcgrs.com)

**Module SIG Co-Chair,** Everett Helm  
503-632-2900 (H), 503-577-2753 (C)  
[mod-sig@rcgrs.com](mailto:mod-sig@rcgrs.com)

**Live Steam SIG Chair,** Vacant

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### RCGRS Newsletter Staff

**Editor & Publisher,** Linda Loudon  
949-275-8578 [rcgrs.newsletter@gmail.com](mailto:rcgrs.newsletter@gmail.com) or  
[newsletter@rcgrs.com](mailto:newsletter@rcgrs.com)

**Proof-Reader,** Jim Loudon

**Hardcopies mailed by,** Jill DeGarmo  
503-648-3041 [Secretary@rcgrs.com](mailto:Secretary@rcgrs.com)

