

In Just One Day, Club Members Build 42 Feet of Trestle

Clinic Results By Gary Lee

On Saturday March 15, 2008, eight industrious Society members gathered at Constructavision for a one-day challenge to build custom trestles to suit the needs of their railroad.

Christina Brittain and Bud Quinn arrived with a large template of their track arrangement at the location on their railroad where a trestle was needed. By the end of the class they had constructed a 9 ft long curving trestle. Gordon Pisle built an 8 ft long trestle on an 8 ft radius curve at 24 inches high. Joe and Jen Eckardt's trestle was greater than 8 ft long on a 6 ft radius curve with a 24 inch truss span near the center, and over 28 inches high. Bill Dipert came as an observer, but soon was caught up in the activity and he built himself a straight trestle over 6 ft long. Penny Walker said she came to see what was happening and went home with a trestle she built. New member Richard Parker joined us and spent much of the day assisting members with their projects.

Doug Vorwaller had a special project. He needed a 61 inch long thru Howe truss for his suspended railway. By the end of the day Doug's project was a complete kit ready for assembly at home.

My father, Odell Lee, spent the day visiting with and coaching the trestle builders. His expertise as a model builder is valued highly.



Joe and Jen Eckert and their new trestle

As for me, I had a great day watching my fellow Garden Railroaders accomplish a project for their own railroads.

Great job everyone!

Doodlebugs Fourth in a Series By Allan R. Warrior

The Ultimate Doodlebug

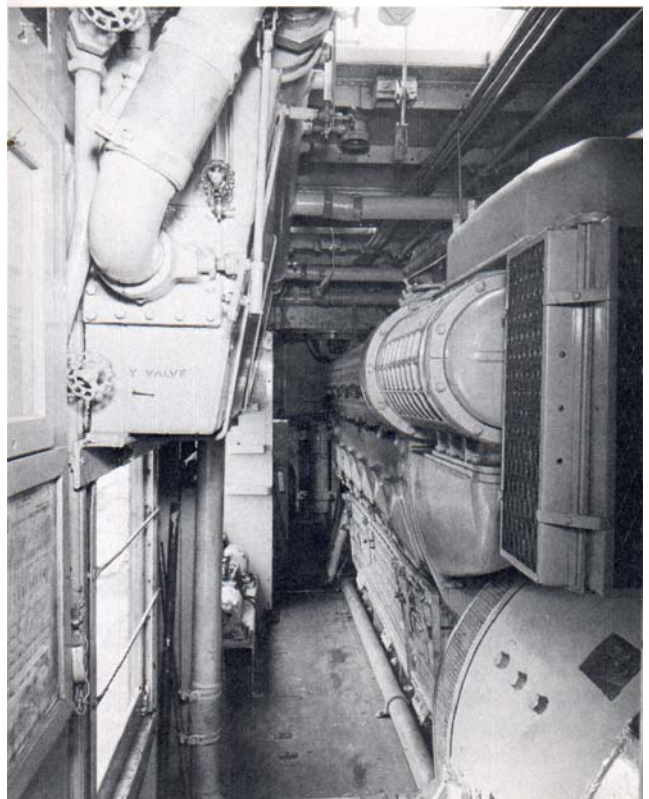
The last motor car of the type was the M.190 and is often called "The Ultimate Doodlebug" or, more commonly, the "Old Pelican." The Santa Fe wanted a motor car capable of powering a train of five standard all steel passenger cars at main-line speeds and schedules. When delivered in 1932, the 90-foot articulated M.190 had so many innovations for that amount of power that the Santa Fe had not agreed to the design until all parties agreed that "if she didn't work, the Santa Fe didn't have to buy her." Tests showed that the M.190 rode smoothly and didn't jump the track into the ditch as expected by the Santa Fe.



The “Old Pelican” beginning its long career

The motor was a newly designed Winton Model 194 V-12 distillate motor with a 9” bore and a 12” stroke rated at 900 hp at 900 rpm. The motor was started with gasoline and then switched to distillate. When the 12 carburetors were correctly adjusted, the four sets of ignition points correctly gapped, and the 48 spark plugs were firing at the right time, the “Old Pelican” could easily make her designed 80 mph down the track.

Maintenance was a mechanic’s nightmare. The motor took so much of the available space that only skinny mechanics need apply for the job. After the ignition points were correctly gapped and the timing set, the mechanic had to go back and forth to each side of the motor to adjust each distributor. Then the needle valves in the carburetors were adjusted for the proper fuel-air mixture. The standard practice for the carburetor adjustment was to idle the motor, open the roof hatches, crane your neck so that the exhaust stack for the carburetor at hand could be seen. When you saw 6-inches of blue flame from the exhaust stack, the mixture was correct. If the flame was red, the mixture was too rich; and if there was more than 6-inches of blue flame, the mixture was too lean.



A close fit of the EMD Model V12-567 in the M.190 motor car

When the motor was started after being shut down for several hours, usually some fuel had leaked into the cylinders. Starting the motor often caused five or six feet of flame to shoot from the stacks. After

M.190 set the roundhouse roof on fire, it was generally “persona non-grata” in the roundhouse.

In 1949, M.190 was converted to an EMD Model V12-567 diesel. The year 1955 saw the M.190 painted in the “Warbonnet” style and assigned to the Clovis to Carlsbad run. The M.190 was retired in 1967 and was allowed to deteriorate for several years. It was stored at the California State Railroad Museum in Sacramento for 20 years. In 2007, the “Old Pelican” (now called “The Pride of the Pecos”) was moved from Sacramento to Belen, New Mexico where it is awaiting restoration.



M.190 in “Warbonnet” paint circa 1955

Measuring Scale Speed

By the Saskatoon Railroad Modellers

<http://www.members.shaw.ca/sask.rail/index.html>

Measuring scale speed – it’s quick and easy.

As model railroaders, we often want to know how fast or how slow our trains are going. We may want an exact speed for checking engine performance or we may want a quick check on speed to make sure we are operating our trains at speeds similar to the

Scale	1:220 (Z)	1:160 (N)	1:120 (TT)	1:87.1 (HO)	1:64 (S)	1:48 (O)	1:32	1:29	1:24	1:22.4	1:20.3
rfps to smph	150	109	81.8	59.4	43.6	32.7	21.8	19.8	16.4	15.5	13.8

For a quick check on speed in any scale (including full size), count how many seconds it takes a 40 foot box car to travel past a fixed point beside the track. Then divide this number into 30 to get scale miles per hour. For 50 foot box cars, divide the number

full size ones. Either way, measuring their speed is fun and easy.

First lets look at measuring speed accurately. Usually we want to know the speed in scale miles per hour. But what we have at hand are the necessary tools to accurately measure speed in real feet per second. So the question becomes how to use them and how to convert the results into scale miles per hour (smph).

To measure speed in real feet per second (rfps), lay two reference markers beside the track. The markers can be anything, but quarters are easily seen and are usually close at hand. Put the markers far enough apart to make timing easy, say 3 to 5 real feet in Z scale, 5 to 10 real feet in HO, 15 or more real feet in large scale. To simplify calculations, make the distance between markers an exact number of real feet.

Next, time how long it takes your train to travel from one marker to the other. A stop watch is ideal, but any watch showing seconds will do. Make sure your train is up to speed when it reaches the first marker and time how long it takes for a point on the train (say the front of the engine) to travel from marker to marker.

Finally, calculate the speed of the train. First calculate the speed in real feet per second by dividing the distance between your markers by the number of seconds it took to travel between them. Then multiply the answer by the rfps-to-smph factor for your scale from the table below. The answer is in scale miles per hour. The accuracy of this method depends mostly on the accuracy of your time measurement.

of seconds into 36. This quick check works best at low speeds and is a great way to keep shunting speeds prototypically slow in a yard.

In large scale, using a factor based on scale and on a common box car which can be used in all these scales may be more convenient. The table below is based on the ubiquitous Bachmann box car. Pick the factor for your scale and divide it by the number

Scale	1:29	1:32	1:24	1:22.4	1:20.3
rfps-to-smph for Bachmann box car	30	28	23	21	19
scale length of Bachmann box car	40 ft	36 ft	30 ft	29 ft	26 ft

As a historical note, these methods are very similar to the ways engineers and station agents measured train speeds in the days before speedometers and hot box detectors. Engineers would time the distance between mile posts, station agents would time the passage of box cars, and the railroads were run on tight schedules based on this.

Some Interesting WEB Sites

An interesting and useful site for beginners in particular is **Family Garden Trains™** found at <http://www.btcomm.com/trains/primer/>

Actually, if you use *GOOGLE* and input “Garden Railroads”, you will find so many “How I Did It” articles on trains, projects, and garden plants that you can be occupied for many hours.

Hand Lettering your Freight Cars

Author: David Maynard

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As most of us who model, I have a need for lettering. And since dry transfers are getting hard to find around here, or are a special order item. And since they never seem to be in the color I want. And since I have not found them in some of the fonts I need. And since when I do use them I have all these letters left over I can't use like ZXQ and such. I decided that I would work out doing my own lettering.

As you may be able to understand I am limited in how small a type of lettering I can do by hand. But since I don't tend to worry too much about the real small details that part doesn't bother me.

of seconds it takes your Bachmann box car to roll past a fixed point to get its speed in scale miles per hour. The table also shows this box car's length in the various large scales.

So the first step is to find the type style (font) I want to use, and in the age of computers there are literally thousands to choose from. Then I print out what I want to put on what I am painting. By adjusting the font size I can make it come out whatever size I need on my printer. Or better yet I print it out as large as possible and reduce it on a copier to the correct size I need.

Then on the model I lay down a sheet of transfer paper or carbon paper (remember carbon paper kids?). Transfer paper will leave white on the model where it's rubbed, and of course carbon paper will leave black. The one I use depends on the color of lettering I am doing, light colored lettering I use the transfer paper and dark colored lettering I use the carbon paper. Then I tape the paper with the lettering (artwork) onto the model, positioning it properly.



Hand Lettering your Freight Cars

To transfer the outline I take an old ballpoint pen that has long ago run out of ink and run it firmly along the outline of the letters on the paper.



Did I mention I hardly ever throw anything away? But in the picture you see me using a pencil, today I couldn't find that pen. Have I also mentioned that I am a bit disorganized? When I use a pencil I have to keep it sharp, and that takes longer. As I go I will, from time to time, lift the paper to make sure I am getting a good image on the model, this is why I usually tape only along the top edge. But sometimes, as in this case, I need to tape along more than just the top to hold the artwork still. Then when I have a good outline of the letters I remove the papers.



It usually takes me going over the letters about 3 times to get them filled in real nice and to fix my mistakes. Sure it is a bit time consuming, but I end up with exactly what I want with no wasted letters. And the looks on people's faces when I tell them its hand painted are priceless.

Then it's a matter of painting between the lines with a small brush.

I know that right now someone out there is saying "My hand isn't steady enough to do that." Well neither is mine. So when I do make a mistake I let the paint dry and then carefully scrape the error off with a new Xacto blade.





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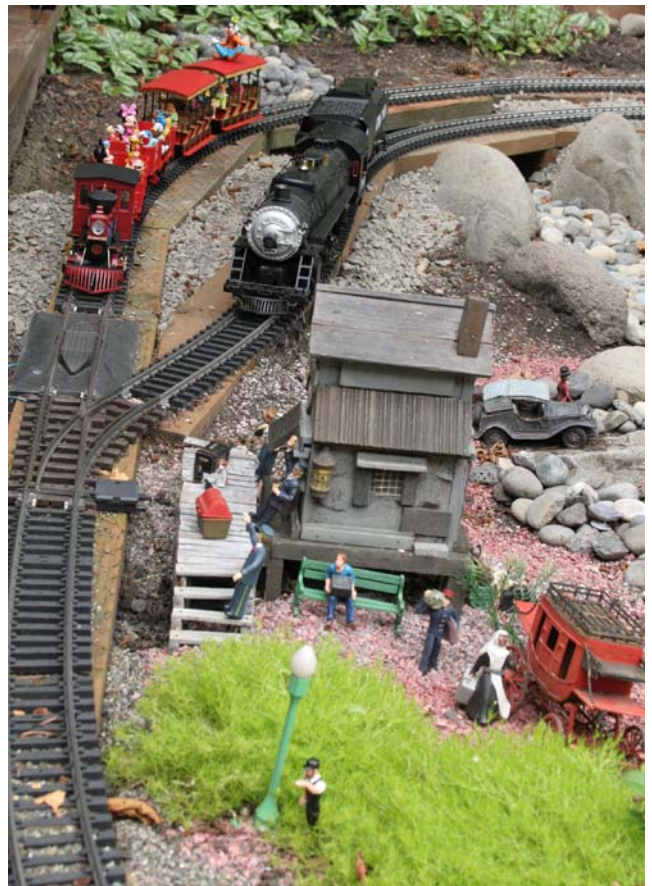
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Scenes from Quinn Mountain on August 18, 2007

Schedules & Timetables

Make sure you check the calendar on our Website at <http://www.rcgrs.com/> for the most up-to-date schedules and timetables.

It is the current Society's policy to attempt to have an event or open house on every second Saturday of the month. Other and additional dates during a month are also available and encouraged. Anyone interested in having an Open House or sponsoring an event, please contact **Christina Britain**.

April 12, 2007, Saturday, 1 to 5 p.m.: Open house at Dave and Margaret Kooker's, 7542 Carolina Lane, Vancouver, WA 98664; 360-695-0389 or dmkooker@pacifier.com. The Kookers will serve dessert, bread and coffee. Pot Luck: A to G main dish, H to M side dish, N to T salad, V to Z snacks.

Directions to the Kooker's:

From I-5 go east on Highway 14 or from 205 go west on Hwy. 14 to exit #4. Go north on Lieser Road (up a hill) to a blinker light at the top of the hill. Turn left for one short block on Macarthur. Turn right onto Miami Way which ends at the Kookers. Be cautious as some of the intersections have no stop signs.

April 28 through May 4, 2008: National Garden Railway Convention in Chandler, AZ. Approximately 50 garden railroads in the Phoenix-Tucson area will be open for touring. There will also be clinics and presentations, live steam tracks, and the many vendors and manufacturers present.

Email: registration@ngrc2008.org

WEB site: www.ngrc2008.org

May 17, 2008, Saturday: Open house at Ron & Merlene Bacon's, 31262 SW Laurelview Road, Hillsboro, OR. 503-628-2300, [mbacon@centricata.com](mailto:m Bacon@centricata.com)

June 14, 2008, Saturday: Harvey & Arlyn Becker, 2497 NW Todds Crest Dr., Bend, OR. 541-383-1864

June 21, 2008, Saturday, "Railroads in The Garden", RCGRS summer tour. Bill Derville is chairman for the tour. It is expected that there will be at least eight railroads open to the public tour this summer. The tour books will still be \$10 per family (or carload) and are expected to be available by May 20th at the same hobby shops and garden centers as last year. In addition to the hosts/hostesses for the garden railroads open for the tour, usually 3 or 4 helpers are needed for each site to help run the trains and for crowd control. You are all needed to help with this event.

July 12 or 13, 2008: Bill & Brenda Derville, 930 NW 170 Place, Portland, OR. 503-645-1771, bderville@generaltool.com

August 9 or 10, 2008: Dr. John Stiger, 15195 SE Thornton Dr., Milwaukie, OR. 503-653-9767, johnstiger@comcast.net

August 24, 2008, Sunday: Open house at Judith Hinnimon's, 4770 SW 98th, Beaverton, OR 503-646-1288

September 13, 2008, Saturday: Jeff and Dianne Lange, 5220 NW Cherry Street, Vancouver, WA. 360-696-0799, jeffdlange@comcast.net

October 25, 2008, Saturday: Annual Ghost Train Event. Plan now to decorate a car or locomotive (or train) with a ghoulish delight. Make sure your design will pass through a typical bridge or tunnel. The railroad is track powered. Open house at Bill and Jean Dippert's; 2650 NW Robinia Lane, Portland, OR 97229. 503-646-9783, bandjdippert@zcloud.net.

December 2008, Friday: The day will depend on the schedule of the Christmas ships. Jan & Rae Zweerts are hosting an open house. Their houseboat is at Jantzen Beach, The Christmas ships will be sailing past their house that same evening. Jan's European railroad which is on a floating deck next to the houseboat will be in operation.

Editor's Note: The deadline for the May 2008 newsletter is April 25, 2008.