The Willow Creek Gazette

Willow Creek Railroad Museum Summer 2020

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This Year @ The Steam-Up "Drive By"

Steam-Up time is almost upon us and with the COVID issue going on this year's Steam-Up is looking quite different. APMA and the rest of the partner museums are doing a drive through, similar to the July 4th one - with one BIG difference -- we have been given permission to give rides...!!!!

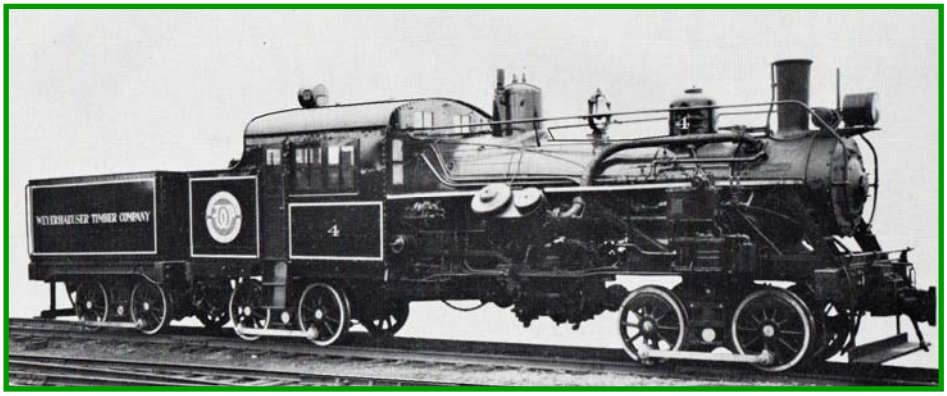
However, this poses some difficulties on our part. We will be loading and unloading at the South Party gate, trains will need to be sanitized between groups of riders, any operators and riders will be required to wear face masks, and those working directly with the public will be required to also wear gloves. APMA has adopted these rules and we need to abide by them and we need to as well. If you are not any closer than 6-7 feet from someone, you don't have to wear a mask and this is the only time.

The Rant

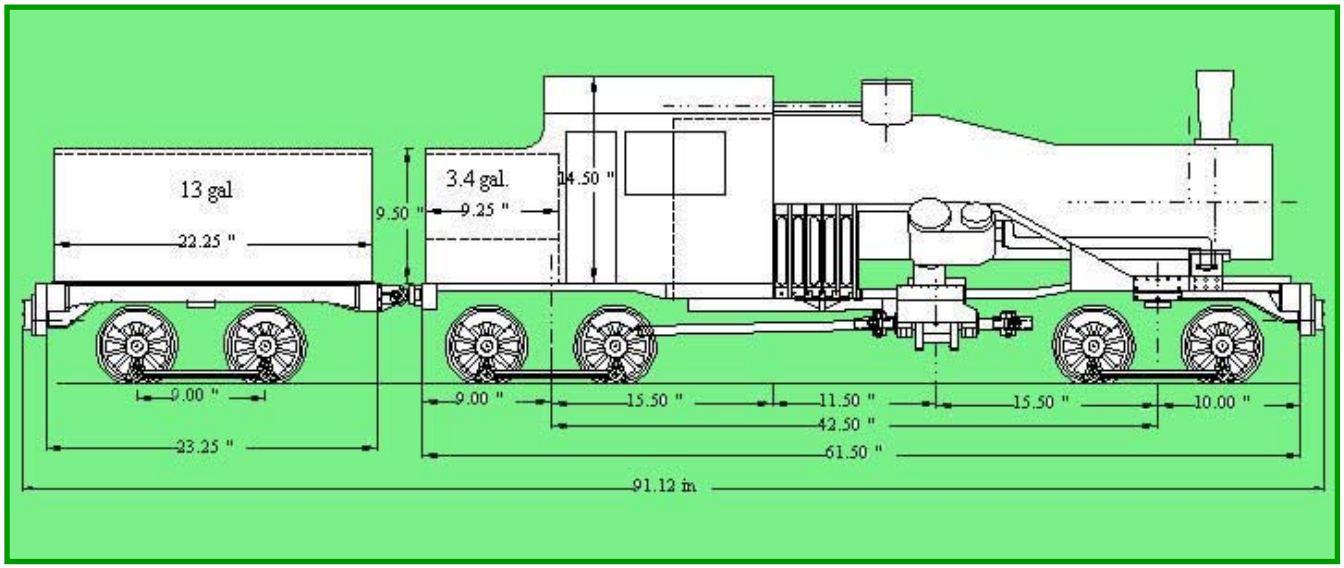
Unfortunately there is not a lot of activity at the Willow Creek Railroad this season.
This does not mean our members are also inactive. In this issue there are several articles on our member's construction projects.
Dick Hofsheier is constructing a Heisler Logging Locomotive.
Frank Lertora and Mark Adelblue have each completed "old school" wooden refrigerator cars.

The "*Electric*" Heisler

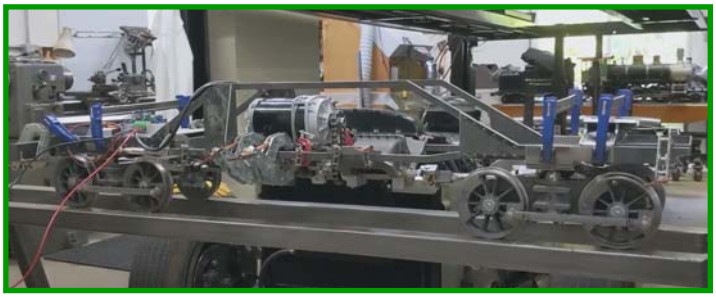
by Richard Hofsheier



This engine was Heisler's answer to the Lima "Pacific Coast Shay". The "New Class 90 West Coast Special" was introduced in the late 1920s.

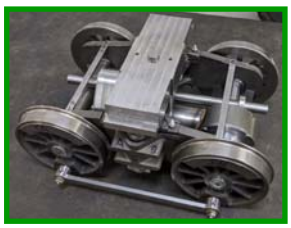


Above are the dimensions for the scaled model.
The scaled frame, motor and chain drive under construction & testing are shown here.

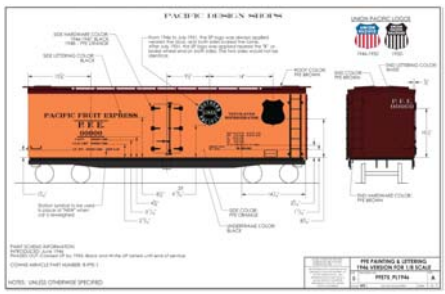


The electric motor.

Power to the truck is delivered to one axle and power to the second axle is via the connecting rod.



Tale of Two Refers ~ Frank Lertora & Mark Adelblue




The Plan and The Pieces

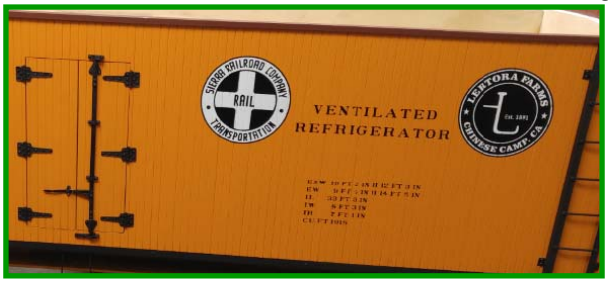


The Assembly



The Painting

The Detailing



Tale of Two Refers

Thank you to Frank and Mark for providing these pictures of their recently completed cars.

This photo of an actual full size car is at the California State Railroad Museum.

The Roundhouse Interior is Closer to Completion!


Feb. 21st: Sheetrock & Supplies Delivered.


May 29th: Framing "Adjusted".


May 29th: First rock applied


June 5th: Continued Sheetrock


June 12th: More Sheetrock


June 19th: Sheetrock nearing completion


June 20th: Corner Trim Installed.


June 26th: Tape Joints


July 3rd: Second Coat


July 4th: "Hot Mud" Fill


July 10th: Spray Texture


July 11th: Texture Completed


July 12th: Ernie Painted
(also the roundhouse interior)


July 12th: Trim Boards for Posts and Windows


July 17th: Post Covers Completed

The ~*Wig~Wag*~ Wags Again

From Wikipedia: "Wigwag is the nickname given to a type of railroad grade crossing signal once common in North America, named for the pendulum-like motion it used to signal the approach of a train. It is generally credited to Albert Hunt, a mechanical engineer at Southern California's Pacific Electric (PE) interurban streetcar railroad, who invented it in 1909 for safer railroad grade crossings."



This signal was installed in 2012. Erika is seen here painting the pole. It had all the pieces installed as seen in this 2013 view. Well, not quite complete. The wiring was not installed so it was a nice inactive display waiting for activation.

James, Jesse and Alan on June 19th are cleaning the signal and getting ready to activate it.







This sequence shows the inner workings of the signal mechanism. The earliest patent date is 1913 and the last indicated is 1914.

June 20th: Alan installs conduit for remote activation of the signal.
July 3rd: The crew installs more conduit and wiring for the signal.



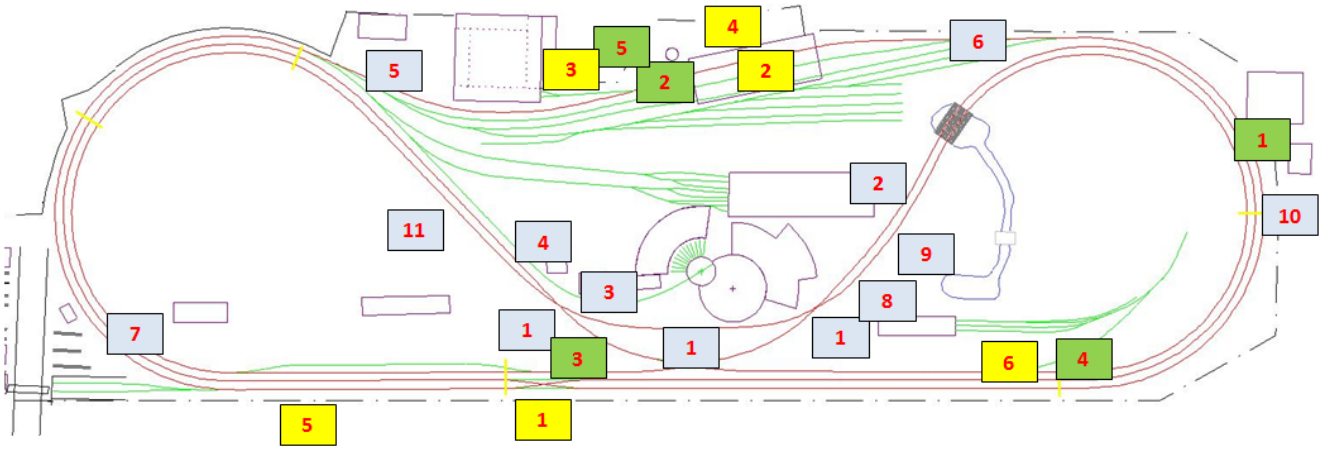

The Wig-Wag Signal is now operational. It can be activated in several ways. 1) A passing train on track one can operate the signal. There is a built in delay of 10 minutes between train activation. This is the default mode of operation. Activation by every passing train was considered "too much of a good thing". 2) The signal can be activated by a person entering the station on weekends. This was to alert operators that people may be waiting for a train ride. This would be used on days when the station is not operator occupied. The bell can be heard over a long distance. 3) The signal can be activated at a set interval.

The controller for the wig-wag is located in the west end of the ICP tunnel.

The Signal System Update

by Alan Shifley

Willow Creek Railroad Signal Projects
July 2020



Completed 2019-2020

1	Yard SLO Flashing Warning
2	Tunnel Siding Turnout Auto-Return
3	Johnson Siding Turnout Auto-Return
4	Industrial Lead East Delayed Auto-Return
5	Wig Wag Signal

In Process

1	Double Crossover Loops Reliability
2	Station Sign and Clock Floodlights
3	ICP Front Floodlights
4	Station Semaphore
5	Loading Ramp Realignment
6	Test WKV Turnout Motor

Future

1	3-Way Crossing Loops
2	Car Barn Crossing Signal
3	Roundhouse Lead-Occupied Signal
4	Roundhouse Lead Campers Xing Signal
5	Yard West End Turnout Motors
6	Yard East End Auto-Route
7	Digital Speedometer
8	Industrial Lead West Auto-Return T.O.
9	Hot Box Axle Counter
10	Gateway Signals
11	Change Party Switch to Timeout

Willow Creek Railroad Signal Projects
June 2020

Projects In Process

1 Improve the reliability of the Double Crossover loops. Proper operation of these loops is critical to the operation of the Double Crossover. Bypass switches have been installed on the middle and trailing loops as a means of continuing train operations ir case of loop failure. Experimenting with different loop configurations and lead wires to determine best reliability.

2 Station Sign and Clock Floodlights: Add low-power floodlights to the signs at the end of the station and both sides of the station clock.

3 ICP Front Floodlights: Add two low-power floodlights to highlight the signs on the front of the ICP. Mount the floodlights at or near the top of the wig-wag signal.

4 Station Semaphore: Get the Station Semaphore operational.

5 Loading Ramp Realignment: Move and/or remove signals, track circuits and detector loops as necessary to accommodate the project to rebuild the loading ramp.

6 Test WKV Turnout Motor: In conjunction with new short-point turnouts, test a Willamette and Kings Valley turnout motor to see if these could be used to supplement the WCRR turnout motors.

Boiler Testing ~ July 4th, 2020

Willow Creek annually provides the opportunity for the steam engine operators to have their boilers pressure tested and a certificate of acceptance issued. This is a safety requirement of our operation. Our certificate is recognized by other railroads and allows them to operate there.

The testing process consists of completely filling the boiler with water. The engine is then fired up to warm the water. The two required pressure relief valves are removed. One is plugged and the pressure pump is attached to the other. Here James applies pressure while monitoring the gage on the pump. It does take quite an effort to bring the pressure up.

Here Garry pumps up the pressure on his engine.

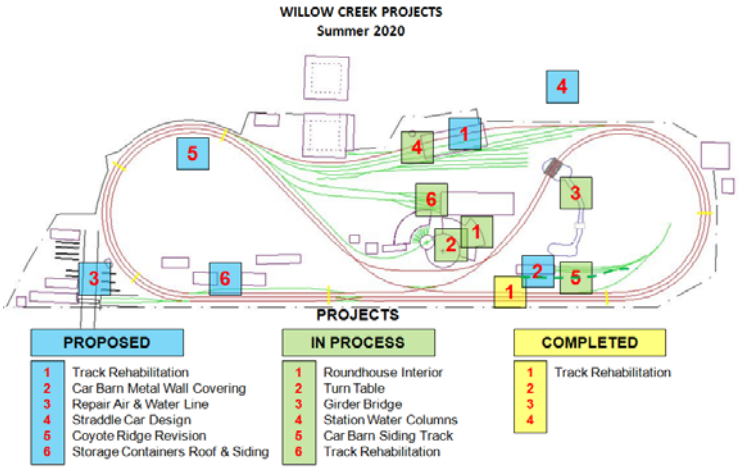
The smoke box cover is removed so the flues can be observed for leaks. Here Phil looks into the smoke box with a flashlight to observe any leaking flues. The required test pressure is 200 pounds per square inch which is twice the 100 psi rated boiler pressure. For safety, two pressure relief valves are required. One relief valve is set at 100 psi and the second at a slightly higher setting. On occasion you may observe escaping steam from a running engine.

Alan has added a new control panel to his Willamette & Kings Valley steamer. The GPS is not so much to show his location but to act as a speedometer. He added that the main use of the USB port is to provide power for his phone to control and monitor his GoPro camera.

July 4 & 5th "Drive By"

Mark went to the BOG meeting July 16th and found out that everyone involved thought that the drive thru during the 4th was a success. There were over 100 cars (did not provide actual count) and we were presented with a check for $105.00. ...

Update ~ Current Willow Creek Projects



Here is the status update on our current projects. Alan gives the progress of his projects on a separate page.

A Glimpse of History: Order of Railway Conductors

Railroad conductors coordinate the daily activities of train crews. A freight train conductor also oversees the loading and unloading of cargo. The job can involve working on trains that cover long, national routes, or it might involve working on trains that operate only locally or regionally.
The Order of Railway Conductors of America (ORC) was a labor union that represented train conductors in the United States. It has its origins in the Conductors Union founded in 1868. The first Conductor's Union was formed in early 1868 at Amboy, Illinois, by a group of conductors on the Illinois Central Railroad. Soon after another division was formed at Galesburg, Illinois, by a group of conductors from the Chicago, Burlington and Quincy Railroad. The two groups met in July 1868 at Mendota, Illinois, and formed the "Conductors Union", which was to organize conductors across the country. On December 15, 1868 the group met at Columbus, Ohio, where they elected the leaders to form a "grand division" and adopted a constitution and bylaws. Later it extended membership to brakemen. In 1969 the ORC merged with three other unions to form the United Transportation Union.