



- Santa Trains 2018 -

- Eugene Vicknair

The Museum's Santa Trains wrapped up just 4 days before Christmas this year. Except for one day with high winds and a little rain, we had cold but clear weather for the event and very enthusiastic attendees.

Ethan Doty did the lion's share of decoration, with a few other volunteers helping out to place over 11,500 lights on our caboose train and decorations around the museum. Southern Pacific GP9 2873 pulled the train that consisted of cabooses Denver and Rio Grande Western 01414, Union Pacific 25283, Sacramento Northern 1642, Missouri Pacific 13878, Rock Island 17174 (former UP 24592), UP 25732 and SP 4706 "Christine".

Car counts for each day were:

Saturday, 12/8 - 113	
Friday, 12/14 - 33	Saturday, 12/15 - 190
Friday, 12/21 - 71	Saturday, 12/22 - 180
Total - 587 cars	

Our volunteers and staff kept things moving. In addition to running the trains, we also had members working the gate, handling the Museum Store, handing out cookies and hot drinks and just making sure everything was kept in motion. A huge thank you to EVERYONE who pitched in and made the 2018 Santa Trains another success. Almost all of these people were at all five events and the others made at least one night each weekend.

Major kudos go to Operations Superintendent Loren Ross for his top-notch management of

train crews, car attendants, and crossing guards; and to Vice-President Greg Elems for roving supervision as he documented the event with photography. Loren, Greg, Ethan and Erik McKay also made trips to replenish supplies several times, sometimes on short notice. Special thanks to Eric McKay who donated \$100 toward the Santa Trains.

Those who worked the event include:

Steve Habeck, Mary Habeck, Kathy Errecart, Zayden Errecart, Kevin Errecart, Jennifer Harley, KC Dunn, Jean Danielson, Tajanae Yager, Ali Doty, Ethan Doty, Loren Ross, Charlie Spikes, Greg Elems, David Elems, Vickie Krois, Eddie Powell, Janet Steeper, Bil Jackson, Bart Hansen, David Hansen, Fred Elenbaas, Eugene Vicknair, Craig Simmons, Kevin Ross, Barbara Jackson and Duane Vander Veen.

As they have done at Santa Trains for the last 20 years, Santa was played by Dave Rudolph while

(continued on page 13...)



2019 FRRS Election

Three seats, presently being held by Bob Sims, Roger Stabler and Janet Steeper, are available for the June 2019 FRRS election. Nominees must be FRRS members in good standing at the time of nomination. Nominations are open until January 31st, 2019

Please see the Membership web page for more information on nominating yourself or someone else.

-THE TRAIN SHEET-

Issue 179 - November/December 2018
 Published January 14, 2019
 News from the Feather River Rail Society and the
 Western Pacific Railroad Museum at Portola

Editors - Matt Elems & Paul Finnegan
 Email: trainsheet@wplives.org

Contribution Deadlines: Last Day of March, June,
 September and December.

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FEATHER RIVER RAIL SOCIETY
WESTERN PACIFIC RAILROAD
MUSEUM at PORTOLA

PO BOX 608, Portola, CA 96122-0608

Museum Phone: (530) 832-4131
 Fax: (530) 832-1854

The museum is open:

April: Thursday - Sunday

May - September: Daily

October: Thursday - Sunday

Hours: 10 - 5, weather permitting.

If you wish to visit during the closure period, it is
 advisable to call in advance
 and find out if the museum will be open.

Entrance to the museum for members is free. Non-
 members are required to pay an admission fee, details
 are inside this issue on the inside of the back cover.

The Feather River Rail Society, a tax-exempt public
 benefit California corporation, is the historical society for
 the Western Pacific Railroad and operator of the Western
 Pacific Railroad Museum in Portola, California.

**The FRRS is not associated with the Union Pacific
 Railroad.**

FRRS Tax ID number is 68-0002774

Member of the Association of Railway Museums and the
 Tourist Railway Association, Inc.



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- WEB PAGES of INTEREST -

FRRS Official Site	www.WPLives.org
CZ Virtual Museum	calzephyr.railfan.net
California Zephyr	californiazephyr.org
Western Pacific Pages	www.WPLives.com
WP Virtual Museum	wpmuseum.railfan.net
Tidewater Southern Pages	www.TidewaterSouthern.com
Central California Traction	www.trainweb.org/tractionco

– NOTICE TO ALL FRRS/WPRM VOLUNTEERS –

Background Screening for Volunteers

- Kerry Cochran, General Superintendent

Background screening or getting a background check, I'm sure you have heard these terms before.

When you apply for a new job this is the now normal for any applicant when looking to be hired by most firms or companies, public or private.

The Feather River Rail Society is concerned about the safety of its volunteers, constituents (staff, community, etc.) and the protection of its assets and reputation. To address these concerns volunteers of Feather River Rail Society must undergo background screens, which shall comply with the Fair Credit Reporting Act ("FCRA"), in order to volunteer with the Feather River Rail Society.

Why now? There have been questions asked about our society and the museum, along with our insurance company asking each year on the renewal of our insurance policy.

Earlier this year more questions were asked, so I contacted several other museum to see how they handle this subject. Each that I contacted told me basically the same thing, you better be doing it or you may end up with a problem on your hands.

With some of this information in hand, a new Feather River Rail Society Policy was created and sent to the FRRS Board of Directors for consideration. After the legal team reviewed and approved the policy, it was brought to the FRRS Board of Directors at the May 12th meeting and approved.

During the time the policy was being reviewed by legal, we had selected a background screening company and entered into discussions with them. Working with the legal team and the background company, we selected Verified Volunteers as the third party to conduct our background screening.

Verified Volunteers is an independent third party that conducts background screens ("Background Screener"). Information on Verified Volunteers can be found at:

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

No background check will be run without your prior knowledge and consent. The personal data and information collected from the background screening will not be used for other purposes and shall be securely stored, and access is available only to the FRRS background administrator. Storage is held on a secure site of Verified Volunteers.

This Policy applies to all prospective and current volunteers, actively working at the museum, on any of the FRRS off-property events and every member who represents the FRRS.

Full details are detailed in the society policy PM0033 - Volunteer Background Screening available to all members. It can be viewed on the society's website:

https://www.wplives.org/museum_policies/PM0033_Volunteers_Background_Screening_Policy.pdf

An invitation will be sent to each volunteer that will need to have a background check performed and the volunteer will be able to give Verified Volunteers that information needed so that they may perform the check.

(continued next page...)

In this invitation you will see the following message:

<Your Name>

This is your invitation to provide the FRRS with your background check which is required to volunteer at the Feather River Rail Society and/or the Western Pacific Railroad museum.

Please follow the Verified Volunteers instructions to submit a background check, we are asking that each volunteer (donate) the \$19.00 cost for the check. Should you have any questions, please contact me.

The FRRS Policy for background screening can be found by going to:

https://www.wplives.org/museum_policies/PM0033_Volunteers_Background_Screening_Policy.pdf

Thank you,

Kerry Cochran

General Superintendent

The volunteer manager will review the report provided by the background screener and determine if any negative information has a direct connection with an applicant's ability to fulfill the volunteer's duties with competence and integrity, or that might impact safety.

Background check findings shall be reviewed in a fair, impartial and confidential manner. Because the Feather River Rail Society priority is the safety of the members, staff, volunteers and guests, certain convictions for certain crimes serve to automatically disqualify applicants for volunteer service at the Feather River Rail Society. For example any position that involves working with children will automatically disqualify a volunteer who is a convicted sex offender. A person will be ineligible for volunteer service if the person:

- (1) Refuses to consent to a background screen.
- (2) Makes a false statement in connection with a background screen.

Verified Volunteers will communicate with you during the background process and once you have created an account with them you will receive email updates.

Any questions or special considerations concerning this policy should be directed to the volunteer manager or the general superintendent.

Reflections of the Western Pacific (part 5)

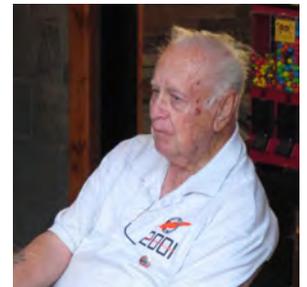
- Jack Palmer

I made several visits to the Niles (now Fremont) Station and its small storage yard to take pictures of the WP equipment and on November 27, 1981, was pleasantly surprised to see Al Hill whom I met previously in April 1980, when he was the Trainmaster at Oroville.

We had a great time recalling our first meeting and his words of advice in response to my request to go into the yard for pictures and also my ridin' the rails' from Oroville that day up to Portola and eventually Salt Lake City and return. He also informed me he would soon be

reassigned to Milpitas and that we should keep in touch. (I'm thankful we did)

After his move to Milpitas he would occasionally call and tell me "Bring your camera Saturday, I have something to show you". That was September, 1983, and only a few WP units remained in service and their days were numbered so he kept GP-7's numbers 708, 709 and 711 and GP-9's Nos. 715, 728, 729 and 731 long enough for me to get their pictures while



still in WP colors. After that, he was promoted to Ass't. Terminal Supt, Stockton.

One day I told him I would like to go to the Union Pacific facility at North Platte, Nebraska, to take pictures of WP units as they were going through the process of changing their colors to the Union Pacific, and had written to the local U.P. office for their consideration.

In our several conversations after that he asked if I had received a reply to my request, until one day he called and said: "Start packing your bags – I received authorization for you to go to Salt Lake City and North Platte!" This came as a total surprise because I had not asked for his assistance, nor had he even once hinted that he would become involved with my request. I don't recall my response in expressing my appreciation, but I was sincerely grateful for his assistance.

Upon completion of all my arrangements, I wrote to Ex-WP Engineer Bob Smith (who I met in 1980) to inform him of my plans and that I would leave Oakland April 8, 1984, on Amtrak, and the possibility he might be at the controls when we arrived at Salt Lake City.

He was indeed the engineer and was waiting to greet me and then took me up into the cab for a quick look. We had but a brief visit because I was scheduled for a 7:00 a.m. appointment with the Shop Superintendent.

I then met with Mr. William Cocking, Shop Supt., who promptly gave me a personal tour and told me that he did this occasionally for school children as an introduction to the Union Pacific, some of which might become employees in the future.

I first noticed the U.P. Centennial No. 6929 as it was lifted up off its trucks and hoisted up to the roof by the shop Crane and barely clearing the end walls of the shop. (THAT was impressive!)

I took several photos of the "Reno Runaways". WP GP-35 No. 3014 was seen partially assembled by parts salvaged from other locomotives. The WP GP-35 No. 3020 was located outside the shop

waiting its turn and the WP Derrick No. 79 was being serviced.

I then went out into the yard area and took pictures of six WP Cabooses and the remainder of the WP Dead Line.

I left early the next morning and arrived at North Platte April 11, 1984, and was happy to see my car rental was waiting for me.

As I approached the entrance to the Union Pacific's Bailey Yard I was amazed at the sight of this huge facility because it is seven miles long – the largest in the U.S. I immediately realized it would be necessary to develop a plan where I could take pictures of each area separately during my visit.

I first noticed two "slugs" on the track nearest the parking area and went into the yard office where I was greeted by Mr. Berney, Trainmaster, and then directed to Mr. Tom Allred, who after signing my "Release of Liability" form, provided me with my Visitor's I.D., Hard hat and Safety glasses. I was then instructed on the Safety Practices to be observed while on their property.

Mr. Allred and I drove out to the West Hump Yard and Bowl and watched the operator of the computer as it classified each newly arrived box car at the top of the hump and sent down to one of fifty tracks in the bowl to its designated track to become part of a new westbound train. (There's an East Hump too.)

We then went to the "One Spot" which is a small shop building where they repaired Freight Cars. We next visited the Paint Shop which is attached to the north side of the Diesel Shop Building. There is but one rail and is long enough to accommodate two locomotives. And what a sight to behold when we went into the Diesel Shop. There are eleven tracks in this shop and all were occupied. I thanked him for the tour and left for lunch and checked into my motel.

I reviewed a booklet prepared by their Public Relations Department at Omaha, and learned that the Diesel Shop here installs new or rebuilt parts and that parts needing major rebuilding

are sent to Omaha.

When I returned that afternoon I pursued my original plan of following the WP locomotives as they were being processed to meet the requirements of their new owner. I was informed that the WP units were initially prepared in the Diesel Shop. I soon located the WP 3508 and noticed the Nathan M-5 horn was removed and placed in a basket with others and the number boards also removed, and was being checked by shop personnel. It was then washed and allowed to dry before being sent to the Paint Shop. I then began taking pics of my surroundings and was impressed to see such an efficient modern shop.

All eleven tracks were surrounded by concrete platforms built up to the height of a locomotive's frame and tools and parts within easy reach at each work station and bins provided for the parts being discarded. Ramps were found at the ends of the shop that led down BELOW track level (rather than pits) and noticed that the locomotives and rails were supported on a large number of pedestals, allowing for clearance all around for any work to be performed. Here too, everything was within easy reach. I also particularly noticed nothing was found loose laying on the floor on either level. It was fascinating to see all the work being performed on such a large number of units all at one time until 4:00 p.m.

At exactly 4:00 p.m. each day, bells would continue to ring and warning lights flashing while all the Diesel Shop doors opened for any movements to be made or around the shop at that time, and that time only.

The WP3508 was moved over to the Paint Shop at that time and the Paint Gang would take over the next morning.

After masking all the glass inside and outside of the cab, the paint gang donned their protective gear and climbed up onto the platforms which were mounted on an inverted "U" shaped unit mounted on wheels that ran on tracks located on both sides of the engine and began painting the interior of the cab Beige color and then

continued painting the in-side of the doors to the entire hood. When dried, they applied primer to the entire exterior, which looked like "red lead" in appearance.

Another employee came into the shop next morning, laid a chalk-line the length of the hood and applied the lettering to both sides and finally the wings on the front and shield under the cab window.

Then the Paint gang applied all the yellow and when dry masked it in preparation for the gray. When the gray was finished, they removed all masking and then painted the trim and mounted the new number boards, now U.P. No. 657. Scotch-lite was then applied around the frame.

WP GP-40 No. 3514 and WP GP-35 No. 3015 were next and I took photos of all three going through the process and becoming additions to the U.P. Fleet.

The Paint Gang allowed me to assist them in applying the Scotch-lite to the 3015 (now U.P. 794) and cleaning the glass on the headlight. (A kiss goodbye?)

Whenever time permitted, I would go out to other areas to photograph and acquired shots of seventeen Centennials out at the East end and other U.P. units outside the doors of the Diesel Shop at sun-down. During my visits to the four-track servicing area I took pics of MP, CNW, BN, NS, NW, MK, MIL and MKT units, and night shots from the towers, one of which was WP GP-40 No. 3553.

The day before leaving I was paged over the P.A. system to report to Mr. Robert Gay, District Foreman, and was assigned Fireman on Centennial No. 6938 as we negotiated several moves over to the East Ready Track.

Before leaving August 19, 1984, I met with Mr. Berney, and expressed my appreciation for the privilege of allowing me to take photos from down in the "Pits" to up in the yard towers and everything in between, and also for my "Visitor's paraphernalia". I then drove down to McCook and caught the Amtrak for home.

What the heck is an injector?

- from *THE WPRR COMPANY THE DIESEL ENGINE OPERATING DEPARTMENT TRAINING MANUAL*

The fuel system, often referred to as the heart of the diesel engine, squirts the proper amount of fuel into the cylinder at the proper time. The most important part of the system is the injector, which measures out the right amount of fuel, injects it into the cylinders under high pressure, and reduces it to a fine spray.

In the four-stroke-cycle engine, air is drawn into the cylinder through the intake valve as the piston descends on the intake stroke. The intake valve then closes and the piston goes up on the compression stroke, compressing the air within the cylinder. Fuel is injected through the injector while the air is compressed, and combustion occurs. The combustion, with resultant pressure, drives the piston back down on the power stroke. The piston rises again on the exhaust stroke and expels the air through the exhaust valve, a process called scavenging,

Piston action in the two-stroke-cycle engine is basically the same. A difference in scavenging accounts for two strokes rather than four. Air entering the intake port pushes the oxygen-depleted air, left from the previous combustion, out through the exhaust valves. The compression stroke then occurs. Air ordinarily enters the cylinder at atmospheric pressure. The amount of fuel entering the cylinder is therefore limited because it has to be related to the amount of oxygen available to mix with it. If too much fuel enters the cylinder and is left unburned, it settles on the cylinder wall and piston and dilutes the lube oil film. This prevents a tight fit and causes leakage of air and loss of power. Therefore, the amount of entering fuel must be carefully regulated. Also, it must enter the cylinder so that the first fuel entering begins burning before the rest of the fuel enters, providing gradual, even combustion. If all the fuel enters the cylinder before ignition begins, it all burns at once, explodes and a loud knock from the explosion, called combustion knock, occurs.

A pressure-charged engine provides a method of putting more air, more fuel and resulting greater power into the cylinder. By this method, sometimes called super- or turbo-charging, power can be increased 50 percent in a four-stroke engine and 35 percent in a two-stroke engine. Extra air is made to enter the intake valve or intake port by compression. A number of air-compressing devices have been used to furnish supercharging air. The kind most commonly used on diesel-electric locomotives is the turbine compressor, operated by a gas turbine in the exhaust system. It is the most logical place for this turbine because a great deal of energy is wasted through exhaust of burned gases. Heat balance figures show the loss to be as much as 40 percent of the energy liberated from the fuel by combustion. This energy is captured to run the turbine which is connected to the compressor that delivers air under pressure to the engine.

Fuel Injectors Status at WPRM

Our Mechanical Department has been dealing with fuel injector issues recently. This is a summary from acting CMO David Elems' August report to the board of directors.

WP 917D - Leaking Injectors: Eleven of sixteen injectors leak at the main body seal just as we had with the injectors in WP 2001. Two of the eleven are very bad, but two or three out the other nine leak excessively. The fuel contamination by the end of this season will likely put the locomotive out of service for next season unless a full oil change is done due to the fire/explosion hazard. Changing of injectors would need to be done to prevent further contamination.

Like what we did with WP 2001 last November, I recommend that all sixteen injectors be replaced, oil filters replaced and the crankcase be drained and new oil added. Due to the nature of the contamination being a fuel leak, the engine does not need to be flushed, but inspections of the main bearings and crankpin and bearing will need to be done. Assuming that we are able to purchase injectors at \$128

per unit and the price for a 55 gallon drum of oil stays in the \$900 range, we are looking at around \$6000 dollars for all injectors and 2/3 of a crankcase worth of new oil (four drums.)

WP 707 - Leaking injectors: Nine of sixteen injectors leak at the main body seal. At the moment the oil hasn't been contaminated beyond use provided enough fresh oil is added when the crankcase level is topped off. I recommend not using the locomotive until it has a full injector replacement. Otherwise, we will run into the same safety issues with fuel dilution like the one we had with WP 2001 (until last year) and WP 917. A full set of sixteen injectors will run about \$2400 assuming a unit price of \$128 each plus the shipping.

Note from the editors...

- Paul Finnegan

At the October 2018 FRRS Board Meeting, it was decided to change the publication schedule for the Train Sheet. Starting in 2019 it will be a quarterly publication. The new submission deadlines will be the last day of March, June, September and December.

2018 RAL Report

- Ethan Doty, RAL Scheduler

	2017	2018
April	9	7
May	12	15
June	37	30
July	36	36
August	26	26
September	33	14
October	12	10
November	0	2
Total	165	140

Previous years:

- 2016: 131
- 2015: 153 (1857 pulled out end of season)
- 2014: 157 (1857 entered service)
- 2013: 119 (608 ended service, it was listed but not run)
- 2012: 158
- 2011: 174



Help wanted - WP Headlight

- Kerry Cochran

The Western Pacific Headlight Magazine is looking for new writers and people who love the Western Pacific to help us boost the variety of stories publish through our Headlight Magazine.

We're looking for:

Writers and reporters with experience, story-telling ability, curiosity, and a willingness to be part of the Headlight staff.

What's Needed:

- A passion for Western Pacific railroading in all its forms.
- Experience meeting deadlines and staying calm under pressure.
- Eagerness to take assignments from editors and to "own" topics of special interest.
- Ability and willingness to learn and use the latest technology available to for digital publishing.
- Demonstrated skill in writing and photography gathering and digital production.

Compensation:

This is an all Volunteers run process and magazine (No pay, No salary)

How to apply:

Send an email to the editors at:
www.wplives.org

In your email message, tell us in a few paragraphs why you think you would do well working with us.

Please make sure to tell us your full name, home location, and how to contact you.

Headlight editors will contact the applicants they believe will best fit the magazine's needs.



Things Around the Museum – USA Ammo Car

- Paul Finnegan

This unusual car has a complex and interesting history. It started out as a US Army ammo car, declared surplus and was then used for payroll and MOW service. It ended its commercial life as an outfit car for the Clover Valley Lumber Company.

It was built in April 1919 as an artillery fire control car for use with one of the big railway guns built during WWI. The car probably had wood siding when built (Texas State Railroad Museum has similar cars with wood siding). The car was later rebuilt with steel sheathing and has trucks built in 1936.

In U.S. Army service, it carried the number ODKX 2. It was probably declared surplus, purchased by a railroad equipment dealer and sold to Clover Valley Lumber Company. The car was used in log trains hauling loggers and supplies to the logging camps in Clover Valley. It may also have been used as a bunk car in remote areas. In that service, it was known as a "cootie car."

The car was donated to the Feather River Short Line Railroad in 1958. The Feather River Short Line Railroad was a non-profit corporation organized to preserve logging equipment from the area. The car was moved to Quincy and stored on the Quincy Railroad. Eventually it was retired and placed on static display at the Plumas County Fairgrounds.

When our museum was getting started, we invited the FRSL to move its equipment to Portola. After several years with us, the outfit car was moved back to Quincy for storage. Because of a need to use the storage space for other purposes, the car was given to the Sloat Mill Company and moved to a siding track at Sloat in 2000.

In 2001 the car was donated to the FRRS and moved to Portola again where she remains today.



USA Ammo Car - CLV Pay Car

- photo by Paul Finnegan

2018 Western Pacific Railroad Historical Convention "Where the WP Meets the Rio Grande"



Rob Spangler's Layout WP 8th Sub

The 2018 WP Historic Convention was held in Salt Lake City, one of the many events was a layout tour of Rob Spangler's Layout.

Rob's Western Pacific's 8th Subdivision is a photo-freelanced extension of the WP set in Utah in the 1978-1982 era. The layout is approximately 30 x 30 ft. The layout has been under construction for just over three years and is nearly 80% complete. It has come a long way from the tours of two years ago. Major progress has been made in the track and scenery area. Scenery and building details are outstanding. He has several levels and a lower deck staging yard. The mainline is nearly 100% finished along with the backdrops and fascia. Construction details include the use of structural backdrops to reinforce the 60-foot long serpentine peninsula, and octagonal helix. Rob has used codes 83, 70 and 55 flex track installed with caulk. Control is NCE DCC. (Photographs of the layout are on the next page.)

Rob Spangler's Layout of WP 8th Sub – Part of the 2018 WP Historical Convention

- photos by Kerry Cochran



Morton Salt



TOFC Loading



Yard and Industrial area



Cooper Siding Crew Office



Minion invade the layout



Grain Facility

Fairmont Motor

- as told by Charlie Spikes
to Paul Finnegan



We have in our collection a number of Fairmont equipment artifacts including speeders, a 1943 weed burner and the subject of this article - a Fairmont motor with double wheels and pulley.

The story goes that when the museum manager came to open the museum one day, the Fairmont motor was sitting at the front gate. No note or information was with it or ever developed. The manager put it in a boxcar.

Recently I got it out of the boxcar and started to work on it and see if I could get it running. Bob Sims stepped in to help by doing some computer research and contacting other museums for information about the motor.

It uses a model-T battery and magneto. The wiring on it is very simple. Hank Stiles showed me how to get the timing right and what parts of the fuel system need to be cleaned.

Using engine-starting fluid (ether), I was able to get it started and it ran for about ten seconds. I understand that it will run on regular gas with 2-cycle oil mixed in. (Per information from the West Coast Railroad group in Virginia City, the proper mix is 6 oz./gal.)



Fairmont motor with double wheels and pulley at the WPRM

- photo by Bob Sims

Catch the Early Train!

Get your Train Sheet by email and you will get it before the post office even receives it and it is in COLOR!
(and you save the FRRS money too!)

Send an email requesting email delivery to membership@wplives.org with your name and email address.



WP 501 Work Report October 2018

- Seth Adams



1. Attempted to flush diesel system to find fuel pump fuse blew each time pump was operated. Inspected pump and found fuel pump was locked. Removed pump head from motor and determined pump was locked while motor was able to freely spin. Disassembled pump, cleaned, and reassembled pump to find problem still existed. I believe water may have frozen in pump and bent something causing it to bind. Replaced pump with one from stock.
2. Reattempted to flush diesel system to find pump could not get suction. Reset emergency stop valve. No suction. Added fuel to bottom 1" of sight glass. Got suction and pressure to 20#. Primed fuel system to engine inlet by purging into bucket. Reattached fuel line to engine.
3. Cleaned and refilled oil bath air filters on air compressor.
4. Checked oil level and operation of oil level float on air compressor. Found in satisfactory condition. Will eventually change out oil with an R&O Turbine oil.
5. Filled sump and strainer box with 110 gallons of oil.
6. Topped off oil in governor.
7. Flushed and then filled cooling water system.
8. Attempted to start engine multiple times. Investigation revealed fuel rack was seized. Disassembled all fuel rack linkages to locate and found Cylinder5 injector to be stuck. Freed up injector and reassembled fuel racks. Rack moves smoothly.
9. Reattempted to start. No success. Adjusted fuel pressure relief valve at pump to get 40# on gauge. No success at starting. Disassembled outlet tubing from fuel return rail relief valve with fuel pump running. No fuel was found to be coming from relief valve. Removed relief valve. Primed system through valve. Took a fair bit of time to prime through engine. Disassembled, cleaned, and remounted relief valve. Large air pocket in fuel rails is thought to be to blame. Because this engine has no return flow sight glass, its impossible to determine if fuel is circulating through engine and back to tank, and whether any air is still in the system.
10. Started engine. Engine fires, and idles very rough. Does not want to stay running. Had to throttle up to keep it running. Ran for ~30 minutes while diagnostics were performed. Lube oil pressure was obtained, piston cooling pressure was made. At least 2 cylinders are not firing or misfiring. One or two cylinders have a pronounced knock. One cylinder accounts for 95% of the smoking upon cutout of injector. Successfully got locomotive to move ahead and back a few inches. Shutdown engine, drained cooling water. Leak on union from oil cooler pressure relief valve noted to be leaking steadily; will require tightening. Various coolant leaks at old rubber hoses noted. Governor seemed to operate sluggishly.

Seeing as fuel problems were the major issue of these past few days in getting the engine to run, I would reckon they are what are hindering the locomotive from running smoothly. My course of remedy would be to change the fuel filters again, have the injectors rebuilt, timed, and their racks set, and flush the governor with diesel, flush with oil, and then fill with oil. After this is performed, the locomotive should be ran for a few weeks, and then the oil drained, the sump mucked, the oil filter changed, and new clean oil filled. I would also change the oil in the air compressor and governor at this time. Operating crews should keep a close eye on lube oil pressures, especially since there is currently no low LO pressure safety shutdown switch installed.

The next thing to do is pull the injectors and sent them off to a shop for a rebuild. I've drained the coolant through the engine valve, the water pump casing, and the compressor heads, but take a second look before deep winter arrives to make sure.

Would YOU like to work on the Railroad? Join our Operating Department!

- Paul Finnegan, Crew Caller

The museum operates trains every weekend between Memorial Day and Labor Day. We also run our Pumpkin Express in October, Santa Trains in December and special event trains. If you have always wanted to have a taste of "working on the railroad", such as connecting air hoses, giving hand signals to the engineer and pulling pins on couplers, then this is your opportunity.



FRRS members (active and above) who would like to participate in the museum's train operating crews are required first to take a rules examination, sign a liability release and then to be instructed in safe operating procedures.

Two crew-training classes are scheduled for 2019. They are scheduled for Saturday, April 27th and Sunday, May 26th, starting at 10 am at the museum in Portola. You need only attend one day of training. Please use the "Join our Operating Department" link on the museum's home web page to register for the class day of your choice.

(Santa Trains...continued from front cover)

Mrs. Claus was played by Linda Knutson.

Cookies were supplied by:

Barbara Jackson, Kim Ross, Greg Elems family, Charlie Spikes, Mary Habeck, Ali Doty, Janet Steeper, Louise Dunbar, Mary Ann Vicknair, Eugene Vicknair and Leonard's Grocery Store.

Advertising was done by Big Fish Creations with help from Eugene Vicknair, Paul Finnegan and Greg Elems. Eugene also donated hand bill posters to accompany our large full color posters. These were placed around the Eastern Plumas and Reno areas by Patty Clawson, Greg Elems, KC Dunn and others. TV channel 2 in Reno ran a story on the Santa Trains before our final weekend and the Portola Reporter also featured the event in an article. Michael Clawson of Big Fish Creations took extensive photos and video for us to use in future

(continued on back cover...)

Museum Web Page Update – December 31, 2018

- Paul Finnegan, Webmaster

The Santa Trains ran again in December. I created a gallery of photos from the event and kept the news item web page up to date as things progressed.

Several new items have been added to the WPRM Photo & Video Gallery on the About Us pull-down menu.

The website has been set up for 2019 with the latest FRRS calendar and the sign-up tools are all updated for 2019.

Museum Sponsors

The Western Pacific played a major role in developing the economy of Plumas County and the surrounding region. The Western Pacific Railroad Museum is proud to be a part of that heritage and to hold a position in supporting the ongoing economic health of our community. We welcome the support of that community in return. Helping to preserve the Western Pacific is good for tourism, good for our regional culture and good for business.

We ask our members and visitors to support our business sponsors, companies who have generously contributed to the museum and its mission to preserve the Western Pacific family.

If you are a business owner, see how you can support the WP Museum, your community and improve your advertising and networking outreach through our sponsorship program. See www.wplives.org/sponsors_how_to_become.html to learn how.



H & R Block - David Hansen

2100 Main St, Ste. B, Susanville, CA 96130

Tel: 530-257-9339

Feather River Rail Society Event Calendar 2019

January - Museum Closed to the Public

- 1-31 Director Nominations open for 2019 elections
- 12 Board Meeting – 1 PM - Habeck Residence, Portola, CA
- 21 Martin Luther King Jr. Day

February - Grounds Clean-up

Museum Closed to the Public

- 9 Board Meeting – 1 PM – "Two Rivers" Woodland CA
- 11 Election – Candidates Statements and Payments due

March - Museum

Closed to the Public

- 4 Election Withdrawal Deadline
- 9 Board Meeting – 1 PM – WPRM, Portola
- 31 Train Sheet Deadline

April - Prepare for Operating Season

Museum Hours: Thurs - Sunday, 10 AM - 5 PM

- 4 Museum opens to public, Thursday-Sunday, 10-5
- 13 Volunteer Breakfast in the "Silver Plate" - 9 AM
Board Meeting – 6 PM – WPRM, Portola
- 13-14 "Get Ready for Opening Work Party" – 10 AM - 5 PM
- 15 Election Ballots mailed to membership by this date
- 27 Crew Training / Rules Exam – 10 AM

May - Prepare for Operating Season

Museum Hours: 10 AM - 5 PM daily

- 1 Museum Open Daily, 10 AM - 5 PM
- 1-5 Steam Department Work Session
- 2-5 Western Pacific Historic / NMRA Pacific Coast Region
Joint Convention – Sacramento, CA
- TBD RAL Meeting
- 11 Board Meeting – 1 PM – WPRM, Portola
Appoint Election Tellers
- 12 Mother's Day
- 24 Ballot Return Deadline – 5 PM
- 25 Operating Season Opens – Caboose Train
Operations
- 26 Crew Training / Rules Exam – 10 AM
- 27 Memorial Day

June - Museum Hours: 10 AM - 5 PM daily

Caboose Train Operations Sat-Sun

- 1 Board Meeting – 1 PM – WPRM, Portola
Members Dinner – 5:30 PM
Annual Membership Meeting – 7 PM
Election Results
- 16 Father's Day
- 30 Train Sheet Deadline

July - Museum Hours: 10 AM - 5 PM daily

Caboose Train Operations Sat-Sun

- 13 Board Meeting – 6 PM – WPRM, Portola
Installation of New Board

August - Museum Hours: 10 AM - 5 PM daily

Caboose Train Operations Sat-Sun

- 6-11 Hot August Nights
- 10 Board Meeting – 6 PM – WPRM, Portola
Appointment of Committees & Officers

September - Museum Hours: 10 AM - 5 PM daily

- 2 Labor Day – Caboose Train Operations
Operating Season Ends
- 14 Board Meeting – 6 PM – WPRM, Portola Calendar
Review
- TBD Steam Department Work Session
- 30 Train Sheet Deadline

October - Winter Prep Museum Hours: Thurs - Sunday, 10 AM - 5 PM

- 12 Board Meeting – 6 PM – WPRM, Portola Budget
Deadline
- 19-20 Pumpkin Patch Express – open: 10 AM - 6:00 PM,
trains: 1 PM - 5 PM departures
Evening trains on Saturday
- 26-27 Pumpkin Patch Express – open: 10 AM - 6:00 PM,
trains: 1 PM - 5 PM departures
Evening trains on Saturday

November - Museum Closed to the Public

- 9 Board Meeting – 1 PM – WPRM, Portola

December - Santa Trains

Museum Closed (except for Santa Trains)

- 7 Santa Trains – Gates open at 4 PM, trains begin 5 PM
- 13 Santa Trains – Gates open at 4 PM, trains begin 5 PM
- 14 Board Meeting – 1 PM – WPRM, Portola
Santa Trains – Gates open at 4 PM, trains begin 5 PM
- 20-21 Santa Trains – Gates open at 4 PM, trains begin 5 PM
- 31 Train Sheet Deadline / New Year's Eve

NOTE: All hours are subject to Weather Conditions. In particular, special events in October and December are WEATHER PERMITTING, as are Run-A- Locomotive availability. If you have a question about operations when weather is questionable, please call 530-832-4131 for the latest information.

- FRRS Membership -**Yearly Dues**

Associate \$25.00
 Active \$50.00
 Family \$80.00
 Sustaining \$150.00

Single Life Membership - \$1800.00

Family Life Membership - \$3000.00

Institutional - \$60.00 (annual membership for 501(c)3 groups)

Renew or change your information on
 the FRRS website! Go to:
<https://membership.WPLives.org>

These are the dues for the duration of one year, with Life and Family Life being a one-time payment.
 Five year payment plans are available for life memberships.

Associate memberships do not have a vote, receive The Train Sheet but not the Headlight and are for one person only.

Active memberships receive both The Train Sheet and the Headlight, have voting rights and are for one person only.

Family memberships receive both The Train Sheet and the Headlight, have two votes and include two adults and all minor children residing at the same address.

Sustaining memberships receive both The Train Sheet and Headlight, have voting rights and are for one person only.

Life memberships receive both The Train Sheet and Headlight, have voting rights and are for one person only for life.

Family Life memberships receive both The Train Sheet and the Headlight, include two adults and all minor children residing at the same address, and have two votes (one per member) for life.

Send all applications, renewals and address changes, including email changes, to:
 Feather River Rail Society - Membership Dept. - P.O. Box 608 - Portola, CA 96122-0608
 Address / email changes may also be sent to membership@wplives.org

Mission Statement

"The Feather River Rail Society is dedicated to the preservation, interpretation and education of the public, as to the history and people of the Western Pacific Railroad."

Mission Goals

To preserve and interpret the history of the WP, the "Willing People" as a vital link in the development of the rail industry on the West Coast, including the steam and diesel evolution, WP's influence in the passenger tourism industry, the impact of freight competition between neighboring railroads, and WP's influence in the lumber, mining and agriculture industry from Plumas County throughout California, Nevada and Utah.

WPRM Admission and Train Ride Fares for non-members (effective April 1, 2011)**Admission**

- Adults 19 and over... \$8.00
- Youth 4 - 18... \$4.00
- Child under 3... free
- Family... \$20.00
 (2 adults plus any related children 18 and under)

Admission and Train Ride tickets are good all day.

Admission and Train Rides for FRRS members are free.
 Cab rides are extra fare with member discount.

Train Rides

- Adults 19 and over... \$4.00
- Youth 4 - 18... \$2.00
- Child under 3... free
- Family... \$10.00
 (2 adults plus any related children 18 and under)

Cab Rides

- Adult 19 and over... \$20.00
 - Youth 4 - 18... \$10.00
- Cab rides are for one (1) ride only.

The Train Sheet needs your photos and articles!

If you are working on projects for the Society, volunteering on restorations, performing archives work, helping out at off-site events, etc., or if you get some nice photos of FRRS or museum happenings that you want to share, **please contact us to have them printed in The Train Sheet.**

Photos should be at least 5" high by 7" wide and 300 dots per inch.

Articles should focus on FRRS related events, people or your own personal experiences with the Society.

To contribute, contact the editors - Matt Elems & Paul Finnegan, by email at trainsheet@wplives.org.

The Train Sheet

Feather River Rail Society
P.O. Box 608
Portola, CA 96122-0608

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(Santa Trains 2018...continued from page 13)
promotions.

This year we also had vendors for the event: Dennis Dickinson of Street Cart Café, serving up hot dogs, tamales and drinks. was there all five nights, making the shop smell great with his hot dogs, tamales and other hot foods. Treat Yourself of Reno, NV, owned by Robert Hudson, was there for the final two weekends serving up sweet and spicy treats, gourmet nuts, snack mixes and kettle corn. Thank you to both Street Cart and Treat Yourself for giving discounts to our event volunteers.

We also had some visits from the local wildlife. We were treated to deer roaming around the balloon track while two coyotes were spotted on the property. Despite many folks keeping a lookout, our local bear “Yogi” appears to have not made an appearance.

Thanks again to everyone to worked the Santa Trains! We look forward to an even bigger event in 2019. Merry Christmas and Happy Holidays to all our FRRS members.



Santa sent his special helpers, Dave Rudolph and Linda Knutson, to meet the children and provide generous cheer at the 2018 Santa Trains event.

- photo by Michael Clawson