Preserving *"THE FEATHER RIVER ROUTE"*

The Train Sheet

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News from the Feather River Rail Society and the Portola Railroad Museum

FRRS Returns to Equipment Restoration

By Doug Morgan

After a hiatus of 3 years and more, the Feather River Rail Society is back in the restoration business. In an ambitious project involving 6 pieces of equipment, including WP 707, former UP Baggage Car 5623, the Alaska Power Car, Sleeping Car 1112, Lounge Car 754, WP Caboose 428, the SP SD-9 4404 and the UP Business Car 105.

Sparked by the continued enthusiasm created by the successful sortie to Truckee in September of 2000, with 14 pieces of rolling stock including some of the equipment mentioned and armed with an invitation to return to Truckee again, work is speeding along at an accelerated pace.

Freshly painted GP-7 707 flys white flags while powering the caboose train during Railroad Days. - photo by Norm Holmes

The impetus for the Board of Directors to approve such an ambitious schedule came from the proposed Reno Branch excursion, which is planned for a time when the Reno Branch is devoid of stored freight cars. Until then, work goes on with the equipment.

To achieve the desired quality of work results, master painter Raymond Franklin was brought to Portola. He was joined by member Nick Tynan and local resident Tom Morgan. In the welding department, master welder Howard Hansan of Portola provides the iron worker capability.

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Feather River Railroad Days

By Norman Holmes

August 18-19 was the date for Portola's annual Railroad Days. As is the custom a parade was held on Saturday at 11AM with the signal to start by blowing horns on several of our locomotives Our museum train rides started at 12 noon and operated to 4PM and on Sunday from 11AM to 4PM. Visitors were down from the previous year, but all seemed to enjoy the event. The Donner Pass Gandy Dancers brought their modular HO gauge model railroad layout from Carson City and I'm sorry I misplaced the name of the man who again brought his G gauge live steamer to operate on the dock area. Thunder Mountain Model Railroad Club from Sacramento had to cancel at the last minute. To fill up the space in the shop building DPGD expanded their layout to 82 feet. The Truckee Regulators held up our train twice on Sunday, much to the amusement of the passengers.

Power for the caboose train was our newly painted GP7, No. 707. She sure looks great back in Silver and Orange. Between caboose train runs, Tom Graham drove our 1923 Model T rail car and Don Borden ran his Fairmont MT-19 giving rides to our visitors. The fan belt broke on the Model T and you just don't go to

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Feather River Railroad Days

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the local Napa for parts, so Tom found a rubber strap, cut it to length, bolted the ends together and vola a fan belt. We are going to need a new radiator now, anyone have one laying around?

Among crew members were Kerry Cochran, Don Nelsonk, Lew Barnard, Jim Brehholdt, Pat Brimmer, Chris Juzwiak and Dan Kantoff. Others helping in various ways were Jannet Breholdt, Linda Brimmer, Norm and Barbara Holmes, Ken Roller, Jack Hathaway, Hank Stiles, Doug Morgan, Alan Hirasawa, Steve Habeck, Barbara and Mark Aston and Ed Powell.

While re-filling the radiator on the Model T rail car, Tom Graham and Steve Habeck enjoy a lite moment while Don Bordon waits patiently.

- photo by Barbara Aston

Crews for the day included (left to right, top row) Pat Brimmer, Kerry Cochran, Lew Bernard, Steve Habeck. (on step) Don Nelson. (left to right, bottom row) Mark Aston, Hank Stiles, Norm Holmes, Alan Hirasawa, Ed Powel.

- photo by Barbara Aston

The Truckee Regulators who held up the train during the days events pose with some of the days visitors.

- photo by Norm Holmes

FRRS Returns to Equipment Restoration

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A new paint scheme for the passenger equipment, excluding the UP 105, has been approved and is being applied to the cars.

At press time, the WP 428 has received much work including straightening of grab irons (bent from normal were and tear on the WP), repairs to its handbrake stanchions, and other welding related repairs. It recieved its final coat of mineral brown Centari topcoat along with yellow lettering and matching nomenclature.

For some time the car has possessed a slight lean. It was decided to jack the car and remove the trucks for a complete inspection. After doing this on one end, it was discovered that most of the pins in the lateral swing hanger of the truck bolster were worn far beyond their limits so the truck was completely dismantled. The hanger arms and bins were taken to the bench, cleaned, built back to conformity with weld and ground to proper tolerance. Both trucks have now been rebuilt.

Many hours where spent preparing 707 for the new Silver and Orange paint.

- photo by Norm Holmes

While all this work was being performed in the building, the UP Baggage Car 5623 was outside on the West End of track #2 being prepped for paint and other modifications. The car is sided with aluminum and is more difficult to work than mild steel. Orbital sanders were employed using various grades of sandpaper to remove flaking paint and to smooth the surface for primer paint.

Sometime back it was determined that a form of "Head End Power" system (HEP) would have be developed to supply electricity from car to car in order make the various lighting and air conditioning systems function. Jim Halliwell, a retired electrical designer from Lawrence Radiation Laboratory in Berkeley, CA, volunteered to take on the formidable task of engineering the HEP system. It is similar to that which is used by Amtrak with some exceptions. First it has to be simple. Second, it must be more cost effective to install because Amtrak HEP systems are very expensive due to the 100% redundancy built in.

The primary source of power for the HEP system will be the Alaska Power Car. In it there are two 240 volt AC alternators with the capability of producing 40 kilowatts of electricity each. This power will be moved from car to car via conduit running under each car.

Work on locomotive WP 707 has been completed. Again Raymond Franklin has put his orbital sanders to work smoothing the car body. This has been followed by body fillers and filler primer. It has been repainted in a silver and orange paint scheme similar to the WP 2001. The exception is the single scotchlite stripe on the nose, which is notably different from the 2001's tiger striped nose.

Work is progressing on the sleeping car with further electrical upgrades and a new paint job. Simultaneously, the lounge car is receiving the same electrical upgrades that were installed on the sleeping car two years ago. It will also receive much steelwork prior to painting. HEP will be installed on these cars.

Lastly, UP business car 105. The 105 is easily the biggest challenge because of its overall condition. It was built in 1917 and rebuilt many times over the years. In its present incarnation, the car is completely self contained. Because of what it is and how the human comfort control systems are configured, conversion of the car in a manner similar to conversions to the sleeping car is considered impractical and ill advised. Only the failure of the systems and the inability to repair them due to a lack of parts availability would change this.

It is therefore hoped that the over 50-year-old systems can be rejuvenated.

There are other challenges with this car most notably the center of the roof, which is completely rotted away. This will be quite a job! The 83-year-old side sheets will also require attention. The plan is to concentrate on the mechanical systems first, followed by the roof and side sheet work followed by paint prep and finally painting.

Recently, the main motor generator has been fired up for some tests for the entire air conditioning system in the car. The motor generator works like this: The motor is rated at 25 Kilowatts at the output at 32 volts DC. The motor generator is rotated via a connection with one of the axles on a truck through a driveline and a differential similar to that used in an automobile. Above the speeds of 30 MPH, the generator generates 32 volts DC that is fed into a bank of batteries located in a battery box under the car. This DC voltage provides primary electricity for lighting and drives the air conditioning compressor and related blower motors. This same power drives the motor alternators which take 32 volts DC and converts it to 110 volts AC. This AC power is used for florescent lighting, drives refrigeration motors in the galley and supplies electricity for wall outlet usage.

Last year the motor alternators, as described above, were bypassed to allow the straight introduction of 110 volts AC to energize the florescent lighting in the car as well as the wall outlets.

When in a terminal with 240 volts three phase, there is a "shore power receptacle". When the 240 volts is introduced into the receptacle, a slip clutch disengages the main motor generator from the drive shaft and the generator rotates via the 240 volt motor thus providing the necessary revolutions to generate 32 volts DC.

When completed, it is expected that the car will function just as it has in the past with the exception that the power source will be from H.E.P. while under way, but will still be able to function on standby as designed.

What is happening at Portola is nothing short of fabulous. It is long overdue. It is hoped by the managers of this project that a new flame that will burn brightly in the preservation community has been lit.