

## Western Pacific FP7 805-A Runs Again The 'Silver Lady' Lives

By Dave McClain

One of the greatest parts of the collection of the Feather River Railroad Society is the only remaining California Zephyr F-unit, WP 805-A. And with this piece in our collection, and the chance to use it within our operations and on the main line, we could not leave it as a static piece. Seeing her in freight service back in 1971 dragging a train up the hill at Dark Canyon MP 230 was so fitting to my memories of this Odyssey, and now to be able to actually work on and hear her run has brought a dream come true for me and others

Three members, Steve Habeck, John Ryczkowski, and Larry Hanlon, each putting up a fourth of the cost, and the museum the remaining, paid the LNW for her, and then at a later date, donated their shares to the Society. Due to the efforts of these members, a real important part of WP history was saved.

After the arrival of her in Louisiana and Northwest paint, and more or less complete mechanically in the middle to late 80's, we have had various bouts with the challenge of getting her just to run at idle. The engine has always had problems with water leaks from various cylinders to the crankcase, and was supposedly complete. She was, but the parts were just thrown together with no expectations of operation. The electricals were undisturbed with only the dynamic brakes removed.

Time and time again, members Steve, John, Larry and myself put in many scores of hours, only to operate a few hours with failure again and again, same problem, emulsified oil.

With very little push from myself, or anyone to keep the effort going, very little was done to the mechanicals and electricals these past few years. She was gorgeously painted with factory colors, inside and out, except for the engine room. One look at that striking paint and something just had to be done. She was used at various photo shoots and railfan days, but with something so very much missing—the sweet soft drumming of that 567-B!

One solution was to re-engine her with the 567-C that was purchased by the Society that has been sitting on a flat car for years. I still believed that we could save her heart, and with the possibly of operation on the High Iron, and the fact that the engine block and crank are the originals, one more try was in the offing.

They say timing is everything. I just happened to meet a guy, who has now become a very close friend, Dwight Whetstone, who has worked for the Southern Pacific for 24 years, and the UP for 6 years. And retired with all sorts of free time! He has had millions of hours of experience on practically all EMD—SD40's, SD 45's SD,GP'9's, even a few F's when he first started. What a great asset at such a needed time.

Very early this year as the weather was really getting its stranglehold on the museum, myself and Dwight made an assessment as to what it was going to take to repair this old girl's heart. We together have had been there twice earlier to no avail. He then suggested that we bring up the blue wrenches(acetylene torches) and begin to try something new. At the bottom of this stubborn cylinder #13 is where the problem of major leakage was.

Each cylinder liner has two water control o'rings near the bottom, and they seal the water cavity in the block (upper) from the air-box and (lower) the crankcase. The water moves from the cavity into the liner through holes at the bottom, and up through the cavity inside the shell up to the head, thereby keeping the cylinder cool in its whole circumference. At that lower O'ring here in lies the problem. The lower sealing area was too far away from the o'ring to complete a full seal in about half of its circumference. So, to get a good seal which was at least 1/2-3/4 of an inch out away from the o'ring, something new had to be done. Applying 2 o'rings at that area, JB Weld, welding, crying and hoping just wasn't going to do it. In walked **THE WHETSTONE AND BELIEVE ME, THERE IS ONLY ONE OF THESE GUYS.**

He suggested that we try to bring up that lower sealing area which is at least a 1/2 inch thick by heating it with a torch and use a hydraulic jack to bring it back up to spec. That meant braving the strong cold, ice, winds, 2 feet of snow, and setback after setback. But this time we weren't going to give up short of Dwight and myself trying to better each other in our remarks. Ever strain to torque a head bolt and somebody say something so funny that it was all you can do not to smack him up side the head with a wrench?? But it is all in fun. And things began to come together. Back to the project, Dwight would heat the metal to red hot, and I would jump into the crankcase and start jacking the plate up. It would move up ever so slow. Then he would heat again, and I would jack, he was always better at torching, and me jacking!! This was done at least a half a dozen times, as the bitter cold would cool down that steel plate so quickly, hardening up within 30 seconds. The distance between the upper and lower o'rings is a nominal 3 inches, the plate on the one side was at least 3 3/4 inches below, no o'ring can make up the 3/4 inch. By jacking it up as far as it would go, the measurement was now 3 1/4 inches, a spec that was more or less for the complete circumference of the liner. We theorized that the o'rings would seal up with this, so we put the liner back in, head on top and then torqued it to 1700 ft lbs for the umpteenth time.

The acid test, again climbing up on top of the locomotive with 2 inches of slippery snow with the water hose and fill the cooling system. With a wing and a prayer, it was now water tight, but now # 14 was dripping, but not significant enough to not test by starting.

With water in the sight glasses, and many thanks to EL President Rod McClure and Caboose Hack Habeck, we had batteries in and ready, battery switch in, pre lube and fuel pumps running, lay shaft all the way for full rack, a push of the start button, she began to turn over slowly. Compress, ignite, compress, ignite, she was running! Hearing her come to life still excites me to no end. With everyone-Dwight, Rod, Steve, and myself waiting for oil pressure, seconds turned into minutes, minutes into seems like hours, no oil pressure. We shut it down, checked the crank for oil, it was dripping. We had oil there, that pump was working, but the upper scavenger wasn't pumping. We started her again and waited another 10 minutes, no pressure to the top of the engine and gage.

It was cold and dark, so we quit for the night. Everything had frozen over, Dwight and I stayed in my camper for the night.

The next morning, we found the turbo heater and put it next to the block, thinking that we must have some ice in the bottom of the crankcase. With the temps in the 20's it was going to take a lot of heat to melt anything. Dwight and I removed all the crankcase covers to let the heat in. Heating the block for two hours warmed the engine room, but the block was still cold. I then took a steel bar and poked it into the mucky oil to the bottom of the sump. It felt very lumpy, so I stuck my hand in there all the way up to my elbow! ICE!! Pounding the bar against the ice started to break it up. Then pieces began to float on the oil and Dwight began to pull them out. We pulled over 50 lbs of ice out of there. We had found the suction screen at the bottom of the block had been encased with ice, preventing oil from entering the pump.

After cleaning out all of the ice, Dwight jumped out on to the ground and built a beautiful ice sculpture that lasted for a month before completely melting. We needed a monument reminder for all the excitement that we could share!

We then prepared for fire, cranking her over and bringing her to life. She started and 30 seconds later—oil pressure!!! We were home free, we thought. All of this work took us at least 4 different trips.

The next trip, Dwight, Larry Hanlon and I came together again to continue what we started. Only this time Larry started to bring all the electrical problems to the forefront. The Mars light, the air compressor control circuit, the tractive control circuits and general electricals were all parts that needed attention. Using a electrical schematic, each circuit was carefully analyzed for operation, and due to weather, neglect and age, another significant challenge was upon us to have her operational for the big upcoming event. The Mars light circuit was the most challenging, since the old system to control it was completely missing, except for the switches in the cab. With good ole electrical Larry, he designed a new system with new conduit laid in the frame from the batteries to the nose. He only had to drill one hole in the floor for this new connection. EMD used a motor-generator to step the voltage down from 64 volts to a nominal 12 for the Mars light motor and bulb. Larry used the 12 volt tap from the set of batteries on the engineer's side to connect a large disconnect and a relay, which are now on the inner nose wall. And then using the switch in the cab, it now controls the relay that connects the batteries with the Mars light itself. Very few locomotives have gyrating headlights today, much less a Mars.

The next big challenge was to get the generator to load and to produce power for the traction motors. There are many circuits that have to pull in and connect before the locomotive will move. Without going into the technical aspects here, Larry used the schematic again to trace down the culprit, which was a loose wire on the ground relay. With most electrical problems, it takes 5 hours to find it, and 5 seconds to fix it! And with one loose # 18 small wire, it can bring a locomotive to its knees. It takes a real talent to be able to do what Larry can do with the schematics, and without him there, the locomotive would have had to be unused for the duration. In my opinion, this old girl was the real

star of the show. And up to the last minute before departure, she was fighting us with little electrical parasites that kept rearing their ugly selves. On the same weekend, Dwight and I removed #14 and did relatively the same thing, especially with the torch and the jack. We lifted the #13 cylinder up a couple of inches so as to not receive all the heat from the torch, as 14 had done earlier. With everything torqued back tight, we started filling the cooling system again with water. For the first time, not a drip into the crankcase. This was the very first time that we were completely dry, until!! Dwight says *OH S—!* but he has done this to me many times only to alarm me over nothing. That's why I did not even answer him. All he usually is looking for is my frantic reaction! That dirty rat!! But this time he wasn't kidding. The water was flooding into the crankcase from the front of the block, next to the equipment rack—back of the locomotive. It stated all at once, flooding in, but not from the cylinders. Upon discovery, we found that the problem was the oil cooler. With less than two weeks to go, and the thought of doing a major R&R, we could not waste another day.

The next day, His Highness, El Presidenty Rod, manned the truck crane. Hack Habeck organized the troops, Frank Brehm and Rod's son started removing the upper rear hatch on 805, Dwight, Ed, and I started disconnecting pipes in the rear of the carbody, loosening everything. Then he and I went over to the 708 to loosen everything to remove its oil cooler. Rod removed 805's oil cooler right out the top, put it on the ground, and then ran the crane down the track to the 708, which now had been switched closer to us. 708's cooler came out the side above the walkway and onto the ground. We then groomed the good cooler, Rod picked it up and lowered it into the 805 to the whole crew that was on the roof and inside her. Like an army of ants, we positioned it into place, reconnected all the lines frantically finishing before dark. Water was loaded into her once again, and finally a dry crankcase!! Many thanks to all here for sweating out tons with so little time. So many names, if I have forgotten you, please be assured your work is much appreciated. And for the time we most needed it, the weather was warm, not snowing, freezing, etc.

With a little more than one week to go, Dwight and I went up again the first weekend in April, bringing a barrel oil pump to transfer oil to 805's crankcase. Decision was made to use the oil from 849. Within an hour that oil was transferred, filters were installed, and ready for fire. We switched her outside of the engine house and started her up. At this time, thanks to John Ryczkowski, we had a new injector for the famous #13. And with Dwight's expertise, he adjusted the complete injector rack to clean up the exhaust as much as possible. And a final check was done on all systems, everything seemed to be up and running. But there was another monkey wrench thrown into our faces. When we shut the engine down, we discovered the large oil suction line from the crankcase to the lower oil pump had about a foot long crack in it, which now leaked badly. Decision was made that we would return Tuesday before departure day of Wednesday to replace that using a like part from the 708. Larry, again made a special trip down from Bend Oregon, to begin removing the part from 708 and to do a final cleanup and check of all the electricals. I finished replacing that pipe and did a final cleanup of the engine room. Larry finished and tested the remain-

ing electrical systems, and we were both done around 9 pm.

Also, one very important part of this whole process was the washing of the whole locomotive completely at least twice due to the persistence of oil thrown from the stacks of 805. Along with all the other problems, oil is shot past the tired rings and out all over the roof. Plans were made to run her minimally throughout the trip so as to not coat everything with the black stuff. Hats off to Jason who has had to clean up our messes often.

The trip and convention were a resounding success. All the locomotives ran well at Sparks, and some needed a little attention there. Again Larry was there to mainly take care of electrical problems, mainly with the 2001 and the 925 B-unit. I took care of changing one head on 805 suspecting we had a problem still in our hard-luck cylinder #13. Problems will not cease for awhile, it looks like. Now back at the museum, work will progress, maybe not at this feverish pitch, but will be done and will make her road worthy to run on the front of the head end someday on the High Iron!

I want to thank the board, Steve Habeck and the Pres for cultivating a great atmosphere to allow some of the old heads to return. Without the support of them, we would not be able to get so much work done in such little time. And most important, a salute should go to John Walker, who was always there to support us. A simple phone call and things would be ready upon our arrival. Great work John, and Thank You!

## Volunteering has Rewards

By Charlie Spikes

While working at PRM is always fun, we some times over look the things that can make it a real joy to be there at certain times. One of these times occurred on Saturday the 24th of August.

Norm Holmes, Lew Barnard, Dave Epling, Spencer Walker and me (Charlie Spikes) were experiencing a normal day of fun and safe operating after bean break when the day turned into a very special and memorable one.

Right as I was about to give Lew the come to me signal and begin another run I checked the crossing and noticed a young man with a white cane get out of a van. This was followed by about 20 or 25 more visually impaired kids on their way to do an RAL.

I led them into the shop area and introduced them to Norm. He took 4 at a time to 2873 and they each had a turn at operating the locomotive. The others were told by their escorts to have fun and look around.

What a great time they had exploring the museum and seeing it in a way that we can't. These kids had more fun than most seeing people will ever know. Nothing got in their way of having a great time exploring every piece of equipment they could. Although we kept a watchful eye on them, we didn't really have to. Each of them had a family channel radio to stay in contact with the escorts if any problems arose.

At the end of the visit they all thanked us at PRM for providing them a great place for a field trip as well as the learning experience it provided to help them gain confidence in their

abilities. I was equally thankful that they came and turned a normal operating day into a very special one.

## 2004 WPRRHS Convention

By Steve Hayes

The "2004 Convention" was held April 16th and 17th at the Holiday Inn in Reno, Nevada.

**Attendance:** There were 135 registered attendees. It appears there were 115 paid registrations, the difference being the ones Frank admitted with no charge, which is allowed in the guidelines.

**Facilities:** In my opinion, this may have been the best overall facility that we have used so far. The 2 rooms we needed were more than adequate for our needs. The Hotel staff appeared to be there to provide whatever was needed in a fairly timely manner. Having the Banquet upstairs in a separate room was great. The Hotel even provided us with a gift certificate for 2 free rooms to put in the raffle! The small restaurant was adequate for breakfast and there was a neat sandwich shop in the Casino. The only complaint I heard was the smoke throughout the Hotel, but then this was Nevada!

**Raffle:** 20 manufactures and businesses plus individuals provided ample material for the raffle. As we have noticed in the past, the outside providers are responding less and less each year, even with the thank you notes we have the recipients sign and we mail back. But we appear to keep it going and as the accounting below shows, the raffle does make us good money. Having a separate raffle for a picture and a locomotive is really working. Together with the impromptu auction, Norma sold the WP locomotive for \$465.00. You will note in the accounting, I withheld funds for and purchased three more locomotives for future conventions based on these figures.

**Clinics:** The clinics sort of got off to a bad start and there were more no shows than we have had in the past. Frank was able to do some quick readjusting and it came off fine. I think we will always have this problem and by having back ups we can control it.

**Modeling Contest:** The modeling contest continues to get smaller and smaller. It has been suggested that we discontinue it, but I feel it is an important part of the convention. Maybe we need to make it a display your models only. I will get with Thom Anderson and we will come up with some ideas as to how to make this work better.

**Sales:** The sales room continues to grow and is well received! The folks that were there to sell appeared to be happy. We allowed them to donate material to the raffle instead of paying for their tables. This proved to be a mistake in many cases. Prizes they donated appeared to just things they wanted to get rid of. I question if this was a good move on our part. Sales are the main use of this room and should help pay for it, at least a big part of it.

**Advertisement:** As usual this is an area where we are not sure what is going on. Many past attendees said they never received a flyer for the convention. Frank was not clear as to whom he sent them out to. We paid for a lot of stamps and his attendance was the largest of any convention so I am surely not