

## SWANTON PACIFIC RAILROAD SOCIETY

Number 200

Cal Poly

Oct. 2010

### **ON TRACK with your Director**

Ed Carnegie:

Cal Poly Day was miraculously dry, compared to Al Smith Day. It was a great success with over 450 people attending. I would like to take this opportunity to thank ALL our volunteers, supporters, the Cal Poly Logging Team, ranch personnel, Swanton neighbors and friends—all of whom pitched in to help make the day very successful. Some firsts for Cal Poly Day were:

- A youth conductor brakeman course, where approx 30 pre-teens, covered hand signals, and railroad safety. Upon completion of the session each were presented with an official SP Railroad patch.
- During lunch, recognition by our president, was given to one of our own junior volunteers who had just received his Eagle Scout certificate for a project recently completed for the railroad society.
- Fred Loveland, Supporter of the Wounded Warrior Project drove in with his beautifully customized 1934 Ford, proudly carrying all the service flags flying from the bumpers.

The work weekend, prior to Cal Poly Day, saw much activity to get ready for the event. As well as, hosting a brief visit from Cal Poly's new student body president, Sarah Storelli and her board. College Station received its final coat of new yellow paint, but now waits for someone with a steady hand to add the final touches of detail trim in Cal Poly green.

The upcoming work weekend, October 9-10, we will have students and instructor from Cal Poly's reinforced concrete class come up to pour 4-6 concrete benches to place around our fire-pit area.

Hope to see you soon at Swanton.

### **In the Roundhouse**

Randy Jones

There's been a great deal of work done in the last six months. Just before Al Smith Day, the 1913 was loaded in our custom container and shipped to Wasatch Railroad Contractors in Cheyenne, Wyoming, to have a new boiler built and fitted to the frame. The design process has gone slowly, mainly because a problem came up involving another manufacturer which caused the inspecting authority to scrutinize new designs exceptionally closely. Our new design has passed with flying colors and a higher-than-required safety factor. Most parts have been fabricated and are on site, and assembly has begun. A supporting framework has been made to precisely position the pieces before welding and assure proper fit. While we are at the top of WRC's priority list, we almost certainly won't get the loco back before the New Year. In the meantime, we have lots to do on the tender to be ready when the 1913 returns home.

On other fronts, Mark Cooper came up during "Summer Camp" and performed a thorough inspection of the steel "Branson tractor" flatcar. This included pulling all the old oily cotton waste out of the 8 journal boxes and repacking them with wool felt pads. Brendon Hilton and a friend lifted the oil bunker out of the 1913's tender, and then lifted the water tank off the frame and began cleaning it for testing. Mark Franceschi got started using our ultrasound gauge to examine the water tank for remaining thickness. The tank has rusted inside over the years, and we need to know its condition to decide what repairs are needed. Jerry DeWitt measured the tank and created a 3-d CAD rendering of both the existing tank and a stainless

steel insert or liner if that turns out to be necessary. Amy worked at the parts wash tank and bead blaster cleaning parts of the 1913's engine (lead) truck frame, and the shop crew continued the rebuilding of the forklift motor.

Leading up to Cal Poly Day, the shop forces spent many days weighing the 1914, axle by axle, and adjusting the spring rigging and equalization. This job's not done yet, but things are very much improved. A new blow down valve w/dischARGE was installed. We were also able to tackle a project that has been on our list for many years, a new oil burner design. The old burner was simply not adequate in many ways, being inefficient, smoky, and making untold quantities of soot. Our new burner generally follows prototype practices and Erich Thomsen's miniature designs, with modifications suggested by our own Pres. Fitz regarding air and gas flow. Credit must also be extended here to Geoff for his design work at the computer, without which the burner couldn't have been finished on time. This is typical of Geoff: lots of time spent behind the scenes, not many curtain calls. The improvement demonstrated on CalPoly Day was everything we hoped for, generally burning clean and hot. Now we need to improve the firing (oil) valve for better control.

A new boiler water treatment program was begun, generously supported by Water Tech of Milpitas. Fitz again came to our aid, making a copper cooling coil so we can cool down boiler water samples for chemical testing. Water coming directly from the boiler is around 380 deg. F, mostly flashes to steam if not cooled first, and thus can't be accurately tested. We got some good results at the run, and now need to "dial in" the dosages.

Next up for us are continued work on the 1913's tender and engine truck, routine car maintenance, air brake work, 1914's engine and trailing trucks, and semi-annual 502 maintenance.

My sincere apologies to those I've missed mentioning. My memory does not due you or your work justice, and you are appreciated probably more than you know.

**NEW SOCIETY SUPPORTERS** received over the last month were as follows:

Nancy Norris	Santa Cruz
Hans Rosenast	Santa Cruz
Michael Wong	Sunnyvale

On behalf of the entire organization, we welcome each of you into our "train family" & we certainly look forward to seeing you at some of our next events. Many of our supporters may not recognize you right away so please introduce yourselves so that we can get to better know you & vice versa. Also be sure to introduce yourself to both Pete McFall, Secretary to obtain your membership book with bylaws, etc. & then to Bob Wilkinson so that he can make up your very own "gold", laminated nametag with all pertinent information.



Music for the day provided by Fiddle Road.



Gordon Claassen and his trusted horse demonstrate ranch skills

**UPCOMING EVENTS/PUBLICITY**

Mary Ann Carnegie

Oct. 9/10	work weekend
Nov. 13/14	work weekend
Dec. 11/12	work weekend

Thank you, thank you, and thank you again to all of you that made the Cal Poly Day such a success. Numerous compliments were received and

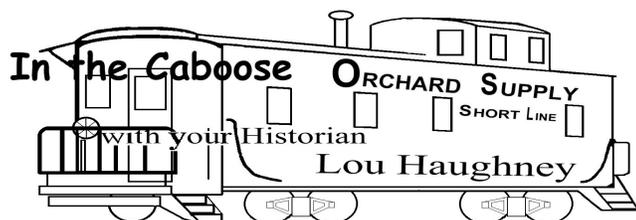
heard throughout the day and beyond. This was the largest turnout for Cal Poly Alumni ever, so a new goal has been set to exceed this number each year. Please note, we are now back to just one work weekend a month, and with the height of our train season over, we are beginning to prepare for our New Year's Eve Run. This is our very own rail-formal, that is really very casual. Any ideas and/or themes are welcomed. Hope to see you soon.



Fred Loveland's 34 Ford supporting Wounded Warrior



Cal Poly Day 2010; newly painted station in back



AN INTRAMURAL RAILWAY FOR THE PANAMA PACIFIC INTERNATIONAL EXPOSITION

A recent article concluded that the Overfair Railway ran passenger trains for several months before the official opening of the PPIE. That conclusion was based on a few photographs showing an Overfair passenger train going through a vacant area where two Exposition Buildings were later erected. (Fig. 1) Donald Larson, the World Fairs historian, had given me a clue when he commented that the public was allowed into part of the PPIE's grounds while construction was still proceeding.



Figure 1 Overfair train passing site of building for the Great Northern RR and the Canadian Pacific RR some months before official opening of the PPIE Ferry terminal and PPIE warehouses in right background.

Now, a brief article in *The Electric Railway Journal (ERJ)* of June 13, 1914 corroborates that conclusion. The article reads:

**INTRAMURAL RAILWAY FOR THE PANAMA-PACIFIC EXPOSITION**

“The intramural railway at the Panama-Pacific International Exposition is to have part of its line completed and equipped in time to handle traffic during the festivities to be held at the grounds on July 4. At least one of the locomotives, a number of cars and that part of the track necessary to carry passengers from the Palace of Machinery to the Palace of Agriculture are planned as a demonstration of the service to be rendered during 1915.

The intramural railway will be a replica of a modern railroad system and will be built to one-third standard size in all features where this is possible. The gage will be 19-1/2 in. and complete Pacific-type steam locomotives, which weigh only 13 tons, will be operated by engineers and firemen, members of the

national organization, who are not over 5 ft. in height. The line will be double tracked, about 2-1/2 miles between terminals and will be protected by a block signal system. There are to be about 100 cars of 20-ft. and 24-ft. lengths, eight locomotives and one switch engine. These engines will burn either oil or hard coal, the concessionaire guaranteeing that there will be no smoke.

A regular train schedule will be maintained between the eastern terminus at the southeast corner of Machinery Palace and the western end of the line near the Stadium. The line for most of its length runs along the Marina close to the water, and there will be five intermediate stations. “

Several points in this article are pertinent to our information about MacDermot’s plan for operating the Overfair Railway.

No. 1 As mentioned in the previous articles (Jan. & Feb. 2010 newsletters), sections of the PPIE site were open to the public several months prior to its official opening on February 20, 1915. During that pre-opening period, the Exposition management organized activities to honor special events and to commemorate certain holidays. For example, “Flags of all nations were raised on the Exposition grounds on July 4, and patriotic exercises were held on the Zone”. {From Todd’s *STORY OF THE EXPOSITION*, Vol. 2, Chap. XLV, p. 232, which describes activities "In The Year Before The Opening"}. “

No. 2 The completion of the tracks to the Agriculture Building would represent the eastern half of the total trackage. The Agriculture Building borders on the Marina near the Yacht Harbor. That stretch of tracks along the Marina corresponds to the views in those earlier photos. So, those photos may be dated as having been taken near or after July 4, 1914. The *ERJ's* writer does not identify the locomotive to be used on July 4. Judging from the early photos, we may assume that it was the #1500 switcher/work engine.

No. 3 The surprising statement in the *ERJ's* article is: "... eight locomotives and one switch engine." There is only one other reference in our files about MacDermot's intention to build eight Pacific locomotives; namely, MacDermot drawing C122, "Name Plates, ...." (Figures 2). As we

know, MacDermot built only four Pacific locomotives, numbers 1912, 1913, 1914, and 1915. The last one, no. 1915, was not completed by MacDermot. Therefore, he used only the first three in the Overfair operations. An early photo of the engine construction shop at the MacDermot Estate shows room for only three engines. Perhaps, MacDermot started to build No. 1915 after one of the other three engines was completed and moved out of the shop. Then, he probably ran out of time and money to finish No. 1915. (In the early 1990's, the exterior of No. 1915 was completed by a volunteer group at the California State Railroad Museum, where it now stands in the Museum's lobby.) Why engines nos. 1908...1911 were not built remains unknown.

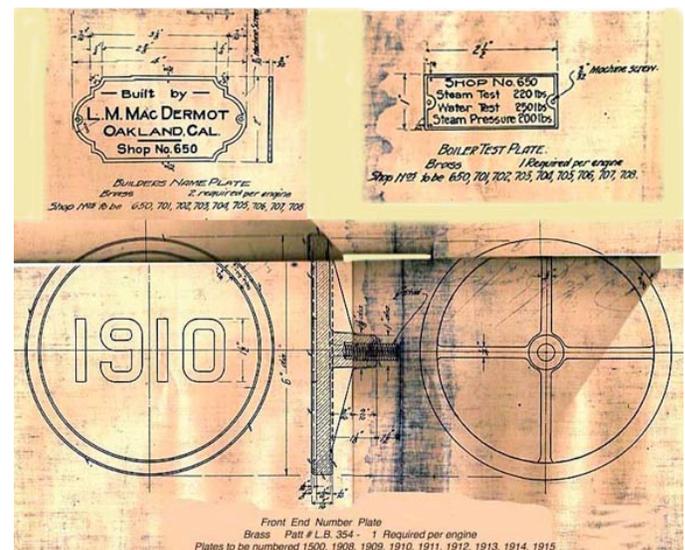


Figure 2 L. M. MacDermot drawing C-122, Number, Boiler & Name Plates, All Engines

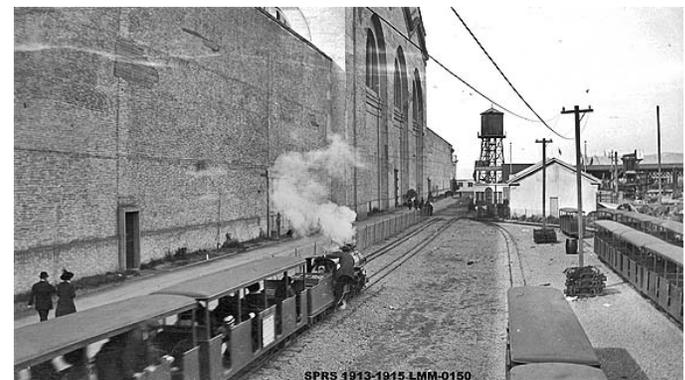


Figure 3A Overfair train leaving the main yard for the Marina Station and Beyond. East side of Machinery Palace on the left of the tracks. Car storage tracks on right.

No. 4 The article implies that MacDermot was considering oil or hard coal as the fuel. Many of our photos show coal in the tender. (fig. 5) Moreover, a few pictures show clouds of smoke despite "the concessionaire guaranteeing that there will be no smoke". (Figures 3a and 3b.)

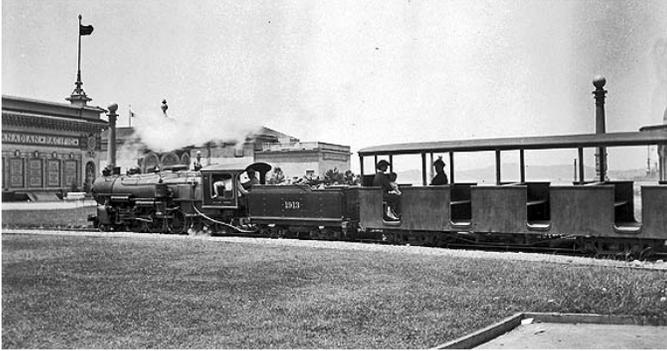


Figure 3B Overfair Train approaching the Canadian Pacific RR building on the Marina. Note two-man crew in cab of engine #1913.

No. 5 Finally, the statement about the height qualifications of the engine crews seems somewhat restrictive.. Some pictures show engineers standing beside the locomotive or tender. (figures 4 and 5). Engineer Arthur Hirst appears to be as tall as the top of the cab. Frederic Shaw's scale drawings and specifications for the Overfair locomotives list the "height overall" of a Pacific type locomotive as 5 ft. 6 in. The tender's overall height is 4 ft.

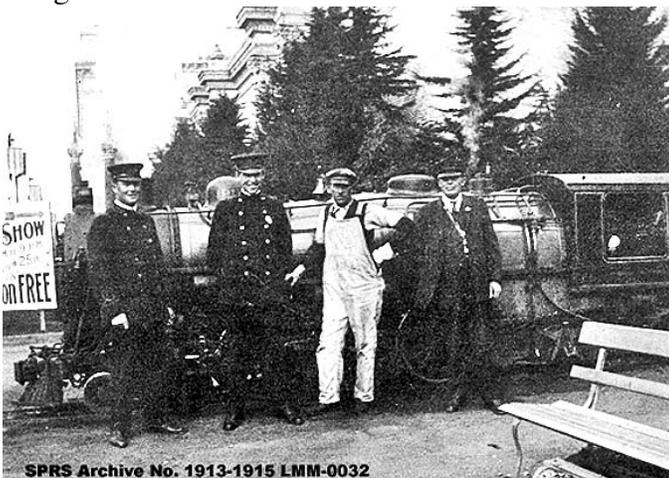


Figure 4 Overfair train crew. Compare Eng. Hirst's height with engine height.

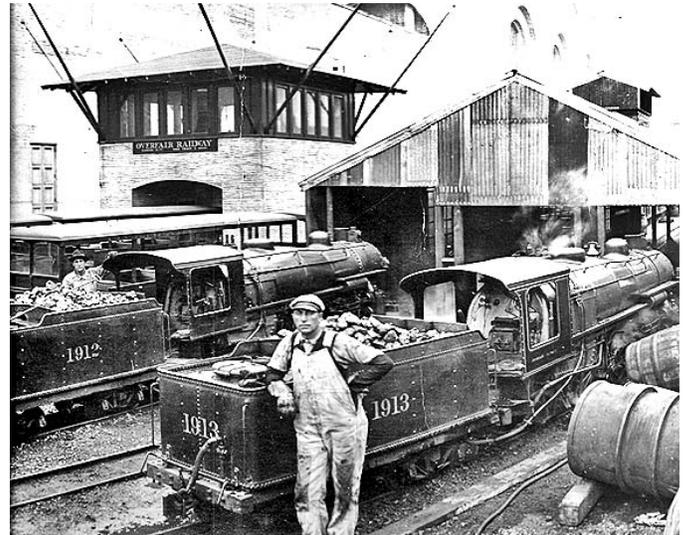


Figure 5 Detail from panorama view of Overfair Rwt. Main Yard, Photo by Cardinell-Vincent, No. 1079-P

Our current Swanton Pacific RR engine crews, consisting of two persons, have learned how to adjust themselves in the cab, despite their being well over 5 ft. in height. However, our young engineer-in-training, Scott, can easily meet MacDermot's qualifications for height, at least for this year.

The article provides a rare insight into MacDermot's hopes and plans for the Overfair Railway. Like some many of our plans and expectations, compromises are often needed. Yet, the final version of the Overfair Railway at the PPIE was successful from an engineering and mechanical viewpoint, if not from the financial consideration.. The Locomotives are still running as they approach the centennial of their construction.

This article was found after a lengthy search of Google Books for references to "intramural railways". Now days, we associate the word "intramural" with the sporting and other extracurricular activities in which college and university students participate among themselves. In the late 1880's and early 1900's, "intramural" was commonly used to describe the internal types of transportation within International Expositions and World Fairs