

DONNER CROSSINGS

A Publication of Placer-Sierra Railroad Heritage Society
Issue No. 1, April 2006



The last SP Steam train over the Donner Pass route, October 1958. This Oakland-Reno round-trip excursion running as train #27 is powered by 4-8-4 #4460, sister to SP #4449. Ken Yeo captured this historic scene at Weimar Crossroad.

Preserving Railroad History along the Donner Pass Route



From the Editor:

Welcome to the premier issue of PSRHS's new publication, Donner Crossings. This document will be published 2-3 times each year. It is intended to supplement, not replace the existing PSRHS monthly newsletter. Donner Crossings will feature articles and photos covering historic and contemporary operations related to the CPRR/SP/UP Donner Pass Route.

One of the stated objectives of PSRHS is to collect data on the history of rail transportation along the Donner Pass Route of the Trans-continental Railroad, and to issue publications relating to this subject. While we have included photos and brief articles in past issues of our monthly newsletter, we have wanted to generate a more comprehensive publication that presents some of the stories that define and document railroading along this historic route.

Member Ken Yeo has made a portion of his photo archive available, and his photos will be featured in future issues. Books, pamphlets, old SP bulletins, and personal stories are all potential sources for future articles. PSRHS members are invited to submit photos and/or articles that you

wish to share with members and the public. Photos can be scanned and the originals returned to you.

We hope you find this new publication both interesting and informative. Comments are welcome, as are photos, anecdotes, and feature articles on historic and contemporary railroad operations along the Donner Pass Route.

In This Issue:

This issue covers two topics at different ends of the spectrum in Donner operations. First: Where did those early locomotives come from and how did they get to the West Coast to support early operations on the new Donner Pass tracks? The article focuses on CPRR 4-6-0 #22, the "Auburn", one of the many early locomotives purchased on the east coast and shipped by sea.

Second: What were the technical issues and personal concerns when diesels began to replace steam locomotives on this and other routes? A 1949 letter from then SP President A.T. Mercier to employees attempts to address the reasons for converting to diesel power, and to alleviate employee concerns.

You are invited to submit feature articles and/or photos for future issues of Donner Crossings. Please contact Roger Staab, email rsrr@ncws.com, or by mail at PSRHS, P.O. Box 1776, Colfax, CA 95713. Assistance is available to format your information or photos into final form for publication.

Placer-Sierra Railroad Heritage Society

Individual Membership	\$20/yr
Family Membership	\$25/yr

Make Check Payable to:	PSRHS
	P.O. Box 1776
	Colfax, CA 95713

Shipped by Sea -- CPRR #22 -- "Auburn" -- 4-6-0 Woodburner

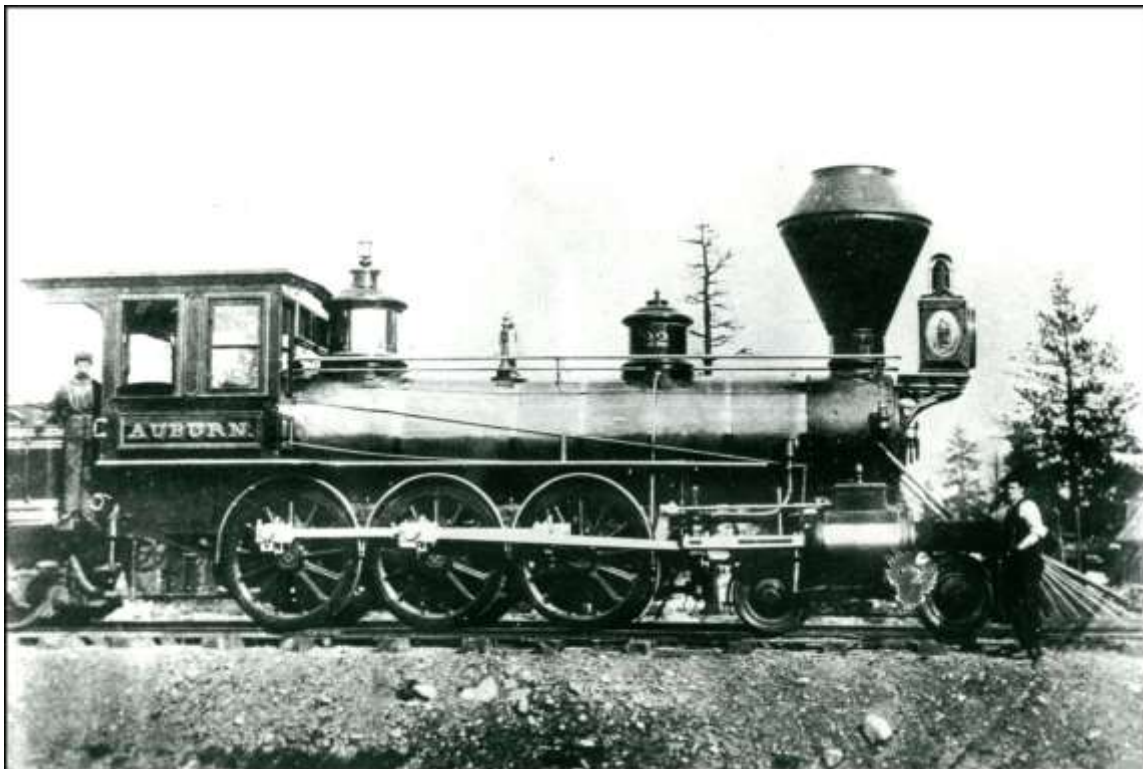


Photo from Ken Yeo Collection

Editor's Note: Portions of the following article first appeared in the February 2003 issue of the PSRHS Newsletter. The photo of CPRR#22 has been featured on our web site home page, and many members have joined since the article first appeared in the newsletter. The story behind the photo has been updated and is being reprinted in this premier issue of the expanded PSRHS publication, **Donner Crossings**. References are provided for further reading on this interesting aspect of early construction and operation of West Coast railroads.

Central Pacific purchased 4-6-0 locomotive #22, named "Auburn", from East Coast builders McKay and Aldus in 1866, along with five other similar engines #20 "Amazon", #21 "Tamaroo", #23 "Mono", #24 "Montana" and #25 "Yuba". (With so many locomotives to order, CPRR was not particular about names already assigned to some units by the manufacturer.) These were among 195 locomotives imported in the late 1850's to late-1860's for various West Coast railroads, 147 of which were imported by CPRR starting in 1863. In these early days of railroad building in the western U.S., the locomotives and nearly all railroad supplies and equipment were purchased from East Coast manufacturers, and

shipped by sea around Cape Horn or overland at Panama to western U.S. destinations.

The resulting time from order to delivery averaged 145 days from East Coast sources, and this created significant logistical problems for the railroads that ordered the locomotives. Some of the designs were unproven in western operating conditions. The purchasers had to either wait for a locomotive to be delivered and tested before ordering more of that design, or take a chance and order several of a given design in hopes that they would prove to be roadworthy on their destination line. As an example, by the time CPRR #1 "Gov. Stanford" proved its superior performance in operation, its

manufacturer, Norris, had gone out of business and only six more of this type could be found.

CPRR purchased East Coast locomotives from some nine different manufacturers, which created additional problems because of non-standardization of parts. Some of the companies were on questionable financial footing, and in fact, McKay and Aldus went bankrupt in 1868, leaving CPRR with 8 ordered, but undelivered locomotives. The shipping delays and problems from non-standardization helped spur development of West Coast production of railroad supplies. Locomotives were being produced in the Sacramento area by 1868.

It is interesting to note that Goss and Lambard's Sacramento Iron Works offered to produce locomotives for the Central Pacific as early as 1867. However, West Coast manufacturers expected to be paid in gold, while East Coast firms could be paid in paper dollars, making

CPRR's early East Coast purchases less expensive even with the cost of shipping.

The McKay and Aldus "Auburn class" locomotives were apparently successful in CPRR duty, with the exception of #25, the "Yuba", which exploded in October of 1868. The remaining "Auburn class" locomotives were renumbered 1523-1527 by CPRR in 1891, with "Auburn" renumbered #1525. No final disposition of these locomotives was noted in the Encyclopedia of Western Railroad History, where the information specific to these locomotives was found.

References:

Encyclopedia of Western Railroad History, Donald B. Robertson, Wayne Cornell (editor), Vol. IV, California, p. 106.
"Railroads Shipped by Sea", Railroad History (R&LHS), Bulletin 180, Spring 1999.



Conversion to Diesel Locomotives

Significant changes in railroad operations were occurring by the end of the 1940's, along the Donner route and throughout the U.S. railroad system. Many of us who are interested in railroad history lament the passing of steam power and the magnificent locomotives of that era. Yet, improved post-war roads and increased truck traffic were having significant impacts on railroad business and profitability. Conversion to diesel locomotives was an essential consequence of the shifting economics of the time.

In our present era of outsourcing, we have heard many arguments and much "spin" on why the latest down-sizing is good for us in the long run.

It is interesting to look back at railroading in the late 1940's, with an eye toward the growing conversion from steam to diesel. These changes had pronounced impacts along the Donner route, including the closing of the Colfax engine house, changes in train crew makeup, and less frequent or discontinued stops at stations along the way.

So how did the railroad see this time of transition, and how did SP try to prepare its employees for the changes that were inevitable? **The following is a reprint of a letter to SP employees from A.T. Mercier, President of SP, dated August 1, 1949.** It was found inserted in an old copy of the July/August 1949 issue of the SP Bulletin. – *ed.*

How Do Diesels Affect Jobs?

A Plain Statement of Facts of Concern to
All Southern Pacific Men and Women

By A.T. Mercier, President

Because they are far more economical and efficient, diesel locomotives are replacing steam power on American railroads. Many of us may be concerned with how the dieselization of our lines will affect our jobs, and I shall therefore discuss the subject frankly here.

Why are we changing to diesels?

The diesels provide a means of meeting competition and helping keep costs down and therefore rates down. Only by doing this can we continue to attract enough traffic to provide steady jobs for the majority of our people. Already the trucks are taking away the jobs of thousands of railroad men. We must cut our costs to the point where we can compete with the trucks to get that traffic back and keep more people on the job.

What savings do diesels provide?

Diesels can pull heavier loads than steam engines. They require less helper service. They can make long runs without taking water and fuel or being serviced. They make better time over the road. They spend less time out of service for repairs. A freight road diesel, for instance, will do as much work on one dollar's worth of fuel as will a comparable steam engine using \$2.32 worth of fuel. They are easier on the track because they apply constant, smooth power to their driving wheels.

How fast are we dieselizing?

To date on our Transportation System we have 313 diesels of all types in service and 89 more on order. Fourteen of these now in service are

passenger diesels, with four to come. Fifty-six are road freight diesels, with 42 more now on order. The balance are road switchers and yard switchers. Our long range plan is that over the next 10 years more and more of these diesels will be purchased, so that diesels will replace all but the newest units of our present steam power by 1960. The change will be gradual and general over the railroad, with possibly no one district or division completely converted far in advance of another, except that branch line operation will be dieselized fairly early in the program.

How will diesels affect employment?

Certainly the diesel is a labor-saving device. At the same time it will be the greatest possible safeguard to steady employment at good wages, by permitting us to hold down our rates, improve our schedules and get more business. It is true that with our railroad eventually dieselized, fewer men will be required to move a given amount of traffic. The important thing is that we expect to be able to get more traffic with the diesels and put more men to work.

Will some types of jobs be affected?

Yes, but gradually, over a long period. As more and more steam locomotives are replaced by diesels, there will be less and less need for water and repair facilities at some intermediate points and on our branch lines. At some of our shops, probably no less total men will be required than at present, but there will be a gradual shift to the kinds of jobs directly related

to diesel maintenance and repair. Less track maintenance work may eventually be required with the smoother rolling diesels. Some helper engine crews will no longer be required, and the diesel's ability to handle heavier trains will call for somewhat fewer engine and train crews to move the same amount of traffic. Because the change will be over a long period, normal retirements and turnover will take care of most situations where the kind of job is changed. In other cases where the manpower required becomes less for a given amount of traffic, we expect that the additional business attracted will have the effect of stabilizing employment.

Why must jobs be affected at all?

There are some who hold that if three men were formerly needed to do a certain piece of work or move a certain amount of tonnage, whereas the same job can be better done by two men with better machinery, the three men should nevertheless continue to be employed on that specific operation, even though one must spend his time in idleness. And they believe further that "management" should be required to pay the bill. Against this view there are these facts. First, it is contrary to the plain, honest American precept of a fair day's work for a fair day's pay. Second, railroads are required under the Federal Transportation Act to provide economical and efficient service. And third, there just aren't enough dollars coming in to continue to pay unearned wages in addition to all our other increased costs. The only way to get more badly needed revenue is to cut our costs, so that we can pass this saving along to the customer. That is the surest way of getting more business and putting more men to work.

How big is our margin of profit?

Last year, out of every dollar we took in, there was left six and a half cents after paying wages, other expenses, taxes and interest. But of this six and a half cents, nearly four cents (3.7 cents) was

spent for needed improvements. This left only a slim margin of less than three cents (2.8 cents) to be distributed to the owners of the property. This year, business is down, but costs are continuing to be very high. The 40-hour week, effective September 1st, will increase our costs by seventeen million to twenty-four million dollars per year. This makes it necessary for us to seek every means of reducing expenses.

Are labor-saving devices a threat to employee prosperity?

Americans are the most progressive and prosperous people in the world because we have continued to find better ways to produce better things at lower costs. Every labor-saving device has actually proved itself ultimately to be a job-creating device, by bringing prices down to a level where increased demand calls for increased production, putting more men to work. As a result, we in the United States have a standard of living far higher than that of any other people. We work less minutes or hours for everything we buy than do the workers under any other political system. And we have free choice of what we buy, think as we choose to think, work where we want to work. We are truly a free and prosperous people *because we have put machinery to work for us*. At the same time, we can maintain our freedom and our prosperity only so long as we hold to the proved American principle that a fair day's work must go along with the higher day's pay that labor-saving machinery has made possible. Only on that basis can our Southern Pacific people and the people of the nation look forward to a secure future.

August 1, 1949



WHY DO RAILROADS PREFER DIESELS?

A **diesel locomotive** has the flexibility of the electric drive that allows it to make use of the full horsepower of its diesel engines at any locomotive speed. In contrast, a steam engine does not develop its full horsepower until the locomotive reaches high speed. Thus the electric drive makes it possible for a diesel locomotive to start a heavier train from a standstill than can a steam engine of the same horsepower rating, and to exert more pull at slow speeds – such as on mountain grades, within the ratings of its traction motors.

At high speeds the steam locomotive can hold its own in comparison with a diesel, as far as power is concerned, but at high speeds the diesel is smoother riding on the track because it does not have heavy reciprocating parts such as side rods, etc.

Every axle on some diesel locomotives is a driving axle, which gives the diesel greater traction on the rails than a steam engine of equal total weight.

On downgrades the electric motors of most diesel locomotives serve as electric brakes, saving wear on brake shoes and car wheels and often eliminating stops to set up or turn down brake retainers or to equalize braking heat in wheels.

Diesel locomotives are instantly available at any time of the day or night – no wait to build up steam pressure. They spend less time out of service for shopping and repair, and on the road they can travel much longer distances without stopping for fuel and water.

Text and Photo from the booklet, ‘Rail Lore’ – from and about ‘The Friendly Railroad’’, published by Southern Pacific (date unknown)



EMD F-7 #6163, delivered to SP in 1949, leads an A-B-B-A set of Road Freight Diesels in Black Widow paint scheme



PSRHS Mission Statement

- ◆ To research, document, and preserve the history of railroading and current operations in the Placer-Sierra area.
- ◆ To interpret the relationship and effect of railroad commerce and activities with the cultural and economic development of local communities and the region.
- ◆ To collect, curate, restore, and interpret – by way of display and operation for public view – memorabilia of local railroads.
- ◆ To work with other civic, historical, and public organizations to accomplish these goals.

**Area of Focus: The Transcontinental Route over Donner Pass,
from Roseville to Truckee**

- ◆ Monthly Presentations, 4th Thursday, 7PM, DeWitt Senior Center, Corner of 1st & D Ave., off Bell Rd., N. Auburn
- ◆ Field Trips to nearby points of interest
- ◆ Restoration Projects
- ◆ Photo Displays

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