

Placer-Sierra Railroad Heritage Society



<https://www.psrhs.org>

August 2025 Newsletter

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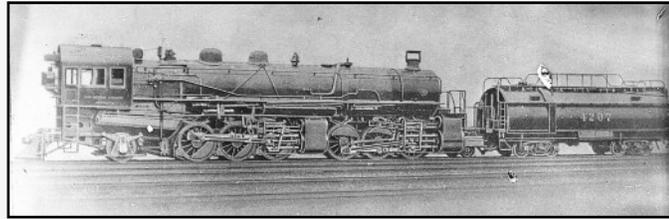
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1912 Wreck of SP 4208. Pages 5-7

You've likely seen photos of SP's cab-forward engines, but this 2-6-6-2 passenger engine had design issues. See pages 4 thru 7 for details about an accident and resulting inquiries that led to changes for this cab-forward.



Scheduled Events & Notices



**Aug 26 PSRHS Monthly Meeting, 7PM – Program - Roger Staab - Colfax at 160
- Celebrating Railroad Changes and Incidents That Redefined the Region**

**Sep 11-14 2025 Western Pacific/Rio Grande Railroad Historical Convention
– CA State RR Museum convention.wplives.org**

**Sep 13-14 Colfax Railroad Days – Volunteers Needed to Staff Caboose Both Days
– Featuring UP's New Fire Train + Handcar Rides + Historic Walking Tours**

**** No Monthly Meeting & Program in September ****

**Oct 28 PSRHS Monthly Meeting, 7PM – Tentative Program - Jim Wood
- England Trip Photos of British Railroads**

Annual membership renewals pay for publishing railroad history documents, purchasing and posting historic photos, arranging field trips, & other historic preservation activities.

Preserving Railroad History on the Donner Pass Route

Placer-Sierra Railroad Heritage Society



August 2025 Newsletter

PSRHS MONTHLY MEETING

AUGUST 26, 7PM

AUBURN VETERANS MEMORIAL HALL

Our meetings are open to all who are interested. See our web site for updates on meeting topics and directions to the meeting location.

August Program: Roger Staab – Colfax at 160 – Celebrating Railroad Changes and Incidents That Redefined the Region.

As a companion to the Sept. 13-14 Colfax Railroad Days event honoring the town's now 160-year link to the transcontinental railroad, the PSRHS August 26 program will look at railroad-related changes that have occurred at Colfax and along the Donner Route since the town was created by the railroad in 1865. Some changes were physical such as track realignments, while others were merely cosmetic or the result of altered operations. You are invited to join us for this walk through time as we look at selected changes to the Nation's first transcontinental railroad.

July Program Recap: Chuck Spinks discussed the history of **Summit Tunnel 6** construction that led to its recent **designation by the American Society of Civil Engineers as a National Historic Civil Engineering Landmark**. Features recognized in its construction included the first use of nitroglycerine in U.S. railroad construction, the painstaking efforts by Chinese laborers to carve the tunnel through solid granite while completing much of the work in Sierra's harsh winters, and the use of a center shaft to allow progress from four fronts and speed the tunnel's completion.

NO MEETING IN SEPTEMBER

COLFAX RAILROAD DAYS SEPT. 13-14

Mark your calendars for Colfax Railroad Days the weekend of Sept. 13-14 in downtown Colfax. There are rumors of some added attractions for this year's event. Union Pacific plans to display snow-fighting equipment along with its **brand-new fire train** that is currently stored on the westbound spur in Colfax.

A special addition this year will be **handcar rides** on a temporary track set up near the caboose.

The **caboose will be open** to the public both days from 10am-5pm. We **need volunteers** to staff the caboose with at least two people per shift. Contact your editor if you can do one or more 2 to 4 hour shifts. No special experience needed – volunteers answer questions and assist kids of all ages who like to climb into the cupola.

Historic **guided walking tours** will be hosted by Roger Staab on Saturday at 11 and 2 and Sunday at 11

PSRHS will have a table at the caboose offering surplus books and documents from our collection free to the public with a suggested donation to the caboose fund.

JULY BOARD MEETING

The PSRHS Board of Directors met prior to the July meeting. Items discussed included:

1. Colfax RR Days
 - UP may be displaying snow-fighting equipment plus Fire Train
 - Dates: September 13-14
 - Caboose to be staffed. Looking for volunteers who can serve 2 to 4 hour shifts
 - Caboose to be open 10-5 both Saturday and Sunday
 - Short-term insurance policy by City of Colfax
2. Chinese Heritage Worker Statue
 - U.S. / China Railroad Friendship Association
 - Possible funding source: 1882foundation.org
 - Small replica of CSRM statue to Colfax museum
 - ACTION ITEM: Jim Wood will be the liaison with Wei Zhang
3. Newsletter Mailing Issues
 - ACTION ITEM: Chuck will speak with Malcolm in an effort to get this resolved
4. Items from Peter Hills Move
 - Bulky items remain at Bill Yoder's place
 - ACTION ITEM: Jim Wood will visit Bill Yoder and transport these items off Bill's property





Passing Scene - SP Lives - Kind-of

There have been numerous sightings recently of an ex-Southern Pacific locomotive still sporting the old SP paint scheme and operational on the Donner Route. Last month PSRHS member Mike Haire captured this photo of renumbered UP 6379 in the familiar but faded SP paint scheme while on the point crossing the Butte Canyon bridge. While other SP locomotives have been incorporated into the UP fleet, most have been renumbered and repainted in UP Yellow. It is becoming rare to spot the old SP paint scheme still in action, especially on the point of a Union Pacific freight.



Membership Information

Individual Members = \$25.00/yr
Each Additional Family Member = \$5.00/yr

- Monthly Meetings (4th Tuesday) and Newsletter
- Member Activities, History Pubs and Field Trips
- Display and Restoration Projects

PSRHS, P.O. Box 1776, Colfax, CA 95713
or join/renew online at <https://www.psrhs.org/>

Reader comments, additional details, etc., are invited on any newsletter items or photos. Please forward comments, suggestions or information for inclusion in future issues of the newsletter to:

roger.staab@psrhs.org

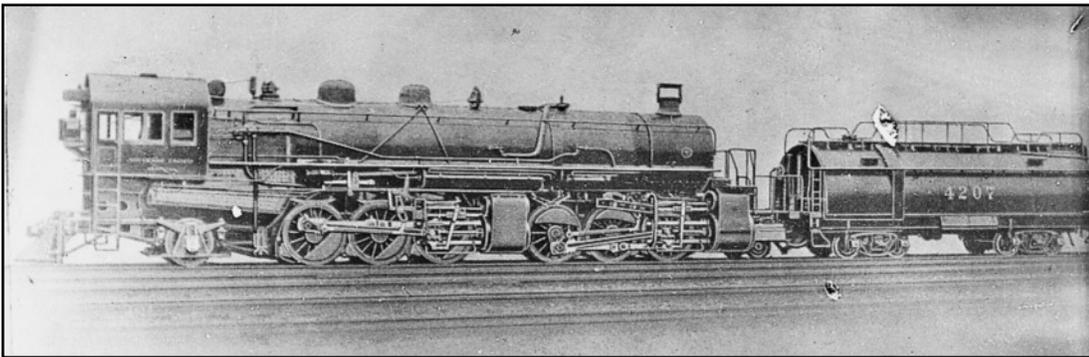




From the Archives - Wreck of Passenger Locomotive SP-4208

In 1912 a new cab-forward 2-6-6-2 locomotive built for SP specifically for passenger service derailed near Applegate. SP 4208 was on its maiden run, pulling the premier Overland Limited from Sparks to Sacramento. The investigation of the accident revealed that in modifying the locomotive to run backward, putting the cab in front, no consideration had been given to whether the existing trailing wheels would perform properly as leading wheels. The accident led to the redesign of the locomotive, replacing the two lead wheels with four wheels.

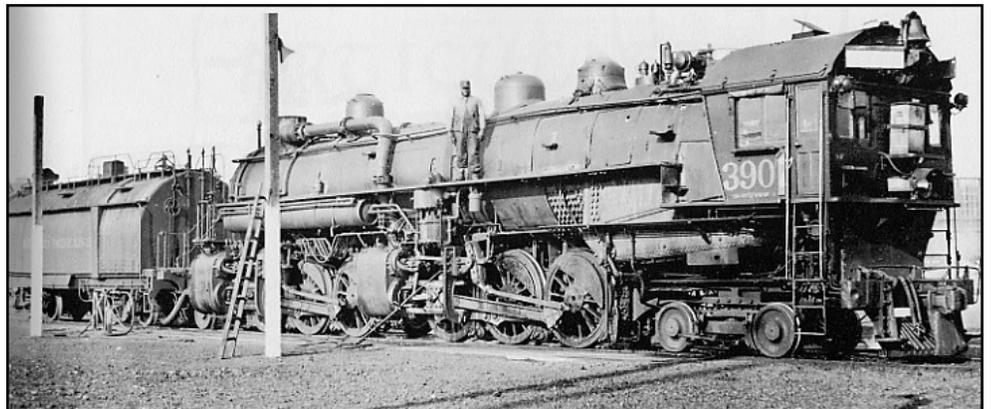
See the news accounts of the accident below and on page 5, and a summary of the three investigations and findings on page 6. The photos below show the engine class before and after adding the redesigned lead wheels.



SP 4207, a 2-6-6-2 built for passenger service, was a sister to the engine that derailed in 1912 near Applegate.

SP 3907 in 4-6-6-2 configuration. In the 1930s SP renumbered the 4200 series passenger engines to the 3900 series. SP 3907 is in fact the renumbered SP 4207 with the modified lead wheels.

Photos from Ken Yeo collection



Accidents/Other Incidents. *Placer Herald, Feb. 10, 1912.* “**Fast Train Wrecked.** Train No. 1, San Francisco Overland Limited, West bound, Monday forenoon about 10:20 a.m., jumped the track on a curve a mile above Applegate station, and the engine, baggage car and diner went over the bank of a deep fill and piled up in a mass of wreckage 30 feet below the road bed. Engineer C. Brown was so badly scalded by steam that he died in Sacramento on Wednesday night. Fireman Clark was hurt about the hips and body, and Brakeman Cook got a number of bruises on his head and body. The quick application of the air brakes saved the sleepers from tumbling over the fill and undoubtedly saved a great loss of lives and further destruction of railroad property.

The engine drawing the train, was one of the big Mallets, and great difficulty was experienced in getting it from the bottom of the ravine where it lodged bottom side up, to a temporary track for removal to the shops...

No cause has yet been found for the accident, although a board of inquiry has been making a strict investigation into the facts.



1912 WRECK OF SP 4208 PASSENGER CAB-FORWARD

The Roseville Register, Feb. 9, 1912. **OVERLAND LIMITED NO. 1 HAS A VERY BAD WRECK**

“We are indebted to the Sacramento Union for the following excellent write-up of the wreck to No. 1 on Monday morning in which three of our local people were injured:

Four trainmen were injured, one perhaps fatally, and the lives of 75 passengers were imperiled at 10:30 yesterday morning when the Southern Pacific’s westbound Overland Limited was derailed one mile east of Applegate, Placer county, and about 45 miles east of this city. The compound Mallet engine, the combination dynamo and baggage car and the diner left the rails and piled up at the bottom of a thirty-foot embankment. The two forward sleeping cars left the tracks but remained in an upright position. The passengers were badly shaken up, but apart from minor bruises no one suffered serious injury.

The injured men were brought to Sacramento yesterday afternoon on the fast mail train, arriving here at 1:45. They were taken immediately to the Wentworth hospital. Dr. H.T. Rooney, the company physician at Colfax, accompanied the injured men from the scene of the accident and administered first aid treatment. Engineer C.C. Brown was pinned under the wreck of his engine and was badly scalded. He was unconscious when removed from the cab by the train crew, who were assisted by a number of passengers in their work of rescue. The exterior burns sustained by the engineer are not believed to be necessary fatal, but the inhalations of live steam has rendered his condition serious. Brown is a widower with several grown children residing in Sacramento.

Fireman W.E. Clark succeeded in extricating himself from the ruins of the engine and managed to crawl to a place of safety. He was not badly injured, his wounds consisting of a wrenched hip and abrasions of the face and head.

Brakeman Cook was riding in the baggage car immediately behind the engine. He was not badly hurt, but at the solicitation of local railroad officials he was sent to the Wentworth hospital for treatment.

The negro Pullman car waiter, Allen Johnson, sustained a wrenched back. He was sent to San Francisco for treatment.

The cause of the derailment has not been definitely fixed, but it is believed to have been the result of a defective rail. The wreck occurred on a 6 per cent curve while the train was going not more than 25 miles per hour. A wrecking train was sent from this city within 30 minutes after the accident had been reported, and the tracks were cleared for the resumption of traffic by two o’clock. The Overland arrived here at 4 o’clock. The passengers reported having suffered no inconvenience, except that the wreck of the diner left them without means of obtaining a noon-day luncheon. An excellent dinner was awaiting them on arrival in Sacramento.

That no lives were lost is regarded as miraculous by local railroad officials. Breakfast in the diner had just been concluded when the derailment occurred, and not a single passenger was in it when the car top-ended down the embankment.

The presence of mind of A.M. Meston, a traveling engineer of the Southern Pacific, residing at Roseville, who was riding on the pilot of the engine, averted what might have resulted in more serious consequence to the crew and passengers of the train. When he felt the engine leaving the tracks, he closed the valve that supplies compressed air to the brakes. He then jumped to safety. His action locked the wheels of the Pullman sleeping cars and brought the train to a stop.

The Mallet engine, dynamo and baggage car and diner turned completely over after reaching the bottom of the embankment. The two sleeping cars were derailed but did not upset.

Continued on page 6





SP 4208 Wreck – continued from page 6

Superintendent H.W. Sheridan, accompanied by A.J. Gilson, master car repairer; W.H. Kirkbridge, division engineer, and L.S. Pratt, master mechanic, followed the wrecking train to the scene of the accident and spent the day in conducting an investigation into the cause of the derailment.

The operating officials of the Sacramento division continued their investigations into the cause of the wreck until darkness closed in without establishing any definite conclusion as to the cause of the accident. The board of inquiry will meet in the superintendent's office this morning to review the situation and make an effort to place the responsibility for the derailment.

Engineer Brown died Wednesday evening. The board of inquiry laid the accident to spreading of rails."

Editor's Note: SP 4208 was on its maiden run pulling a passenger train when the accident happened. It had arrived in Sparks the day before, assigned to pull the premier Overland Limited westbound to Sacramento. The accident created a lot of attention at SP headquarters, as three separate Boards of Inquiry sought to determine the exact cause of the accident and propose a remedy if needed.

An excellent review of the accident and the resulting investigations was recently told in the Winter 2025 issue of S-P Trainline, a publication of the Southern Pacific Historical and Technical Society. The article "**Who Ordered These Engines to Run Backward?**" by **Richard Tower**, summarizes the three Boards of Inquiry that analyzed the accident. Here's an abbreviated summary of the findings and the resulting changes.

Despite receiving testimony about similar engines showing unstable behavior on curves, the first Board of Inquiry reported that they were "unable to form a definite conclusion."

A second Board of Inquiry was formed and their reported cause was the rail turning over. They also mentioned that the locomotive design may have contributed, since it was really a locomotive operating backwards with the trailing wheels now leading, and perhaps they were not properly designed for that role.

New SP President William Sproule was increasingly unhappy with each succeeding Board of Inquiry failing to find a direct cause of the derailment. He called for a third Board of Inquiry that included a series of instrumented test runs of a sister locomotive, SP 4207 that showed slight instability on curves when approaching 30 mph, while causing the driver wheels to bang against the inside of the rail at speeds above 34. The suspected cause was the large overhang of the firebox on this locomotive type, with the design of the lead wheels again being questioned. Despite these results the third Board concluded that the likely cause was excessive speed. The instability appeared to happen only above 30 mph. Since the posted speed limit was 25, the engineer must have been exceeding the speed limit. Sproule felt that the third Board of Inquiry gathered some important new information but their conclusions were not consistent with their findings.

This led SP and Baldwin to determine who had ordered the design change to put the cab ahead. Records showed that all that was ordered was to turn the engines around and modify the cab and other fittings as needed, with no mention of the design of the now leading wheels. SP agreed to purchase from Baldwin new four-wheel lead sets designed to steer the engine around curves. All remaining 2-6-6-2 cab-forwards became 4-6-6-2 and the derail problem was solved. However, the SP 4-6-6-2 cab-forwards were soon replaced by other locomotives for Donner passenger service, and the SP cab-forward 4-6-6-2 passenger locomotives were reassigned to other operational service.





Photos of Wreck of SP 4208 taken by a passenger - *S-P Trainline Winter 2025*

Some historians credit North Pacific Coast's No. 21, an NWP locomotive, or a similar locomotive in Italy as the basis for the cab-forward design. But the S-P Trainline article reports that a letter written by rival Santa Fe's master mechanic Hugo Shaefer appeared in the April 30, 1909 Railway Age Gazette, proposing that the cab be moved in front to improve visibility past the long boiler and piping. The idea was initially considered impractical by SP, but when the issues of both excessive smoke and visibility became obvious in May, SP officials revisited Shaefer's idea and in June submitted it to Baldwin for their thoughts. Baldwin came back with a design on July 9, and the SP cab-forward was born.

