

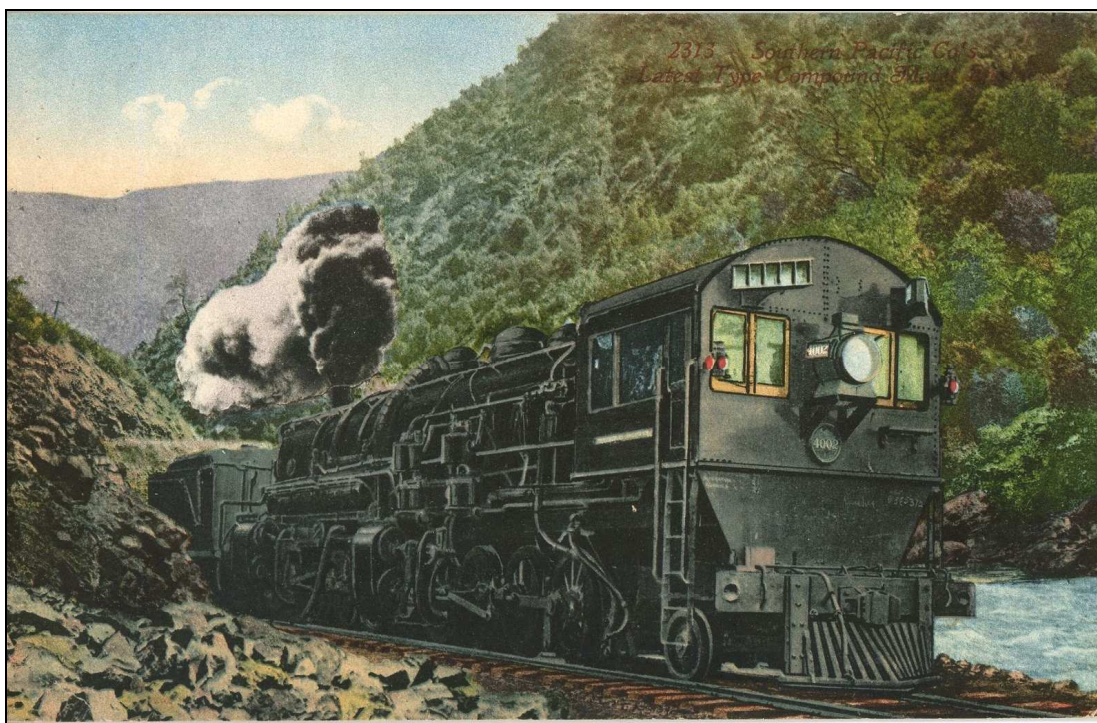
# THE NEWSLETTER OF THE RED RIVER VALLEY RAILROAD HISTORICAL SOCIETY, INC.

February, 2011

SHREVEPORT, LA

Our 30<sup>th</sup> Year

## Is That Locomotive Going Backward ?



No, it is not running backward. It is a Southern Pacific “Cab Forward” locomotive, one of the most unusual and ingenious designs to come out of the steam age. Following is an excerpt from a very interesting website published by Wes Barris called [www.steamlocomotives.com](http://www.steamlocomotives.com)

The Sacramento division of the Southern Pacific had close to 150 miles of grades of up to 2.5%. On this Roseville - Sparks line over the Sierra Nevada there were also almost 30 miles of snow sheds and tunnels. Over the years, as trains grew in length, more powerful locomotives were required.

In 1908 the Southern Pacific ordered two 2-8-8-2 conventional mallets classified MC-1 (Mallet - Consolidation) numbered 4000 and 4001. On a trial run up the "Hill" two problems became immediately evident.

1. The great volume of exhaust gasses almost asphyxiated the crew.
2. The stack exhaust velocity was so great that it blew the roof boards off of the snow sheds.

The second problem was easily handled by installing "stack splitters", a deflector located above the smoke stack which directed the exhaust to the sides. The first problem required more consideration.

Shortly after delivery of the MC-1s, an enterprising engineer decided not put up with nearly being asphyxiated or exposing himself to the tremendous heat and noise. He had the engine turned, hooked the engine pilot to the front of the train, and backed his locomotive over the hill pulling the train behind. This alleviated the above problems but created others such as pushing the tender ahead of the engine and the engineer being on wrong side for the signals. Despite these problems, other engineers began following this example.

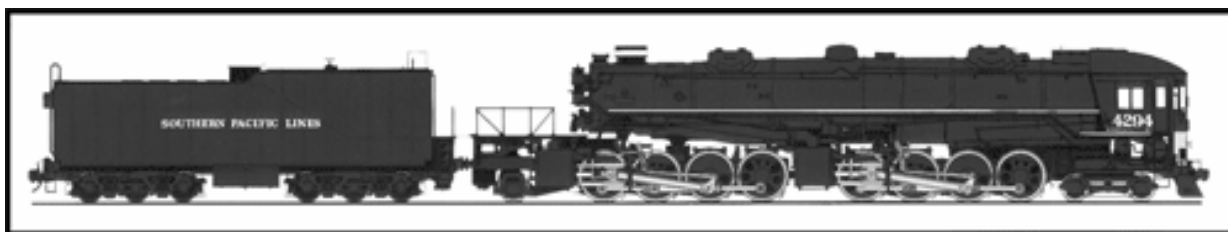
A team of Southern Pacific design engineers came up with a plan and designs for a mallet with the cab in front, classified MC-2. Southern Pacific had Baldwin build 15 without testing one! Numbered 4002-4016, they were delivered in February and March of 1910. The engineer's and fireman's controls were shifted to opposite sides of the cab so that when run "backwards" the crew was on the usual side of the track.

Since the firebox on these locomotive was located in the front (far from the tender), they were designed to burn oil. Oil was piped from the tender along the locomotive to the firebox. The oil bunker in the tender on these locomotives was made air-tight and was structurally braced. They were slightly pressurized with air from the main air reservoir to insure a constant oil flow to the burner in the fire box when to the locomotive when traveling upgrade.

After the MC-2s had proven themselves, 32 more, classified MC-4 and MC-6 (MC-3 and MC-5 were skipped) were ordered. Before it was all over, Southern Pacific ended up with a total of 256 Cab Forwards (all classes). These Cab Forwards came in several wheel arrangements including 2-8-8-2, 4-6-6-2, and 4-8-8-2.

Although the crews initially complained about concerns that if they hit a gasoline truck at a grade crossing they would be right on top of it when it exploded. Fortunately, in 46 years of running Cab Forwards, this never happened. This was partially because of the unobstructed view from the cab. The advantage in visibility was tremendous.

Cab Forwards were a distinct trademark of the Southern Pacific. They were sometimes also called "Cab-in-fronts" or "Backup Mallies" (even though, technically, only some of the first classes were true mallets). According to the definitive book on Cab Forwards (*Those Amazing Cab Forwards* by George Harlan), no other railroad in the world had locomotives like them. However, a few other unique examples did exist.



SOUTHERN PACIFIC-CAB FORWARD

## **The *Monkey Deck***

The Southern Pacific Cab Forwards had a platform immediately following the smokebox of the locomotive (as shown in the figure above). This platform was called the "*monkey deck*". Smoke boxes were often stained with rust from boiler water and boiler water treatment chemicals. Because of its proximity to the stacks, the *monkey deck* was often stained with rust from boiler water, too. Occasionally articulateds would spew hot water and mud from their stacks. Most railroad employees were aware of this fact. However, many hoboes thought the *monkey deck* was a good place to ride. After passing through tunnels or snow sheds, hoboes riding the deck were either scalded or asphyxiated depending upon how the locomotive was performing. The *monkey deck* was not a good place to ride on Cab Forward locomotives.

## **The Last Cab Forwards**

- The last Cab Forward in revenue service was 4-8-8-2 No. 4211 which hauled freight from Oakland to Davis and then to Roseville with only a caboose on November 30th, 1956.
- In November, 1957 No. 4274 was brought out of retirement to make the last run of a Cab Forward over Donner Pass from Sacramento to Sparks and back. **(Editor's note: We will watch a video of this run at our February 18 meeting)**
- In 1960 the last Cab Forward to be scrapped was AC-10 No. 4243.
- On May 7, 1981 AC-12 No. 4294 was designated a National Historic Mechanical Engineering Landmark.

## **Next RRVrHS Meeting on February 18 at the Glen**

The meeting will be held on Friday, **February 18** at **7 p.m.** in the auditorium at the Glen Retirement Village, 403 East Flournoy Lucas Road. **Please be on time** for the beginning of the meeting so you won't miss anything. The Glen Retirement Village is located on the south side of Flournoy Lucas Road between Ellerbe Road and Youree Drive (Highway 1). For information or directions call Dave Bland at (318) 470-5933. We will watch a video of the "**Last Run of a Cab Forward Over Donner Pass**".

## **Upcoming Events**

February 8	T&P Depot Museum in Marshall – 6 pm – “Talkin’ to the T&P”
February 18	RRVRHS Meeting at the Glen – 7 p.m.
February 22	T&P Depot Museum in Marshall – 6 pm – T&P Family Ties Meeting
March 18	RRVRHS Meeting at the Glen – 7 p.m.
March 19-20	Longview Train Show
March 22	T&P Depot Museum in Marshall – 6 pm - T&P Family Ties Meeting
April 12	T&P Depot Museum in Marshall – 6 pm – “Boogie Woogie and the T&P Railway”

## **Texas & Pacific Depot Museum**

Call (903) 938-9495 for more information about their ongoing programs.

**See Current and Previous Newsletters in **COLOR** at our website**

(Thanks to Tommy Crenshaw)

[www.rvrhs.org](http://www.rvrhs.org)

## The President's Message – February 2011

Hello Railfans:

I hope that everyone enjoyed the snow and ice and hopefully a day off last week. I sure did, although Dorothy kept me busy doing "honey dos" all weekend.

It's been very interesting this past month. We held elections, a month late, and had a few changes. Dave did not wish to serve another year as Vice President. We all thank him for serving the past four years. I would like to congratulate Kelly Jo Brunettin, our new Vice President. I know she will do a good job. I would also like to thank Gary Fox for taking his old job of Secretary back, since Mark did not want to serve again in that job.

At the meeting, Kelly Jo reported on her meeting with Mr. Jeff Ware from the American Rose Society, Shreveport location, on the status of the 1 ½ inch scale railroad at Greenwood. If you are interested, Kelly Jo has a written report on what went on. Needless to say the meeting did not go in our favor.

Work is continuing on the museum with Jim McClure and me working on an N scale model of the total museum site. Money was also voted to purchase the remaining electrical supplies to complete the rewiring of the museum building.

I would like to welcome our newest member, Dick Melcher to the group. Dick is a pilot and railfan. He owns a 1 ½ scale diesel and has owned a live steam engine in the past. Dick has recently moved here from the Northwest. Welcome, Dick!

Well, so long for now. Hope to see you all at the next meeting, and hope the weather improves by then.

Happy Railroading!

Russell

**RED RIVER VALLEY  
RAILROAD HISTORICAL SOCIETY, INC.  
Shreveport, LA  
[www.rrvrhs.org](http://www.rrvrhs.org)**

Russell Pedro – President      Kelly Jo Brunettin – Vice President  
Gary Fox – Secretary      Bill Hasheider – Treasurer  
Dave Bland – Newsletter Editor – 797-8008 – [DDBland@aol.com](mailto:DDBland@aol.com)

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### **It is time to pay your 2011 Annual Dues**

Please send a check or money order for \$16.50 with this membership form to Bill Hasheider at 6813 Despot Road, Shreveport, LA 71108

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_