



# Coast Mail

News from the San Luis Obispo Railroad Museum



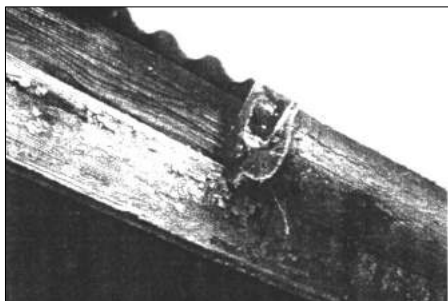
Issue Number 58

San Luis Obispo, California

Winter 2016

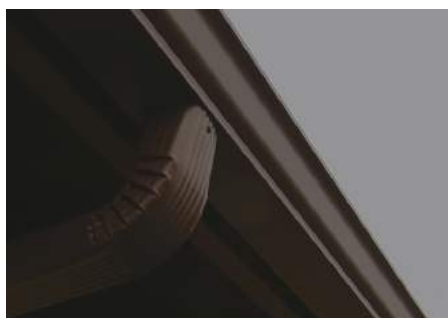
www.slorm.com

Museum open Saturdays 10 a.m. to 4 p.m.; other times for groups by arrangement. Contact media@slorm.com.



## Rain, rain, go that way.

Member John Marchetti worked with the City of San Luis Obispo to have new rain gutters installed at the Freighthouse along the platform. There were none since the building was rehabilitated. The original gutter sections (above) consisted of solid redwood with a U shape milled out. The photo is from the city's 2002 "Historic Southern Pacific Railroad Freight Warehouse Rehabilitation Report." According to the report, the gutters were "a significant character defining element." In September Five Star Rain Gutter, Inc. installed new gutters (below), under a city contract with Alejandro Hernandez coordinating.



## Holiday Schedule

- **December 3** – Santa & Mrs. Claus arrive by midday Amtrak Surfliner.
- **December 10** – Regular open day, but will close at 3:00 to accommodate an event by another nonprofit organization.
- **December 13** – Board meeting, 6:00 p.m. – Model Railroad Superintendent Andrew Merriam's presentation on the model railroad.
- **December 17** – Winner of winter scene to be announced (see below).

## Ludwick Grant Announced

In October the Ludwick Family Foundation awarded the Museum \$100,000 for restoration of our 1926 café-lounge car *La Cuesta*. Members Karl Hovanitz, Andrew Merriam, and Dave Rohr prepared the application. The funds will greatly accelerate this major effort.



*That relay cabinet base is heavy, and it had to be lined up with four bolts in a massive concrete footing.*

*Photo by Glen Matteson.*

## Semaphore Sign Installed



In early October the Museum's long awaited main identification sign was installed next to the retaining wall along Santa Barbara Avenue. Members Howard Amborn, Tom Cooper, Dan Manion, John Marchetti, and Ted Van Klaveren helped prepare the equipment and the site. Pierre Rade-maker Design and Ashley & Vance Engineering provided design and permitting services, with Southpaw Sign Company fabricating and attaching our logo. The Spring 2016 *Coast Mail* had background on semaphore signals.

*Photo by Diane Marchetti.*

## Win a Winter Wonderland

Every paid Museum admission on December 3, 10, and 17, with a completed visitor survey, will have a chance to win the winter diorama shown below, with two tracks, trains, tunnels, trees, cabin, and snow. It's N scale, about 15 by 30 inches, and while the locomotives and cars can be moved it is not an operating model. The winner will be notified and need not be present to win.



## So, pilgrims, had enough sugarplum fairies?

Come to the Museum's January 28 Movie Afternoon to see a very young John Wayne in "The Hurricane Express," preceded at 3:00 by a presentation on some local history: *A Railroad That Never Was* (but sought big-time investors). Free with Museum admission.



**Preserving California's Central Coast Railroad History**

The San Luis Obispo Railroad Museum is a non-profit educational institution. Founded to preserve and present California Central Coast railroad history by collecting, restoring, displaying, and operating relevant railroad artifacts, photographs, models, and documents, its goal is to facilitate a better understanding of railroads' impact on our area's social, cultural, and economic history.

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 San Luis Obispo, CA 93401

**DOCUMENTS AVAILABLE**

Members may access or receive a copy of the Museum's *By-laws* or *Collections Policy* on the website above or by sending a #10, self-addressed, stamped envelope to the address above.

**Museum Store**

To raise funds, the Museum offers several items for sale. T-shirts, baseball caps, belt buckles, mugs, enameled pins, embroidered patches, engineer hats, and videos are available through the Museum website:  
[www.slorrm.com](http://www.slorrm.com)  
 Click on **Company Store**.



**Don't let the train leave without you.**

*Photo by Glen Matteson*

Member benefits include free admission to the Museum and access to Members Only features of the website, including current whole issues of *Coast Mail*.

**Become a member**

Membership provides opportunities for anyone interested in railroad history or current activity, train travel, or model railroading to learn and experience more, and to share with others.

Annual memberships are \$36 for individuals, \$60 for families, and \$100 for sustaining members. Application forms can be downloaded from the Museum's website and mailed with payment. See mailing and web addresses below left).

**Renew your membership**

The Museum exists thanks to continued member support. *All annual memberships expire December 31*. If you have not already renewed, please provide your payment and any changes to your contact information. (The Museum never shares your contact information.) Checks may be mailed to the Museum, or you can pay by credit card in person.

**Timely renewal bonus:** Individuals providing payment by December 31 get a one-time free-admission guest pass; family and sustaining memberships paid by year end will receive two passes.

**Membership News**

Since the last issue there have been: four new individual memberships; three new families; seven individual renewals; three family renewals; and one sustaining renewal. The Museum now has 217 memberships.

**TIMETABLE**

The Museum Board of Directors meets on the second Tuesday of each month at 6:00 p.m., at 1940 Santa Barbara Avenue, San Luis Obispo.

- Dec. 13 - Public presentation meeting (model railroad)
  - January 10 - Board action meeting
  - February 14 - Board action meeting
- For committee meetings, contact the Museum (number and email at left).

**Also in This Issue**

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## How did you get interested in trains?

### Richard Alberts

Richard is a quiet and modest member who has helped the Museum at critical times, such as when volunteers were working under a deadline to move the truly heavyweight Pullman car *La Cuesta* to the display track and the services of a house mover were needed. Richard was not a house mover, but his financial support made the move possible.

He says no one thing sparked his interest in trains and railroad history. But, pardon the pun, living in Southern California he was a rider and fan of the Pacific Electric Railway. The PE, often referred to as “the Red Cars” for an obvious reason, was one of the world’s most extensive interurban railroads. It was a subsidiary of the Southern Pacific for most of its existence. It reached from Long Beach and Santa Monica to downtown Los Angeles, into the San Fernando Valley, and east to San Bernardino. It had plans to build to Santa Barbara but never got that far.

Richard has lived in San Luis Obispo for many years, working for the Post Office, the National Guard, and the California Department of Corrections. Now retired, he often comes by the Freighthouse and display track, keeping an eye on things and checking progress whether or not it’s an open day.

Richard says he often daydreams of what might have been. For example, if the Pacific Coast Railway line from Port San Luis to San Luis Obispo had been saved so visitors and beachgoers could ride it in restored or replica trolleys. He’s also interested in expansion of conventional rail service along the coast.



*Pausing in La Cuesta lounge car’s colorful interior, Mr. Alberts recalls earlier travels.*

*Photo by Glen Matteson.*



*Mr. Alberts has also helped the S.L.O. County Land Conservancy, an organization that protects some of the most beautiful landscapes in the world, once traversed by the Coast Daylight, which many called “the most beautiful train in the world.” This is the UPRR in Edna Valley June 2016, from near the Highway 227 bridge.*

*Photo by Glen Matteson.*

## The Biggest of the Smallest

On September 17 Museum member Bernd Schumacher displayed some of his Z scale equipment (1/220<sup>th</sup> full size, below), aiming for his collection to be recognized by the Guinness organization as the world’s largest. He began collecting in 1992 and focuses on European items.

*Photos by Gary See.*



## You Can Help Build a Bridge to the Future

In the full-size world the landscape usually happens before the man-made structures. But on the Museum’s display layout modelers want to make sure the structure fits and the track works before adding all the rocks, soil, grass, brush, trees, livestock, and wildlife. Here is Stenner Creek Trestle on San Luis Obispo Train Day in May.

Donations to the Museum in the form of time, funds, and items such as books or models that are suitable for sale all help us get from here to there.

*Photo by Gary See.*

*From the Archives* by Glen Matteson

## A Good Year

Someone connected with the Pacific Coast Railway carefully saved many newspaper clippings concerning our local narrow-gauge line. The smaller articles were stapled to standard size sheets of paper, and most have dates hand written next to them. Unfortunately, the article quoted here did not identify the newspaper. It was probably the Santa Maria Times. This one is dated July 13, 1938, and is in a column headed "Fifty Years Ago," so it's originally from the year 1888.

*"The annual report of the Pacific Coast railroad was filed yesterday. The total cost of construction was \$2,072,233, of equipment \$204,795. ...total income from all sources [was] \$193,003, in comparison with [operating] expenditures of \$82,989. The line is in operation between Port Harford and Los Olivos, a distance of 79 miles. During the year, the passenger trains ran 117,165 miles at an average speed of 18 miles per hour while freight trains ran 422,655 miles at a rate of 12 miles [per hour]. The number of passengers carried was 40,430 at an average rate of four cents per mile. Sixty thousand, four hundred and thirty tons of freight were handled on the line, the rate averaging six cents per ton mile. The company employs 125 hands. The engineers receive \$110 per month, passenger conductors \$85, freight conductors \$75, baggage masters \$50, brakemen, switchmen, and flagmen \$55, mechanics in shops \$100. The section hands average \$1.60 per day and the laborers \$2.00 per day. There was but one slight accident on the line during the year."*

Within six years the standard gauge Southern Pacific Railroad would reach San Luis Obispo; it would connect San Francisco and Los Angeles along the coast by 1901. Between 1899 and 1912, what would become the standard gauge Santa Maria Valley Railroad would extend into the area. These more convenient connections to the nationwide rail system, along with paved roads, would greatly change the Pacific Coast Railway's fortunes.

*More From the Archives on page 5 (online).*



### Answer to dynamic brake question

For those who made it all the way through the previous *Coast Mail's* "From the Archives" piece on Details, including the part on dynamic brakes, the answer to the study guide multiple-choice question is: #1 and #4 (according to the answers section at the end). Does anyone want to start a lively exchange of opinions and reminiscences? Anyone?

*Stock photo of locomotive controls.*

## Mystery Photo

What and where is this? Spring 2017 *Coast Mail* will have the answers.



*Photo by Bill Pyper*

## Mystery Photo Contest

The prize is seeing your work in the premier railroad museum publication of the Central Coast. Take a photo and see if readers can tell where it is. Send in a photo that's a mystery to you and Museum volunteers will try to identify it: [newsletter@slorrm.com](mailto:newsletter@slorrm.com).



### Narrow Gauge, Wide View

This painting of a Pacific Coast Railway train crossing a trestle was displayed at SLO Train Day in May. It had been stored for many years and was about to be removed from display to make room for other items. Museum member Howard Amborn located the artist, Martha Saulsbury, living in Arroyo Grande, and re-united painter and painting. Martha, 96, with memories of the PCRY in the Santa Ynez Valley, still paints.

*Photo by Howard Amborn*

*More From the Archives*

by Glen Matteson

## Plug Your Ears and Make the First Shot Count

Structural and civil engineers should enjoy this one. Also people who have been in the military. And people who have been in any organization with a hierarchy. But everyone has to be patient while we get some background out of the way.

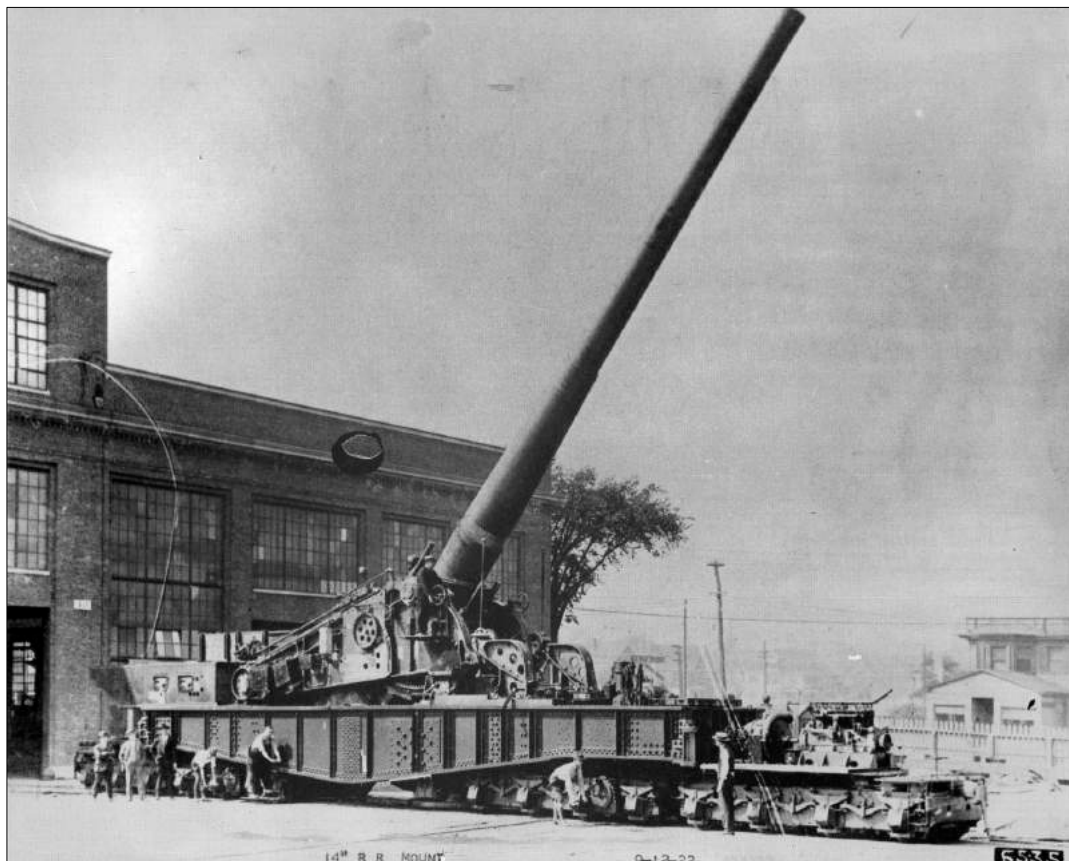
The American Civil War (1861-65) was the first conflict to engage railroads in a significant role. They carried troops and supplies with unprecedented speed, and fed the industries at the dawn of warfare that used standardized parts. Some rail cars were even made to carry canons and mortars. For an amusing depiction of a Civil War era rail-mounted mortar, it's hard to beat a scene in Buster Keaton's 1926 film "The General."

World War I in Europe (1914-18) was the impetus for mechanized warfare, including a new generation of rail-borne guns. There was an arms race of gun sizes generally: fixed, naval, and rail-moved. Arms makers perfected the technique of "rifling" a barrel with grooves to make the projectile spin and follow its intended trajectory more accurately. With aircraft still rather flimsy, big-barrel shooters were designed to lob huge shells 20 or so miles over the trenches to hit fixed targets such as bridges and tunnels, fortifications, and concentrations of forces and supplies.

The end of the First World War provided a convenient pause for several nations, including the U.S., to make their arsenals bigger and more sophisticated, including guns for coastal defense. The Baldwin company, known for building locomotives, got into the business. While a simple view of history sees the December 1941 Japanese attack on Hawaii as the start of World War II for America, the American and Japanese "spheres of influence" had been bumping against each other in the Pacific for decades, with Japan chafing in particular at the U.S. takeover of Guam and the Philippines following the Spanish-American War (1908).

So, in the years before actual combat military planners decided to provide coastal defense guns at several points along the California, Oregon, and Washington shores. One result was a pair of rail-borne monsters that the Southern Pacific hauled on the last part of their journey from the East. With a 14-inch bore, they could blast a 1,200-pound shell 27 miles, and a 1,600-pound shell slightly less. A hoist was used to heft the shells into position for loading the guns. The rail cars had 28 wheels to spread out their 365 tons (more weight than an SP cab-forward steam locomotive) over a reasonable amount of track and roadbed. These so-called "14-inch/50 Railway Guns" had several improvements over earlier models. One was that there was no need to dig a pit between the rails to accommodate the recoil at the breech when the barrel was tilted up. Digging a pit between the rails tended to disrupt the crossties and ballast that supported the whole affair and allowed it to be moved, very inconvenient for a supposedly mobile gun.

*(Continues on page 6)*



*In September 1922, a 14-inch railway gun of the type fired near San Clemente and near Goleta during the 1930s poses for a U.S. Army Ordnance photographer in Watertown, Massachusetts. Three years later the gun left the Aberdeen Arsenal in Maryland for the overland trip to its assigned base in San Pedro, California.*

*This image is from a photo reproduced in the book **California's Railway Guns** by Charles S. Small. On page 51 of that book is a photo that captured the dramatic muzzle eruption of a firing near Goleta. While that photo was taken and passed along by Army men, it was not clearly in the public domain and so is not reproduced here. Those who attended the August presentation at the Freighthouse got to see it, along with others.*

## Plug Your Ears... *continued*

In June 1930, the SP brought a gun from eastern San Francisco Bay to Fort MacArthur in San Pedro, at an average speed of 3.6 miles per hour. The railway guns traveled with crews in “side-door Pullmans” (converted box cars) with additional cars for ammunition and material support. The first practice firing took place at what is now Camp Pendleton, on a siding for the Santa Fe Railway’s line between Los Angeles and San Diego, in 1934. At the time, there were virtually no houses along that stretch of coast. Firing the guns at Fort MacArthur, already a developed base with neighboring communities, had the undesirable effect of shattering “windows and crockery,” according to the main source for this piece: *California’s Railway Guns*, by Charles S. Small (Railhead Publications, 1984), a book in the Museum library. This was the “plug your ears” aspect.

Various outriggers and brakes were intended to keep the guns from bouncing around too much when they were fired, but as we shall see things did not always go as intended. One official observed that the guns were “movable, but not mobile.” In fact, while they could be moved between the Atlantic, Gulf, and Pacific coasts, aiming them was tricky. The elevation, the angle of the barrel with respect to horizontal, which largely determines range (distance) of a shot, went to about 50 degrees. But the angle with respect to compass directions could be adjusted only very slightly from the centerline of the car frame. The solution, of course, was to install a curved track and to move the car along the curve until it pointed in the desired direction. Proponents apparently were not discouraged by the fact that moving and then stabilizing the gun at a certain location on the curve took a fair amount of time, and a ship at sea –the presumed target– was likely to move.

Precautions had to be taken to keep the gun from moving once it was properly aimed. When a target is miles away, even a small difference in direction of the barrel can make a big difference in where the projectile hits. This is the “make your first shot count” aspect. An earlier, 12-inch railway gun routinely moved back 30 feet from the recoil, despite having wheel brakes. As Isaac Newton so accurately observed, when even a little thing is shot very fast from a big thing, the big thing wants to go in the opposite direction from the little thing. In this case, a nearly one-ton shell was leaving a 365-ton vehicle...at about 900 miles per hour.

An interesting detail from this era before electronic computers is that the table of mathematical values used to calculate trajectories spanned the inside wall of one of the boxcars that traveled with the guns.

The 1934 firing of 30 rounds about 11 miles from San Clemente apparently did not attract a lot of attention. Plus, that area is not this Museum’s focus. So, obligingly, in the summer of 1937 high-ranking officers arranged for test firing from the Southern Pacific location of Naples, about 15 miles north (timetable west) of Santa Barbara, and invited various dignitaries and officials, local and from Washington, as well as newspaper reporters and newsreel cameramen.



Author Small found Lieutenant Colonel Keith F. Cordrey, Retired, who had been present at both the 1934 and 1937 firings. Cordrey, a captain at the time, played key roles in both, and reported no problems with the actual gun emplacement and performance in 1934. (Other issues during that firing, involving our well known coastal fog, will be reported in the next *Coast Mail*.) But Cordrey’s account of the 1937 firing is instructive.

He was the only officer present who had actually seen the guns fired, and had first-hand experience in how to stabilize them, crucially, in coastal California conditions. However his superior officer, a general from Washington, insisted that Cordrey “go by the book,” a manual which Cordrey found “imaginative with a lot of omissions and errors.” He was concerned enough for the safety of the crew on the railway gun to prepare a time-certified letter stating his objections to “going by the book” and that he was doing as ordered, not what he believed was proper, given the conditions. He also objected to the order to fire a “staggered salvo,” firing the second gun one second after the first.

In his words, “When that staggered salvo went off, all hell broke loose.” The railway guns –barrels, car bodies, wheel assemblies and all– jumped into the air. When they came down in a cloud of dust they left indentations several inches deep in the rails, in effect locking the guns in place. The crew had jumped off, fearing they would tip over. They didn’t. But it took five days to jack up both guns with hydraulic jacks, rebuild the roadbed, replace the bent 110-pound-per-yard rail, and carefully lower them back down so a locomotive could move them. Cordrey suggested that henceforth the adobe clay soil should be tested for maximum compaction before a firing spur was built. A second firing at a slightly different spot, with better site preparation, still caused even dry adobe soil to flow “like mud squeezed out between your fingers.”

So, with some officers leaving Naples more embarrassed than others, the guns were moved back to San Pedro. One was hauled close to Los Angeles Union Passenger Terminal for its 1939 opening ceremony. According to Small’s book, these railway guns were last fired in August 1941, and were never fired at an enemy.

More From the Archives

by Glen Matteson

# Mechanical drawing's finest hour?

For the United States, World War II officially lasted from December 8, 1941, to September 2, 1945. But with American logistical support and preparation starting around the time the war in Europe began in 1939, and demobilization extending into 1946, many historians see those eight years as the railroads' "finest hour." American railroads carried phenomenal numbers of people and amounts of materiel, with much traffic to and through San Luis Obispo. Experienced American railroaders and quickly trained troops also helped operate railroads overseas as part of the war effort.

As mentioned before in this column, the Museum needs to be selective in obtaining and keeping items for its library and archives. Railroading is a broad topic that has inspired mountains of publications. Our items should be at least indirectly connected with some aspect of Central Coast railroading. But a few items are kept simply for their technical and artistic value.

The War Department, predecessor of the Department of Defense, produced many publications, but maybe none so well illustrated as Technical Manual TM55-1254: "Car, Railway, Hospital Unit – 56-1/2-inch Gage, 12 Wheel," dated December 1945. The title does not refer to three things; it's the characteristic military style of proceeding from the general to the specific. It covers two series of U.S. Army rolling wards (reporting marks USA 89300 to 89499), with operation and maintenance instructions for everything from heating, cooling, and ventilation to air brakes, wheel assemblies, and couplers. Trouble-shooting and maintenance were classified as to whether they were likely to be performed on the road or would need to be done in yards and shops.

Each car contained a small kitchen, a toilet, a shower, bunks for 36 recovering wounded, a desk, an officer's section, and a nurse's section. To a student of mechanical drawing, the intricately labeled, cut-away perspectives are inspiring, especially when remembering that they were typically drawn by hand, in ink, on velum, or were engravings, with no drag-and-drop or mouse clicks to undo mistakes.

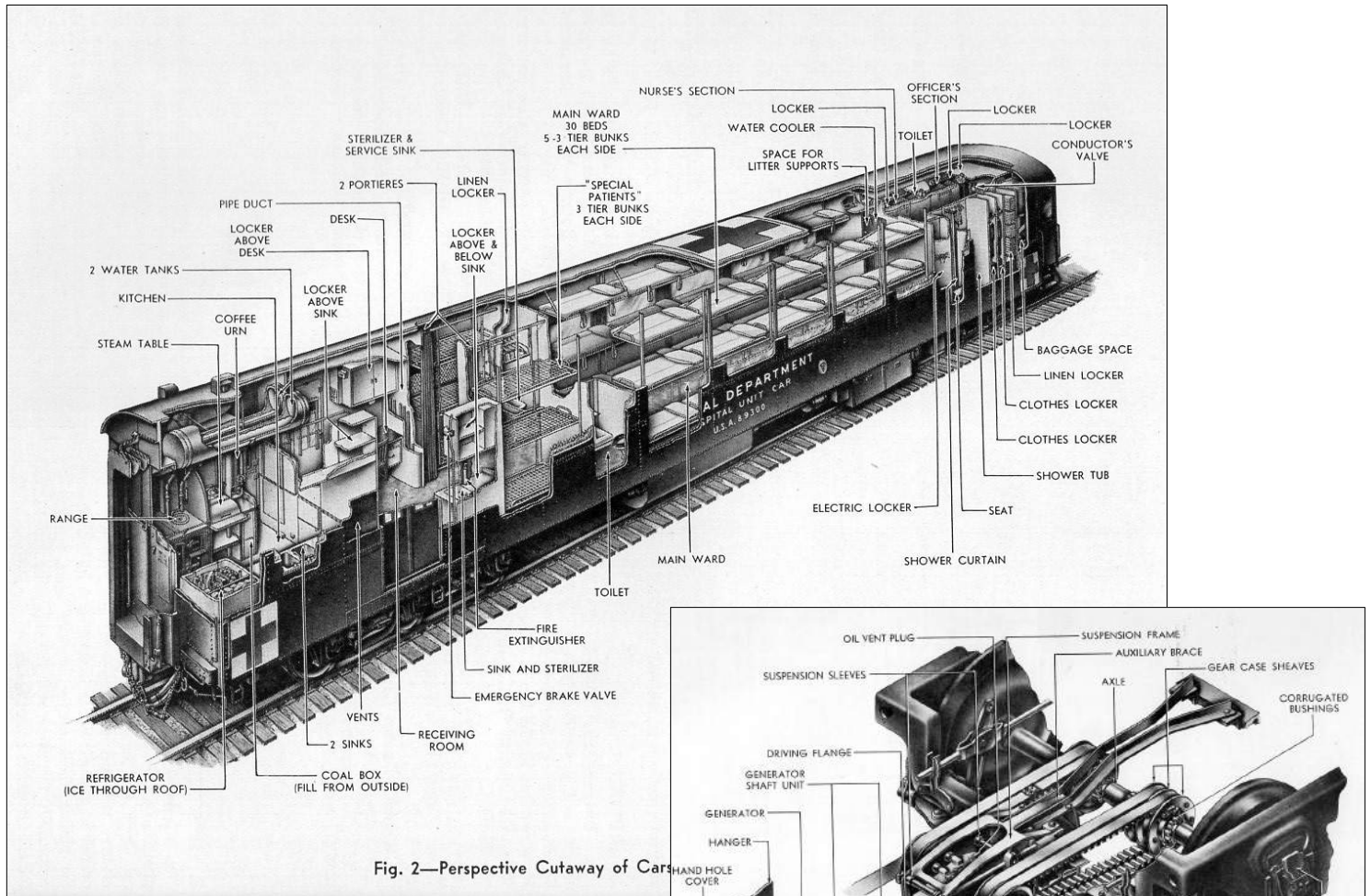


Fig. 2—Perspective Cutaway of Car

*Perspective cut-away illustration of 1945 U.S. Army hospital car. Draftsmen were artists. Both images from Technical Manual TM55-1254, SLORRM collection.*

*Illustration of how the car's electrical generator was driven by belts from the axle and geared shafts.*

# Too Good Not To Share

Sometimes the librarian and the archivist for the Museum decide to keep items for the collection even though they aren't closely focused on Central Coast or even California railroading. Examples are brochures from 1940s railroad fairs, which were a big deal at the time, and long out-of-print books on the details of railroading as practiced many years ago. Here are a few that highlight the art and science of railroad operations.

Below is a diagram in Westinghouse Air Brake Company's 1945 manual on a certain air brake system. It's part of a fold-out page that, along with seven others, shows the system at:

- Running, brakes released, system charged
- Automatic Service, Lap
- Release after Automatic Service
- Holding after Automatic Service
- Emergency
- Emergency, Lap

And there were four "Independent" system positions.

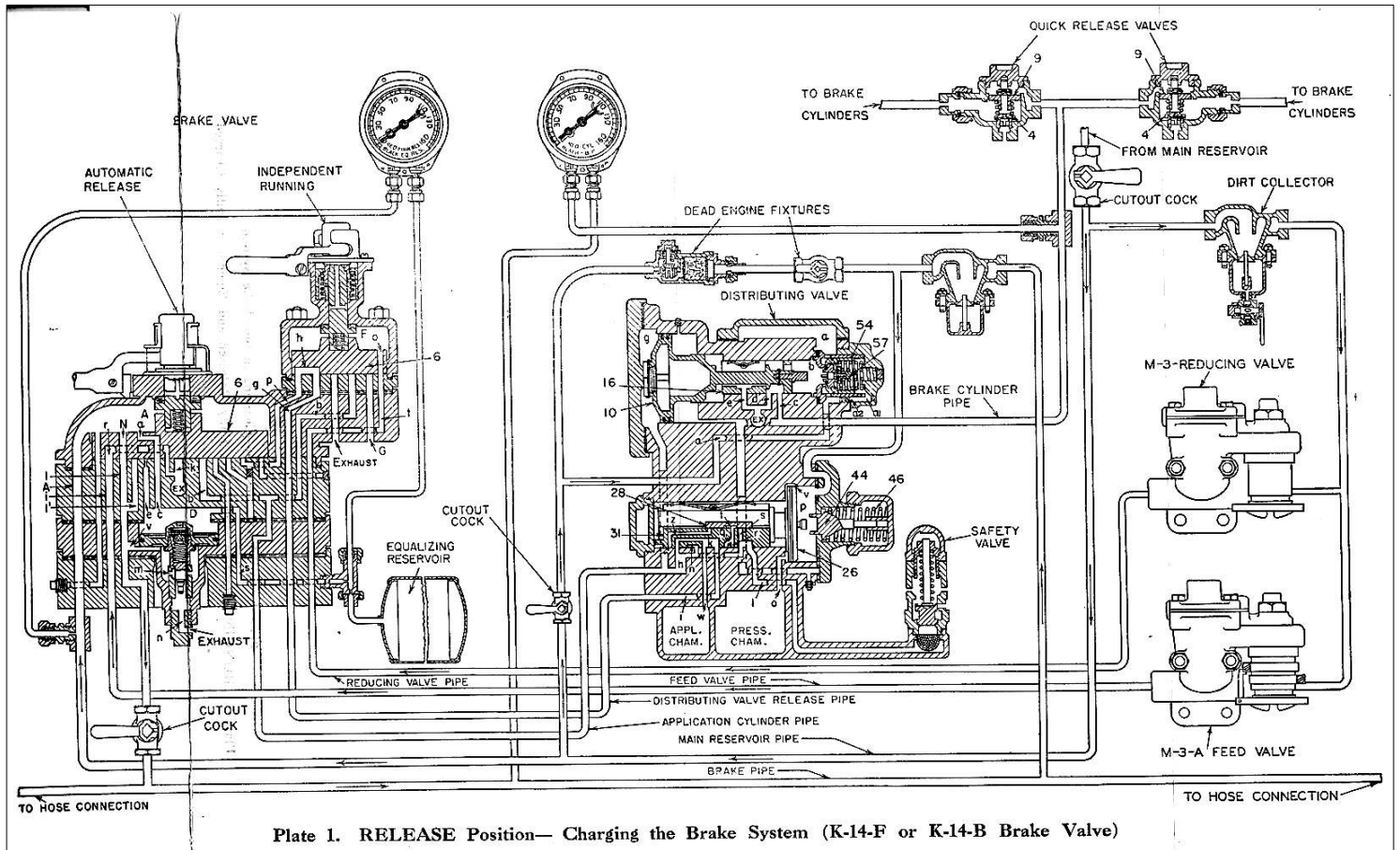
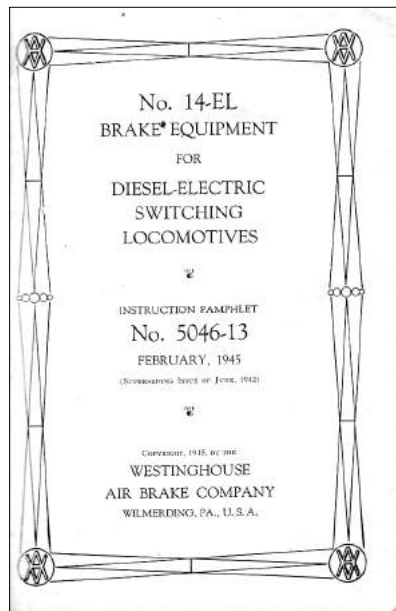


Plate I. RELEASE Position— Charging the Brake System (K-14-F or K-14-B Brake Valve)



Use of air brakes was several decades old in 1945, but diesel-electric switching locomotives were relatively new. Steam locomotives used similar brake systems. Why were there so many brake-control positions? (There still are.)

The "independent" brake applied only to the locomotive's wheels. The "automatic" brake applied to all connected cars in the train. Brakes using compressed air were a big improvement over brakemen applying brakes by hand on each car, and over the earlier vacuum brakes whose force was limited to atmospheric pressure. The tricky part comes in using compressed air to apply the brakes and to release them all along the train, and to have them apply automatically if an air hose connection between cars comes apart.

The solution is for each car to have a tank of compressed air and a "triple valve," with pressure in the "train line" keeping the brakes off by opposing the pressure of the air stored in the tank.

But that leads to the problem of having a limited amount of air stored in the tanks, which need to be recharged after the brakes have been applied and released. An engineer needs to make sure on a long and variable downgrade that there's enough pressure in reserve to control train speed. "Retaining" valves were part of the solution. A better one was designing diesel-electric locomotives so their motors can be used as generators, with electrical resistance acting as a drag to control downhill speed. (Nearly all "diesel" locomotives use electricity to transmit power to their wheels).



### Too Good Not To Share *continued*

Some books are kept because they'd come in handy if the Museum had a locomotive to restore or operate, or a full machine shop to run. A few even survey the whole world of railroading, as it was practiced 100 years ago. This one, first copyright 1916 but with a 1920 revised edition, is by William Nichols who was, as the title page says, "For Fifteen Years Chairman Board of Examiners Southern Pacific Company and Author of Book RULE FOUR." Examiners administered tests to find whether, for example, firemen had the knowledge to become engineers, or brakemen to be conductors. Knowing the rules was key. Rule #4 must have been important to deserve its own book. For this one, \$3.50 was a lot to spend in 1920 (about \$45 today), but you got a lot of book. While the pages below are reproduced close to actual size, there were 370 of them, some with color plates. Writing *treatises* was popular.

The Central Coast did not have trackwork as exotic as shown in the two right-hand arrangements below, but SP's Donner Pass route had double track with a center siding, and junctions in cities such as Sacramento and Los Angeles were complex. Remember, this was an era when nearly every street intersection in a city was a free-for-all of pedestrians, horse-drawn vehicles, motor vehicles, and sometimes streetcars. Railroads pioneered complex signaling systems and "programmable" devices.

*All images are from the SLORRM collection. Distortion is due to care taken in pressing books on a flatbed scanner.*

# Train Operation

**By William Nichols**

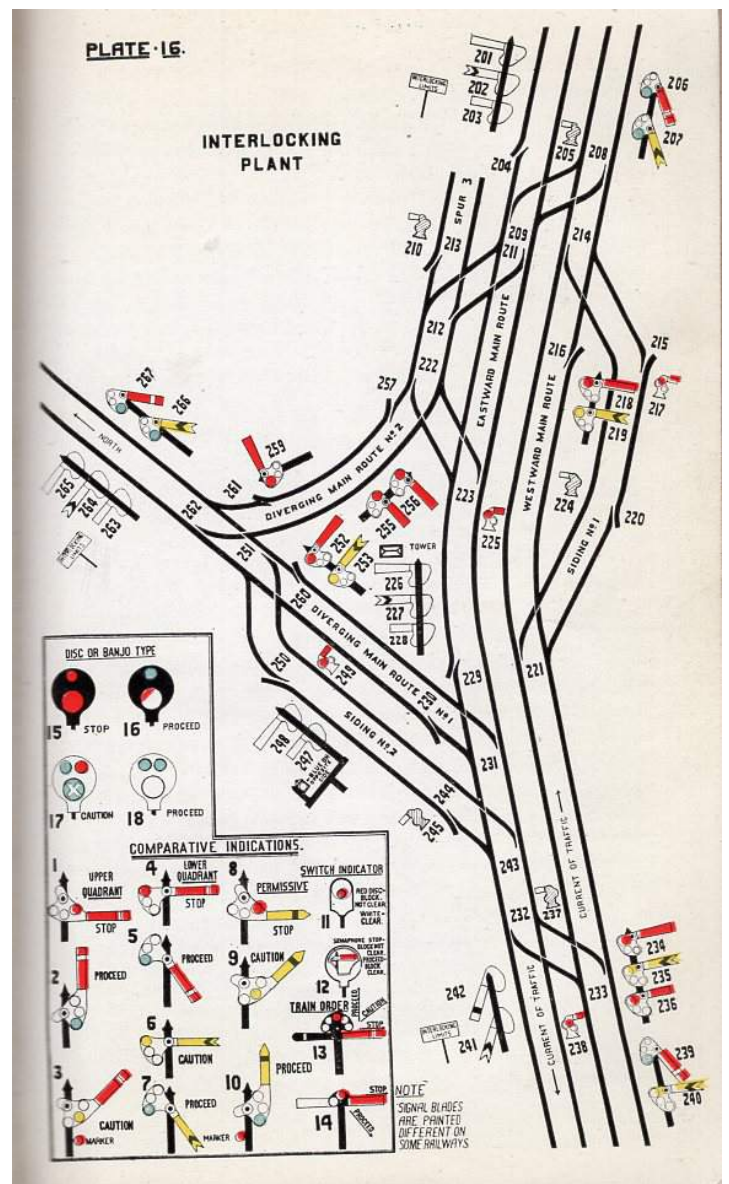
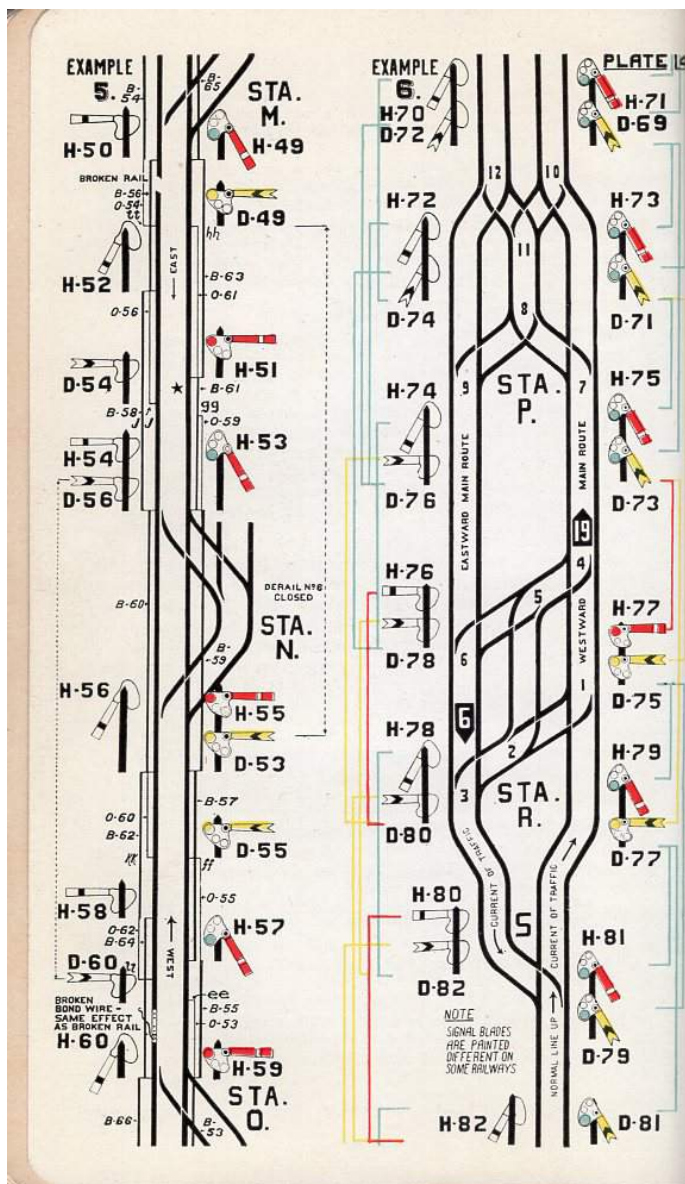
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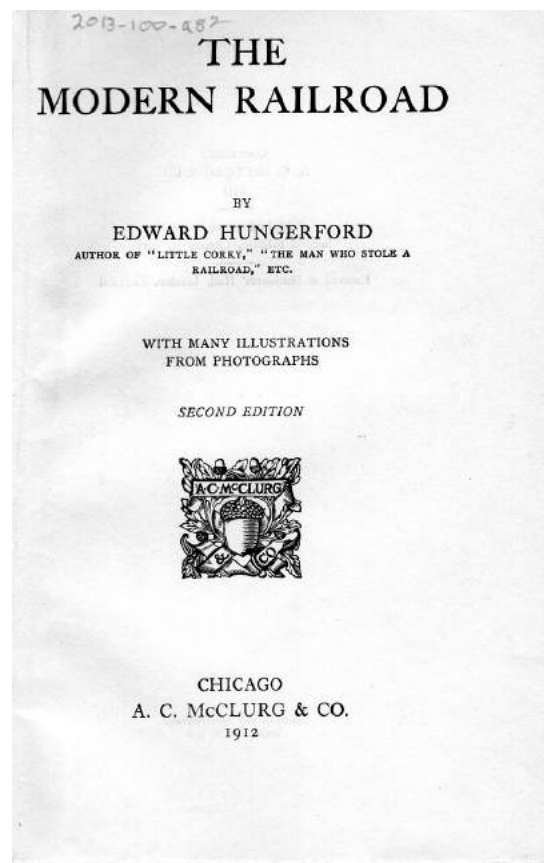
### Too Good Not To Share *continued*

It took a lot of workers to keep steam locomotives running, one reason railroads were eager to replace steamers with diesels. The location of the scene above is not revealed, but the caption reads “The shop-men form no mean brigade in this industrial army of America.” There appear to be about 150 men arranged on the locomotive, tender, and boxcar in a manner that would be frowned upon today. And not a hard-hat or safety vest to be seen.

This 1912 tome boasts “many illustrations from photographs.” At the time, new technology allowed such pictures in place of engravings, which no doubt made the engravers nervous. *The Modern Railroad* had 470 pages, eight of which contained mention of the Southern Pacific. The discussion in the Appendix, titled “Efficiency through Organization” and focusing on the experience at the SP of what today might be called a management consultant, is still relevant.

Readers may recall the difference of opinion about the existence of a Coast Line tunnel in the Fall 2016 *Coast Mail*, and can look forward to more confusion in the next issue involving part two of railway guns. At least in those years wire-linked telephones were fairly common. In 1912 they were not, which helps explain this statement from the book’s Appendix:

“A railroad is really so spread out that its officers live a double life; a part of the time they are at their desks, and another part out on the line. Yet the average railroad officer, be he of high or low degree, flatters himself that by some subtle method of personal superiority, he is enabled to act intelligently in two places at the same time.”



# Focus on Artifacts



The largest of the outside calipers at left is about 15 inches long. (The hand and magnifying glass are not to scale with the other items shown.)

The wrenches below are about 12 inches long. The earwig appears about actual size (if your viewer is set to that zoom) but thankfully is not in scale with any of the tools. They really do pinch.

## Parts for robot pincher bugs?

No, calipers. Outside calipers are used to measure the outside diameter of round things like pipes, rods, pistons, and wheels. They look like the business end of the insects also known as earwigs, bane of Central Coast gardeners. Inside calipers are used to measure the inside diameter of round things such as cylinders. Steam locomotives had lots of round things, even several sizes of cylinders and pistons, from those that drove the wheels to those that compressed the air.

These recently donated tools are typical of those found in machine shops, including those associated with major roundhouses where locomotives were maintained and repaired.

This well cared for collection includes wrenches, gauges, dies for threading rods or tubes, and straight measuring scales.



A previous tool donation at the other end of the size range was modeled for the Spring 2015 Coast Mail.

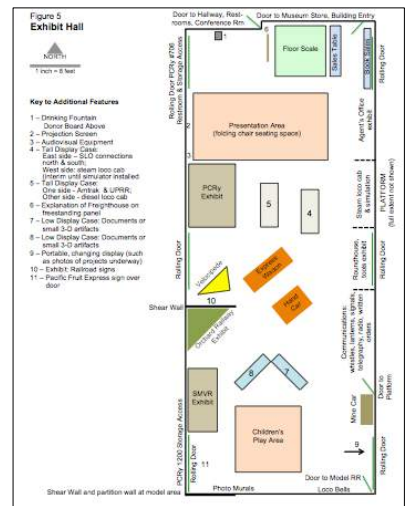
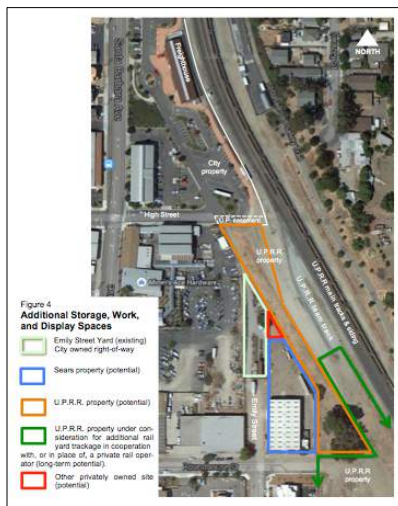
Earwig image from BugBlog by Africa Gomez; tools photos by Glen Matteson.



## Updating the Museum's Plans

On November 8 the Board approved a new *Development and Operations Plan*. It takes the place of the *Master Plan* prepared about 2004 and the *Strategic Plan* approved in June 2015 ["Looking Ahead" in *Coast Mail* Summer 2015]. With so many activities and projects underway, the Board wanted to take a closer look at priorities and space allocations to make sure that our efforts fit a consistent overall vision. Major themes are:

- Connecting the Central Coast to the world
- San Luis Obispo's role as a division point and helper base
- Dominant regional traffic types
- Dependence on rail during World War II
- How the details of rail operations have changed



## An Unwitting Victim of Nepotism on the Pacific Coast Railway

by Arlo Elliott

L.C. Keely was the longstanding booking and managing agent of special contracts for the Pacific Coast Railway. While documents show he had myriad responsibilities, he frequently was the main contact for shipments of goods as well as privately scheduled trips via the routes of the PCRY and its parent, the Pacific Coast Steamship Company. Mr. Keely used his contacts in the railroad and the shipping line to arrange trips for both family and friends, helping one friend book a trip to Alaska and arranging for an Ettie Keely to go to Wisconsin with discounts gained through his connections with railway officials.

Mr. Keely had a reputation for being somewhat a shifty character, with Superintendent W. T. Massengeil frequently reprimanding him for his incomplete keeping of receipts and letters, as well as using the company phone for personal long distance calls. Despite these dubious activities, in June 1930 Mr. Keely sent a request to Mr. Massengeil to have his relative Ella Keely installed as a clerk at the Los Alamos warehouse. Ella Keely promptly began working, her name appearing on countless receipts, showing that she was a hard worker, diligently taking stock of the beans, grains, and goods that flowed through the Los Alamos warehouse.

This was in the wake of the 1929 stock market crash that at least symbolically sent the United States spiraling into the Great Depression. Nearly a year after her employment began, however, she began to complain that she was not getting paid. Her name did not appear on company payrolls, and so Mr. Keely wrote Mr. Massengeil demanding that she receive proper compensation for her year of work.

Mr. Massengeil, it turns out, had never authorized her hiring, and in 1931 he wrote back to Mr. Keely: "I am sorry indeed that there is not enough warehouse business yet to warrant the authorization of your clerk and due to the present extreme depression in all departments we are perhaps lucky to be maintaining an Agent at Los Alamos." Mr. Massengeil not only had never approved hiring or paying Ella, he also shot a figurative dagger at Keely, reminding him that he was lucky to be getting paid at all during those trying times.

Ella Keely's name disappears from the receipts soon after that, a year of work having gone uncompensated, and L.C. Keely's scheme of nepotism ended up being for naught.

*Arlo is a recent Cal Poly graduate who interned at the Museum near the end of his academic year. He went through several bundles of PCRY correspondence that hadn't been reviewed and distilled this report from several memos. -Editor*

## This is Big News

But it didn't make the front page because it's not happening on the Central Coast. However, it is on a unique part of the former Southern Pacific Coast Route. CalTrain, the short name of the agency that took over operation of SP's commute service between San Francisco and San Jose, over the next four years will electrify that line. Overhead wires will provide power for new double-deck trains, with motors under the cars rather than in locomotives. The facilities will be usable by the California High Speed Rail system that is eventually to connect San Diego, Los Angeles, Sacramento, and San Francisco, possibly with a privately operated branch to Las Vegas. The CalTrain project requires installing a new signal system and involves new grade separations at roads –big changes from the days of Fairbanks-Morse Trainmaster diesels and glossy gray gallery cars.

SP's commute (not "commuter") operation was the only one of its kind west of Chicago: frequent trains with closely spaced stations along double track, carrying workers between their leafy suburbs and downtown high-rise offices.

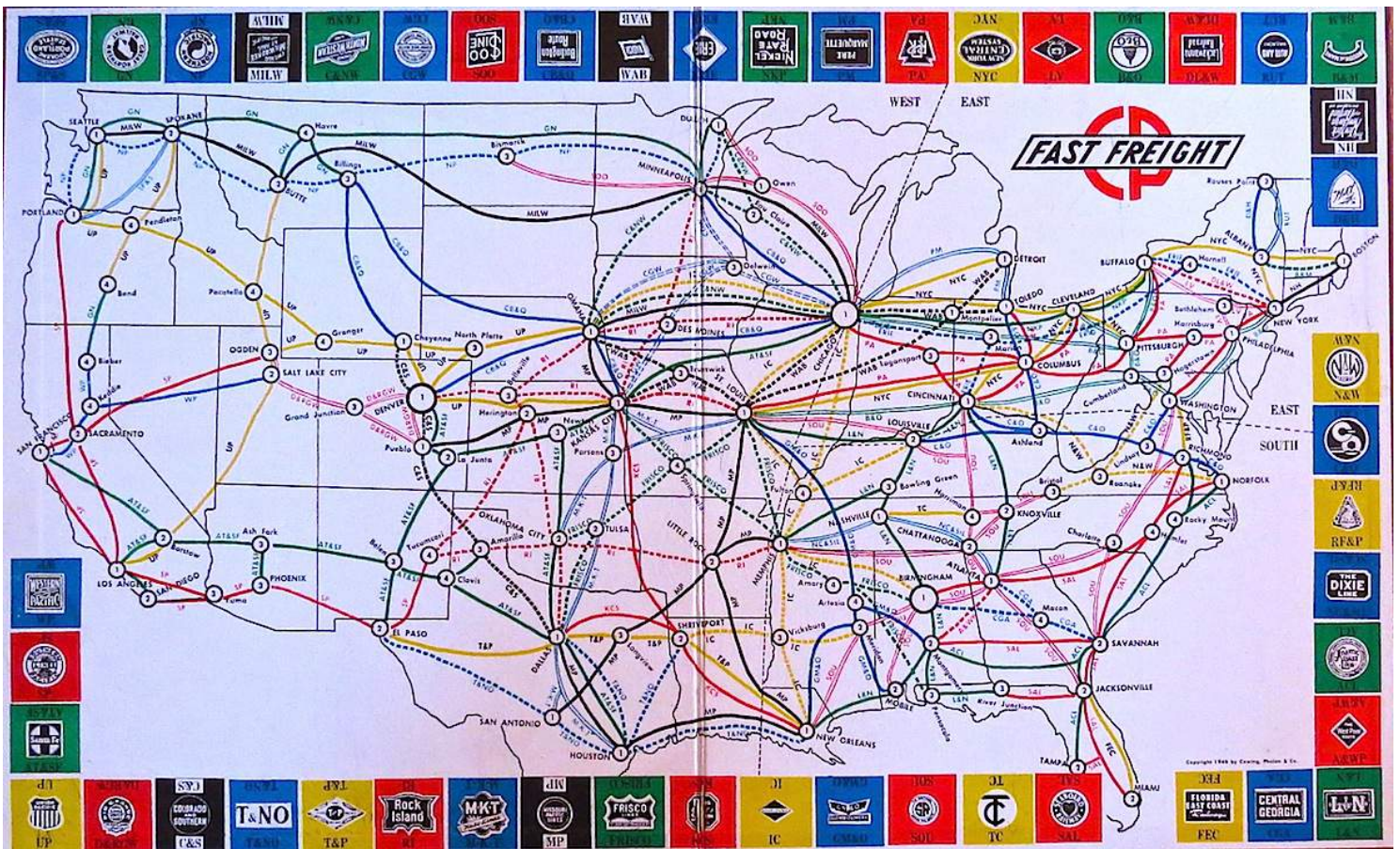
*Rendering by Stadler Rail Services as reproduced on the Railway Gazette International website.*



## And a special prize for anyone who spotted the play on words in the last *Coast Mail*.

Sometimes we're clever and we don't even know it. The Fall issue had a short piece on the history of the Museum's newsletter, in the beginning called *The Wig-Wag*. The title suggested we "wig less." Have you seen those bumper stickers advising you to bark less and wag more? Where could this line of questioning possibly lead?

Wigmore was a location on the Pacific Coast Railway, at milepost 67.8, between Los Alamos and Los Olivos. It was five miles from the more widely recognized name Zaca. Now for the stumper: What is the origin of the place name Wigmore? A landowner? A PCRY worker?



Center-fold game board is 15 by 24 inches. Photo by Glen Matteson.

### Freight for Fun

This map, a simplified schematic of the U.S. rail system of 1948, is a board game by Cowen, Phelan and Company of Pasadena. It was copyrighted, and probably manufactured, that year. A yard-sale find donated by Gary Williams, the game highlights both the importance of railroads in that era of postwar optimism and the large number of companies. In the lower left corner are the logos of the Western Pacific, Southern Pacific, Santa Fe, Union Pacific, and Rio Grande. SP subsidiary Texas & New Orleans made it into the bottom row, but St. Louis Southwestern (Cotton Belt) did not. [Coast Mail Spring 2016, page 8.] The Coast Route is shown, but alas San Luis Obispo is not. The major terminals of Los Angeles and San Francisco are there, along with San Diego and Sacramento. The less known but important railroad points of Barstow, Keddie, and Bieber do appear in California. So the game must have been designed by someone who knew railroads. The rail hubs of Chicago, St. Louis, Kansas City, Denver, and Memphis are prominent.

Of the 48 railroads named, only two still operate under those names: Union Pacific, which having absorbed SP continues to operate along the Central Coast, and Kansas City Southern.

Recent interest by Canadian railroads in acquiring two of the four remaining major companies in the U.S. touched off discussion of a "final round" of mergers. Some say such combinations would stifle competition

and lead to poor service. Others say a company like FedEx can take a shipment anywhere in the country, so why not a single railroad to do the same? (The competition for some types of freight is mainly between modes –train, truck, barge, or pipeline—not carriers.) European countries, initially having many privately owned railroads, had by the 1940s nationalized them. After experimenting with total privatization in the 1980s, some are heading toward quasi-government agencies to own the tracks, with "open access" for qualified operators of trains. Of course Europe is smaller, more densely connected, and dominated by passenger traffic, not freight. That sounds increasingly like the northeastern U.S. Who knows what the future will bring?

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This game map is in the style used by railroads of that era to show their systems to the public, though they typically indicated their own routes in thick colored lines and all others in narrow black lines. There was a time that this game as a holiday gift would have been cause for excitement. In some households it still would. The object was to earn points by delivering carloads of freight to destinations named on the board, and to earn more points than opponents by controlling routes so they could not make deliveries. The rules are fairly complicated, as in real life.

This and other interesting items often appear in the Museum Store and at our swap meets, so come see what's old but new at the Museum.

## Just Like Old Times

In August a Cajon Pass fire interrupted Union Pacific traffic between the Sunset Route (Louisiana to Southern California) and northern California and the Pacific Northwest. Blockage of what Southern Pacific had built as the Palmdale Cutoff resulted in several days of mixed freight trains through the Central Coast. It had been a few years since San Luis Obispo and Cuesta Grade saw such trains, with covered steel-coil cars, boxcars and flatcars of forest products headed south, their empty counterparts headed north, and tanks of Gulf Coast chemicals. It appeared that the trains' tonnage was matched with adequate locomotive pulling and braking power to get over the grade without routine use of helpers, a change from Southern Pacific's practices of the 1990s and before.



*In August, South Coast resident Jeff Perry took this great photo of a north-bound freight stretched around Horseshoe Curve and its approaching curves, about to reach Chorro siding. After about three days the frequent mixed freights were back on their usual inland route.*

## In the next issue of Coast Mail

- Streamlined Daylight 80<sup>th</sup> anniversary
- 2016 Annual Report
- Too much excitement in Arroyo Grande
- Plug your ears, wait for the fog to clear
- Wild speculation about the Santa Fe
- An oily mess, but well contained
- A tiny artifact
- Predicting the future ... in 1909
- Dissension at the Museum

## Quite a Collection

Sid Marques, former Southern Pacific signal foreman, has donated a complete set of *SP Bulletin*, the railroad's magazine by and for employees, covering 1919 through 1950. (Look for items from them in future newsletters.) He also donated railroad telephones and historical photographs of the San Luis Obispo yard.

## Environmental Progress

Until this past summer, the Museum had used commercial herbicides to control weeds in its Emily Street Yard, along the display track, and around the Freight-house. They were always applied by a small hand sprayer, and only to the targeted plants (not broadcast over a whole area), when it was not windy, and with plenty of buffer time before and after rains. However, concerns over the effects of their active chemicals prompted a change to using a mixture of vinegar and Epsom salts (both consumable by people in reasonable quantities). The results have been good.

Also, Museum volunteers have been separating recyclables from trash since opening, using a blue curbside container. More recently, California Redemption Value containers have been taken to buy-back centers. Along with CRV containers donated by members, the funds received are used to buy maintenance supplies, such as vinegar and Epsom salts. With help from trip coordinator Terry Remick, efforts are underway to expand CRV collection to the vintage railcars that travel about once a month with Amtrak's midday *Surfliner*.

The Museum produces plant waste only a few times a year, mainly tumbleweeds that end up near the Freight-house and the trimmings and leaf-fall from a pepper tree in Emily Street Yard. To avoid having the yard-waste truck come by every week, with resulting fuel use and wear-and-tear on the truck and pavement, the Museum and San Luis Garbage have set up collections only on request.

For the longer term, the Museum is exploring with the City of San Luis Obispo installation of solar electric panels over the parking area south of the Freight-house, similar to what San Luis Coastal Unified School District has done at some of its campuses.



*Above left: The Museum encourages visitors to walk or ride to the Freight-house. Above right: The Museum's new weed-control formula uses ingestible household items. Below: gray, blue, and green curbside wheelers plus other containers foster separation of trash and several categories of recyclables.*



*Photos by Glen Matteson.*



*The Museum's wheelers: gray for trash (as little as possible); blue for curbside recycling; green for compostibles. There's a bucket for redemption-value beverage containers. And in the background the sturdy enclosure that keeps them all out of site until collection day.*