Good morning everybody. Welcome to Railtown 1897. My name is Jim, and I’m your host for this roundhouse tour. The Sierra Railroad was, and for that matter still is, a short line railroad. And this is in contrast to a main line railroad. There are hundreds of short line railroads across America; sometimes they’re only a mile long, from maybe a mine to a processing plant. In the case of the Sierra Railroad it was 41 miles of track from Oakdale to here. Oakdale is significant because there’s a Santa Fe and a Southern Pacific spur line that comes out of Stockton and terminates in Oakdale. So suddenly, with the advent of the Sierra Railroad, Tuolumne County had a railroad to the outside world. And it was prosperous times for Tuolumne County.

Now, of all of these short line railroads, I can think of one right now that was better than anybody else. In fact I will give any of you a free roundhouse tour if you can give me the name of the best known, most widely used, short line in America. It’s a trick question; you won’t get it, because it doesn’t have a name.

But you can find it right there between Chance and Pennsylvania Avenue on the Monopoly board.

Why don’t you follow me on down to the roundhouse? Let’s go through the roundhouse where we’ll see just exactly what went on in the roundhouse—what it was and what they did there. Okay? Follow me on down.

In the construction of the railroad, they used 400 horses and 300 men. So which do you think were the more important? Probably the horses.

We’re about to go into the roundhouse. At this point I want to give you a brief but obligatory safety talk. Please watch your footing, the floor’s uneven, there are tools laying around, there are tracks. There’s an opportunity to trip and possibly hurt yourself, so let’s avoid that. The second thing I would caution you against is, be very careful of what you touch or brush up against, because everything in here is covered with grease and grime. Now my concern is not that you get your clean clothes dirty. This is historical grease and grime, and it’s protected. Please leave it here. Come on inside the roundhouse.

We’re in the roundhouse now. What was the roundhouse? The roundhouse is where they brought the equipment in—the rolling stock, the locomotives and the cars—to do maintenance procedures on them. This was a busy little place because the rolling stock of this era needed
a lot of maintenance. At one time, shortly after World War I and on into the roaring ‘20s, there were as many as 90 people worked in this facility right here. This roundhouse right here has the distinction of being one of only two original steam-era roundhouses in America that, without a break in service, is still in operation today. The other is the East Broad Top; it’s in Pennsylvania. Well what happened to all the roundhouses? As I told you earlier there were hundreds of short line railroads across America and they all had a roundhouse. After World War II, the railroads of America went out and bought their diesel electric fleet, and they pulled them into the roundhouses and found that the old roundhouses were just not applicable to maintaining the new fleet. There was just too much of a jump in technology. It was cheaper, easier, safer just to bulldoze the old building down and build a new maintenance facility where the technology was commensurate with the equipment that they were working on. The Sierra Railroad did not tear down this roundhouse for one simple reason. Hooray for Hollywood!

. . . The movie industry. They recognized the revenue potential from the movie industry as far back as the 1920s, and since that time, there have been over a hundred feature length movies that have been filmed either in part here, in the roundhouse facility, or using our rolling stock out in the countryside. To name a few: “High Noon,” “The Virginian,” “My Little Chickadee,” with Mae West and W.C. Fields. And then of course there’s countless appearances in television programs like “Bonanza,” “Gunsmoke,” “Little House on the Prairie.” To say nothing of commercials, television commercials, that have been filmed here. So there was some revenue potential from the movie industry.

Let’s pause for a moment here, and let’s take a look at some of these locomotives. Right behind us here, behind me, is Engine No. 28. Engine No. 28 is our workhorse engine. This is the locomotive that normally pulls the excursion train, and she is in a state of disrepair right now. She’s getting new boiler tubes, a major maintenance operation, or rebuilding operation. She’s been in this process for about the last five months. The guys that are working on it tell me it will be about another two or three weeks before they get it back put together and ready to call back to service to pull the excursion train. Engine 28 was built in 1922 by the Baldwin Locomotive Works of Philadelphia. Over here on the other side is Engine 34. Engine 34 was also built by Baldwin, in 1925. They were both built for the Sierra Railroad, and they’ve been here their entire life spans, which to me tells me that the people that ran the railroad knew something about what they were doing. They ordered the right thing, and they kept it.

Let’s take a moment here and turn around and back up a little bit, and we’re going to take a look at the tool board here. I’ll walk through you right here. All of these tools were used by the people that worked right here. This tool board says one thing to me. It screams, “Jim, don’t come to work here with just a cup of coffee and a doughnut ‘cause you’re going to work much too hard for that.” You want the steak and eggs and all the cholesterol you can get, because by the end of the day it’s gone, you’ve worked that hard. For example, this wrench right here weighs 37 pounds. It would be an effort just to get it there, let alone do something with it.

Well, we’ve taken a look at the tool board, we looked at 28 and Engine 34, why don’t we move down here and look at a locomotive of a different type. So if you’ll just follow me on down . . .

Let’s stop for a moment here and take a look at two different kinds of locomotives. We’re on the other side of Engine 34 here, so we can take a look at it.
But right now as you can see the crew is warming up Engine No. 2 here, getting ready to take her out on the tracks and pull the excursion train, which I’m sure you’re all anxious to go on. Let’s take a look over here at Engine 34. Now Engine 34 is what’s called a rod engine. It’s called that because the steam comes down, operates the piston here, which then operates this rod, it goes back and forth, and that’s what makes the wheels turn. It’s called a rod locomotive.

This is a different kind locomotive here. It’s a gear driven locomotive. It’s not a rod locomotive. This locomotive here has drivers, those big wheels, they’re 44 inches in diameter. It could do about 50 miles an hour between here and Oakdale. This one right here that’s making all the noise, it’ll be coming down the track, spewing steam, making a lot of noise with the top speed 15 miles an hour, maybe 17 on a good day. It was built for working in the woods. It would haul heavy loads of logs out of the woods. That’s what it was built for, that’s what it did best. Why don’t we walk around to the other side of it and we’ll see what makes it go? Follow me.

Okay, we’re on the other side of Engine No. 2 here, and we can see what makes it go. As I told you it’s gear driven, the pistons are back here, and they’re mounted vertically, pumping up and down like this, and they turn this shaft that runs the full length of the locomotive and the tender. It drives twelve driving wheels, giving it that tractive effort that we talked about earlier. Sure is a noisy thing isn’t it? But she’s getting all ready to pull out, and we’ll be able to see it in just a few minutes I hope. This will be a treat for us. Okay, do you have any questions? Why don’t we walk around on the other side of this car right here, and I’ll show you the original steel belted tire.

What do you do if you have a flat tire on your automobile? You have to change it, don’t you? Well, you have to change the tires on a locomotive, too, on a steam locomotive. And here is the original steel belted tire. It was a big job to change the tires, as you can imagine. The way they did it was that the inside diameter of the tire is slightly smaller than the outside diameter of the wheel. So we would place this fire ring around the outside of it, attach a gas line and light the orifices, and heat this up. The metal would expand, slip it over the wheel, clamp it and balance it. Let it cool and the metal contracts against the wheel and you’ve got the tightest bond you could ever have without a single nut or bolt to ever rattle loose. AAA will not do this for you. It was a job done in conjunction with other major overhauls on the locomotive because it was a big job. Of course, if you did one, you had to do them all—all eight of them. They all had to be exactly the same the size, because they’re rotating along, all of them applying power to the rails, and they have to be just the same. Come on this way just a bit, and then turn around, and let’s take a look at the car that’s behind us here—Car No. 5.

In 1902 the Sierra Railroad decided to build a branch line between here and Angels Camp. It’s sixteen miles by highway, it’s nineteen miles by track, and if you drive it today you’ll drive over the bridge and you’ll look down at Melones Reservoir. Of course, then Melones Reservoir wasn’t there, there was just the steep and precipitous Stanislaus River Canyon. They had to get across that somehow. The way they did it was with a series of switchbacks, where the train would come down, go through a switch, and out on a tail beyond the switch, stop, throw the switch, and then go in reverse down to the next one, and back and forth like that down the side of the canyon and then up the other side. It’s not a unique engineering feat, but it certainly is unusual, particularly for a short-line like the Sierra Railroad. So it was important
that they have no train longer than the shortest tail. They had to get beyond that switch. So the Sierra Railroad had two cars built just specifically for the Angels branch, and this is Car No. 5, one of the two cars right here. It’s quite short; it’s about half the length of a normal railroad car. Very utilitarian. This one right here is called a combination; it’s half baggage and half passengers. Now, perhaps you think you might have seen these cars before. Do you remember back in the 1960s there was a television program called “Petticoat Junction?” Well, Car No. 5 and Car No. 6 and Engine No. 3 were the regular “Petticoat Junction” train. Unfortunately, we’re not going to be able to see the gals in the water tank.

Let me show you over here another car—Car No. 19. Come on over this way just a bit. Now if you had to commute to work everyday, wouldn’t this be the way to go right here? I think that would just be the cat’s meow. In 1919 the City and County of San Francisco started construction on Hetch Hetchy Reservoir. Hetch Hetchy Reservoir is located up in the northwestern corner of Yosemite National Park, and it is the water supply for the City and County of San Francisco. When they built the dam, they took the heavy stuff up—the concrete and the steel—they took up by steam locomotive. But they wanted a little more flexibility in getting manpower up and down, so they had twelve of these cars built. They’re built by the White Motor Company, the same people that make White trucks today. The city and county shops adapted it to the rails, and this is how they got the manpower up and down. I think that would just be the greatest ride, to drive in to Yosemite on the rails in a motorcar like this.

It has a couple of interesting features: One, it still has a steering wheel, and of course you don’t need a steering wheel while you’re on the tracks, but it came off the production line with the steering wheel on there and it had certain control mechanisms on it such as the vacuum advance. So they just left it there, but they did make it useful. If you crank the steering wheel hard to the right, by virtue of some cams and cables, it engages the front brakes. That’s something you’d have to train yourself to do, to stop a vehicle by turning the steering wheel to the right. And then the foot pedal activates the rear brakes. The other interesting feature is, by putting a jack under this side and one under the other side at the same position, you could jack it up and then spin the car around right there wherever you were on the tracks. Then of course you’d want to spin it around for four good reasons. One, so the operator wouldn’t have to look over his shoulder all the back down. Two, you have four forward gears and only one in reverse. Three, you put the radiator in front, for adequate cooling of the motor. And, fourthly, so that those guys that are sitting in the back here spitting their tobacco juice out the windows wouldn’t splatter it all down the front of the vehicle.

Why don’t we walk out this door right over here, follow me out, and as we go out I want you to look off to your right, and we’re going to answer the question—why is it called a roundhouse? Follow me. Look off to your right folks, and take a look. You can see how the building is built on a curvature. If you were to continue building on that same curvature, you would completely encompass the turntable. The turntable is the heart of the roundhouse facility. As you can see, you can bring in a piece of rolling stock, a locomotive or a car, put it on the turntable, and then that would spin around to whichever set of tracks you wanted to go off onto, into whichever stall you wanted to go into. By simply pulling the handle he can activate the air motors and spin the locomotive around on the turntable.

Well this turntable is air-powered. You see the pipe that comes off the power pole and comes down on either side of the turntable there. We have ninety pounds of air pressure piped
throughout the compound here. It’s called house air, and that does a variety of things, but the main thing it does is turn the turntable. Simply by pushing a little handle, you can spin that around. This is not the original turntable—this was installed in 1922. The original turntable was called an Armstrong model turntable. Would you care to guess how that got turned around? Oh yeah, “arm” “strong.” Follow me on over here, and we’re going to take a look in the machine shop.

We’re inside the machine shop now, and this was an important part of the roundhouse facility. This was before the days of overnight Fed Ex delivery, so everything that you needed, all the tools that you saw on the tool board, all of the parts, they were manufactured in here. They were cut and milled by the people that worked in here. There were good jobs in here, skilled jobs. This machine shop is called an overhead line shaft, sometimes called a flat belt shop. One motor drives everything in here. That motor is in the back, it’s a 20-horse electric motor. You see the belt that comes up on an angle that turns this shaft right here that runs the full length of the building, in fact it runs outside the building. The belts come off of that, so by taking a belt off the idler wheel and putting it on a drive wheel, you can activate and operate that machine—either the turning lathe here, the 200-ton wheel press, the center hole bore, the flat lathe, or any variety of machinery in here. I think its pretty safe to say that this shop is pre-OHSA. But it’s not pre-good sense. You could still work safely in here; you just had to be aware of what was going on. You couldn’t daydream while you were working in this shop.

The Model-T back here was purchased in Sonora and driven three miles down here to Jamestown. The shops put the steel wheels on, and it became a company runabout here. I have no doubt but what the company president took it out for a little spin now and then, because I know that because if I was, I would. I think that maybe a Friday evening, going out quail hunting out here in the Red Hills, that would be a perfect use for the Model-T.

This contraption right here is called a velocipede. It was used by track inspectors, and he would have a little clipboard on behind there and he could just push and pull that right down the tracks and make notes on the condition of the track and turn that in at the end of the day to the track foreman for any repairs that were needed. It was probably also a part of the company weight reduction program.

Over here we have a handcar. Now we call this our John Wayne handcar because in 1936 there was a movie filmed here, it was called “Conflict.” It starred John Wayne and Ward Bond and there was a lot of footage devoted to them pumping the handcar, so it’s our John Wayne handcar. The bell here, I’m going to ring the bell . . . It’s called a four-mile bell, for obvious reasons. Okay, why don’t you follow me out, and we’re going to walk around the side of the building here and take a look at the movie prop area. Follow me.

Here we are at the movie prop area. Originally this was the carpenter’s shop over here, and you can see the carpenter’s tools there, the saws and lathes and so forth. They were driven by that same overhead line shaft that we saw inside the machine shop; it comes out of the building over here and the flat belts operated those tools. This area over here was the wood storage area. As the years went by, the carpenter’s shop was no longer needed nor was the wood storage area, so it has evolved into our movie prop area. If you follow me, we’ll go on in to the display for the movie props.
Here in the movie prop area we have props that were used in various movies, or could be used in movies in the future. So here in the movie prop area we have this light weight steel rail, that anybody can pick up, the light weight ties that can be moved easily, and even the light weight rocks here that can fall off of a cliff and then you can set them back up there again to shoot that scene again. You can do anything in the movies. Why don't you follow me on down through here, and we’re going to take a look at some other movie props. So follow me on over here.

These are all attachments that would go on one of the locomotives, probably Engine No. 3, our movie queen, to make it look period for whatever the movie company wanted. All of these stacks right here would in some way, indicate just what era that locomotive was from. Normally a stack that’s shaped like this right here, this diamond shape, indicates that the locomotive was a wood burner. These were constructed so that they would capture any embers from the wood that would go out and hopefully not cause a fire because of them.

Now did you see the movie “Back To The Future III”? In that movie there’s a scene where they have to hit 88 miles an hour, the magic speed, and then the train explodes and then goes over a cliff. Well, this right here is what exploded. This is a shroud placed over the stack of Engine No. 3 and there were some propane ignitors there so they got a nice big flash and then when it went over the cliff, they went to miniaturization. Oh, you can do anything in the movies. Well, follow me on around here, and we’ll take a look at some of the signs that have been used in filming here in Railtown.

As we come out of the movie prop area, you can see to your right, right there, the caboose mock up that was used in the filming of “Back To The Future III,” and it’s an excellent place for photo opportunities now, particularly families with kids. Over here we have our signboard. All of these signs here have been used in filming at one time or another. The most recent one was the one down there—“Moonstone, Colorado”—that was about 2-1/2 to 3 years ago. It was filming for public broadcasting. It was called “Song of the Lark.” It was about the trials and tribulations of a young woman growing up in a railroad town on her way to fulfilling her ambitions of being an opera singer. So all of these signs have been used here, of course Petticoat Junction here, the one that we are most pleased and proud of. But this one right here is our current enigma, this sign right here. There’s nobody here either as a volunteer or as a paid employee that was here when this sign was made. So we don’t know why they put a period there, there’s no reason for it in the English language and no other sign has it. Well we’ve got a solution. We’re just going to put a “com” out here. Monterey.com. Oh, give me a break, huh?

Well, okay, ladies and gentlemen this concludes your roundhouse tour here at Railtown 1897, and I want to thank you for coming along with me. I’ve had a wonderful time showing you all around, and I hope you’ve enjoyed it, too. I want you to know that it was brought to you by your California State Parks and the California State Railroad Museum Foundation, and I thank you very much.

Running Time:  27:55
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