



THE MANIFEST

NEWSLETTER OF THE SOUTHERN OREGON CHAPTER, NRHS – APRIL 2007

MEMO FROM THE PRESIDENT At our next club meeting we will be scheduling events for our meetings this summer. We want to schedule some interesting activities and field trips in place of our regular meetings and we would like everyone to be there with your ideas.

The following is a tentative list of ideas for meetings this summer. These are only some suggestions, locations dates and times are yet to be determined. Please bring your ideas so we can come up with a great itinerary.

May Meeting- Revisit the Glendale yard, depot, etc. and give everyone a chance that missed this trip last year another opportunity. This was a great outing and worth doing twice.

June Meeting- On the 23rd of June is City of Yreka's 150 Anniversary, and the Yreka Western Railroad's 118th year of operation. It would be great to help them celebrate their birthday and ride the Blue Goose. There is also a June 17th father's day ride and June 30th Law Dogs and Pistoleros of the old west ride. That gives us three options in June for a theme goose run.

July Meeting- Central Point 4th of July Parade and Festival. The club is already scheduled to have a float and exhibit at the Park.

August Meeting- Can you say "road trip". We have an open invitation to visit our friends in Eureka, check out their collection and their new location at the Samoa Roundhouse. This is your chance to come through with that overnight coast trip you have been promising your spouse.

September Meeting- "Your Idea Here" Fall colors trip? Labor Day campout?

WELCOME ABOARD This month we welcome aboard Landon Humphrey to our chapter. For quite some time Landon has been attending our meetings, as well as our regular slide-video night sessions, so I guess we finally got to him. We hope you enjoy being a part of our club and continue to attend future chapter meetings and functions.

At the March Chapter Board meeting Treasurer Jerry Hellinga reports that our membership now stands at 98 (70 full members and 28 family members). This represents an all-time high in membership and we are very grateful to all for your support.

GET WELL CARD On the morning of March 29 Ric Walch and his wife Charlie were on the way to the dentist in Ruch when suddenly Charlie said she didn't feel well and collapsed with an apparent heart attack. Ric pulled his vehicle to the side of the road and discovered Charlie wasn't breathing, so he immediately performed CPR and very quickly Charlie came back to life.

Being out in the boonies west of Jacksonville Ric knew he could get emergency help sooner by driving himself before any ambulance could reach them, so with one hand on Charlie (she was

confused but breathing on her own) he drove over the hill to a fire department station in Jacksonville. It was there the paramedics stabilized Charlie for the trip to the hospital.

Charlie is now resting at home. The doctors says there is no damage to the heart so they feel she didn't have a heart attack, but at this time they are performing all sorts of tests to determine what happen. Take it easy, Charlie and get your rest. We look forward to seeing you at the park when you're feeling back to normal.

On Sunday, March 4th chapter member Jim Lekas of McMinnville felt tired all day, but he didn't think much of it until the next day he had an ache in his stomach, much like a pulled muscle. By that evening everything hurt, so he asked his wife Sue to take him to Emergency. The doctors figured it was Jim's appendix and it could be removed through the navel. When the doctor was in there he found it had burst and took it out.

Jim is now restricted to 5-6 weeks of rest. Take advantage of it Jim and catch up on your reading. Get well soon.

HAVE YOU SIGNED UP AS A DOCENT? The response to last month's plea for more members to sign up for time slots as a docent has been phenomenal. Many of you have stepped forward to help ensure a successful 2007 operating season by volunteering a few hours of your time. As a result the few regular members that have been volunteering all day every Sunday will now have a much needed break. They will still be there each Sunday but they no longer have to carry the load by themselves.

There are still a few slots left unfulfilled; mostly near the end of the season. If you can help by filling in one of these time slots, it will be greatly appreciated by all. Please let Ric Walch know if you can help.

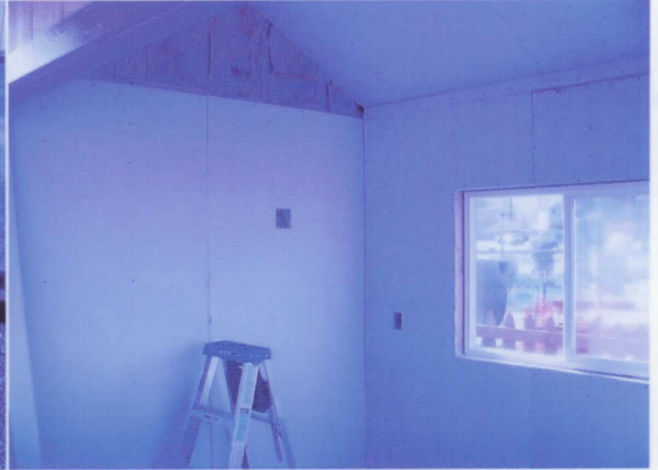
DON'T FORGET OUR YARD SALE! – On Friday, Saturday and Sunday (April 6, 7, 8) there will be a chapter yard sale at the Medford Railroad Park. The items we have for sale are as diverse as can be: everything from motorcycle parts, home and garden tools, children's toys, pictures, truck parts and more. Oh, we also have railroad related articles for sale. We have railroad books, excellent quality HO model diesel locomotives, videos and more.

This is our first attempt at holding a yard sale at the park. If successful, we'll make it an annual fundraiser for your chapter. Come on by and see what we have for sale. If possible, stay for a little while and help out too.

NEW MEMBER MANUALS ARE HERE The new Member Manuals are printed and ready for delivery. Each 54-page, 2000+ word manual contains 32 photographs of chapter rolling stock, plus chapter history, maps and charts, chapter membership directory, by-laws and more. The new Member Manual is designed so that any new acquisitions and updates can be easily inserted by members after they receive them through the mail.

We hope you will try to attend the April 10th general meeting for we will hand out the new manuals to all members present. This will not only save your chapter the added expense of mailing manuals, but we have an evening of enjoyable entertainment. Tentatively scheduled for the April 10th meeting are three short presentations of railroad operations between 1914 and 1929.

- **San Diego & Arizona Railway** - about 10 minutes of old footage shot in 1911 to promote the new SD&A (before it became the San Diego & Arizona Eastern) and also the city of San Diego.
- **Railroad to Eureka – 1914 NWP** - about 30 minutes of old 35mm footage shot in 1914 as the time was ready for the driving of the golden spike at Cain Rock (south of Eureka), celebrating the completion of the railroad between Eureka and San Francisco. There is also a parade in downtown Eureka with just about every car in the county in 1914.
- Little Rascals 1929 film **RAILROADIN'** (19 minutes) – If you've never seen this delightful film before, you're in for a treat. Film in 1929 on location at Santa Fe's roundhouse in Los Angeles, **RAILROADIN'** was the Little Rascals second all-talking movie. There is plenty of Santa Fe steam action as the gang gets in trouble with a runaway train. No doubt Santa Fe's tracks suffered a lot of rail burns from all the slipping locomotive drivers.



The top four photos show a little of the progress on our new concession stand. (Top left) Rickie Aubin is securing sheetrock. Steve Bruff is shown cutting the sheetrock to size at bottom left.

The bottom photo shows one end of SP flanger SPMW330. Notice fresh paint has been applied to the metal ladders, frame and railing. The same thing was done on the other end by Steve Bruff.

RAILROAD PARK NEWS By the time you receive this newsletter it'll be close to our April 8th opening day for the 2007 Operating Season at the Medford Railroad Park. Although the extended cold weather pushed our work back a bit, we think we'll be ready.

Concession Stand – As of April 1st our new chapter concession stand is about 90% complete. On March 19th our stand passed the final building inspection. Immediately thereafter chapter members Steve Bruff, Rickie and Nancy Aubin, and Bruce McGarvey installed the sheet rock, sealed the sheets and sanded them smooth, and by March 31st the interior received a coat of primer and a coat of off-white finish paint.

Left to be done is installing a linoleum floor, the installation of additional shelves, a second coat of outside brown trim paint, and the installation of ventilation fans. We expect our stand to be ready for business on our April 8th opening day.

SP Flanger SPMW330 – Restoration to the exterior of our Southern Pacific flanger would likely be finished by now if we didn't go ahead with building our concession stand. The flanger's interior was completed last year and then Steve began restoring the exterior, finishing the two end walls. Steve has returned to working on the flanger by painting the metal end platform area with SP's maintenance of way orange color. He will soon continue where he left off with restoring the wooden exterior.

T&NO DINING CAR NEWS After over a year of inactivity we have news to report on our 1912-built Pullman dining car stored at Eugene. For quite a few months we have been trying to get the final air brake test performed and approved on our car so we can move it and our third Defense Logistics Agency (U.S. Military) boxcar from Eugene to Medford. The problem has been trying to have a qualified Central Oregon & Pacific (CORP) engineer, a CORP diesel locomotive, and a state PUC inspector all together at the same time to perform the air brake test. Many, many times we could only get one or two of the necessary ingredients together at one time, but never all three.

Then while Jerry Hellinga attended Winterail in Stockton on March 7th, he spoke with Portland & Western's Bruce Carswell about the dining car. Bruce said his railroad's car inspectors perform single car air brake tests with the equipment on their mobile service trucks. One day one of P&W's car inspectors performed the final air brake test on our dining car and it failed. The reason it failed is because the car inspector could hear air leaking inside the locked car. Carswell and Hellinga suspected this was due to the conductor's valve being left open inside, and this was confirmed when Jerry attended the next test. The valve was closed and the outcome was a successful test.

The P&W inspector also gave an inspection and air brake test to our DLA boxcar and it also failed. He said one of the hand brakes failed to work. Jerry took a look at the hand brake wheel housing and found it packed with old wasp nests. After he cleaned the hand brake housing the brake works perfectly.

As this newsletter goes to press we are awaiting the final paperwork which will allow our two cars – both are over fifty years old and not rebuilt, so they need special waivers – to make the trip to Medford. Maybe next month we'll be able to say the cars are home in Medford.

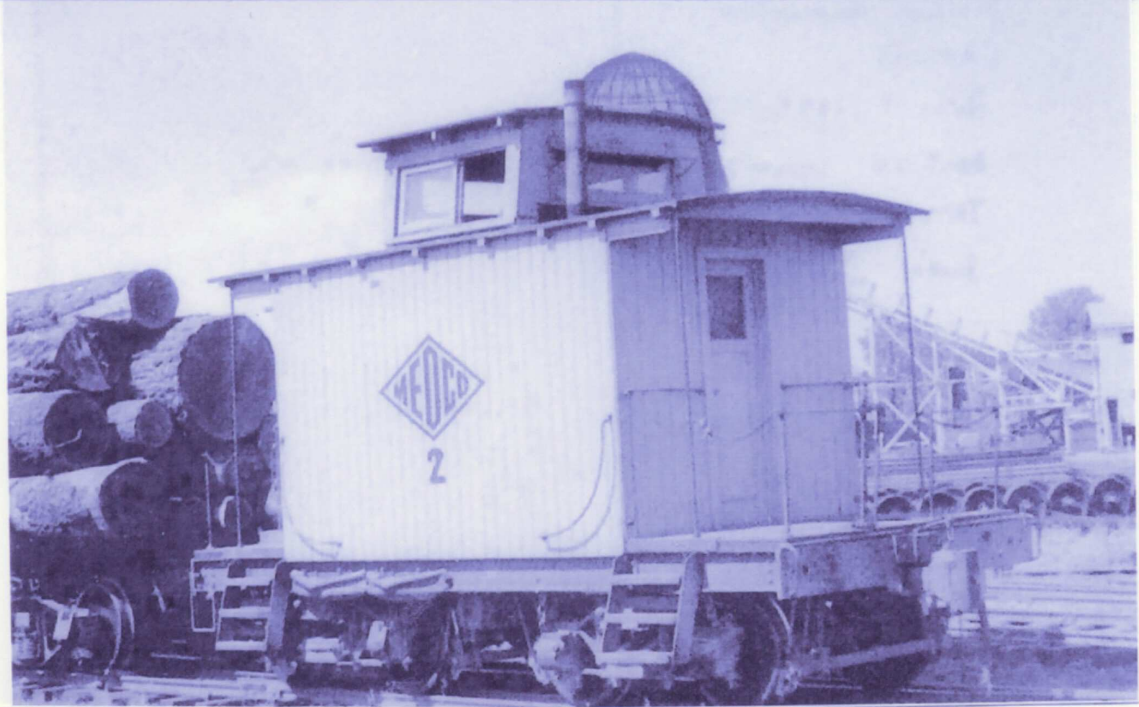
CHAPTER BOARD REPORT On Tuesday evening, March 24th, your chapter Board of Officers met at the clubhouse to discuss a variety of topics. The evening began with a visit and presentation from John Enders of the Southern Oregon Historical Society. John gave us a briefing on a proposed idea on how to raise funds for the Jackson County History Museum Association (JACMA), of which this chapter is a member. It's too early to tell you what we have in mind, but as the plan is discussed among all JACMA members and those willing to help, we will let you know.

As required in our by-laws the newly elected chapter officers are required to assign members to fill non-elected positions. These are some new positions this year as the by-laws were recently changed and approved by the chapter membership. The one non-elected (assigned) position unchanged is that of Chief Mechanical Officer (CMO). For the moment this is filled temporarily by current CMO Gordon French.

The old positions of Newsletter Editor and Historian have been combined into one position. The chapter board has assigned Tony Johnson to the new position of Newsletter Editor/Historian. John Powell had been the chapter Historian. John will now take over the new position of Director of Public Relations.



Late last month my good friend (and good friend to the chapter) Tom Mounovan sent me this wonderful 8" x 12" Hal Stewart color shot of MEDCO No. 7 sitting next to the Medco pond on September 21, 1956. The late afternoon sun beautifully highlights the "plain" side of this Class 70-3 Willamette built in February 1926 as #2 for the Anderson-Middleton Lumber Company of Cottage Grove, OR. After serving three more owners it was sold to the Medford Corporation in 1949, becoming #7. Today Medco #7 can be found on display at the Caboose Motel off I-5 in Dunsmuir.



Rick Aubin donated this copy of one of Medco's tiny 8-wheel cabooses. The photo was taken by Ivan English on July 1, 1952 at the Medco mill in Medford. The caboose was built upon a retired locomotive tender frame, outfitted with utilitarian steps for use in the woods, and was equipped with a stove and cupola. Since the logging railroad's tracks were anything but perfect, one can only imagine the swaying back and forth you'd get from riding high in one of the cupola seats.

These are some of the small changes needed to better serve your chapter. When the time is right the new positions of Activities Director and Membership Director will be activated and assigned to other willing members.

Treasurer Jerry Hellinga reported that the total amount of extra donations above and beyond each member's renewal rate now stands at \$1,715.00 or about \$200.00 more than last year. Way to go! These extra funds will help us stretch our budget even further now that county funding is no longer available at this time.

Ric Walch updated the board with no news. That is, we haven't heard anything new about two previously discussed projects. One involves the removal of old wood from a house in Medford scheduled for removal. We were given verbal assurance that we would be allowed to remove any old planks and beams that could be used in other chapter restoration projects. We haven't heard anything from the city since then.

Then there is the proposed development in Gold Hill that would include a new train depot and spur our chapter could use for future train excursions between there and Tolo. We haven't heard much since that first proposal. Knowing the developers have two plans – one involving our chapter and one without – for the time being we have told them to proceed without us as we're not ready at this time to commit to such a plan.

A LOOK BACK IN TIME Five years ago (April 2007) Rick and Nancy Aubin, Steve Bruff, and Bruce McGarvey were working on the interior of our CB&Q Caboose Visitor Center. They just finished sanding and sealing the old floor, and they gave the ceiling and the walls a good application of "Pina Colada" color paint. Since we finished the caboose it's been a great gathering place for the public to visit, ask questions, or just hang out.

During this same time Jerry Hellinga, Gordon French and this editor prepared four foundations for the pouring of concrete. One foundation was inside the locomotive shed where the steel storage shelves would be located. Two more would support the workbench area and the electrical box area inside the locomotive shed. The fourth would support the chapter's dual Southern Pacific block indicators outside the locomotive shed.

Moreland Smith was busy removing rust and dirt from the Medco No. 4s frame, and also on the bevel gears to go back to No. 4. Jerry had just completed the installation of a new air line from the park's air supply to inside the locomotive shed. And this editor managed to get the chapter forklift stuck in some gooey mud next to the locomotive shed. So much has happened since then it's hard to realize it was only five years ago.

Next General Meeting! The March general membership meeting will be held Tuesday, April 10th at 7:30pm inside the Rogue Valley Model Railroad's clubhouse at the Medford Railroad Park. We hope you will attend for an evening of vintage railroad videos and good fellowship. New Member Manuals will be handed out to those attending.

Your Chapter Officers for 2007

Ric Walch, President 541-772-6255
E. Don Pettit, Vice President 541-601-4772
Jerry Hellinga, Treasurer 541-772-6432
John Powell, Dir. Of Public Relations – 541-826-1992

Bruce McGarvey, National Director – 541-779-8145
Gordon French, Chief Mechanical Officer – 541-832-2276
Rickie Aubin, Secretary - 541-779-4259
Tony Johnson, Newsletter Editor/Historian – 541-944-9176

Good Old Days of Railroadin' – Last month we began with Part 1 of a long list of memories from the late E. O. "Ed" Williams. Ed began his railroad career with the El Paso & Southwestern Railroad and retired after being a Division Civil Engineer for the Southern Pacific. Ed passed away in 1994.

We continue with his thoughts about many of the changes he experienced with the Southern Pacific. Of great interest in Part 2 are Ed's recollections of what used to be on SP's former El Paso & Southwestern line between El Paso and Tucumcari. This lonely section of railroad has been vastly under reported over the years because there simply is not a big population base along the line.

CHANGES IN RAILROADING – MY HALF CENTURY (Part 2) by E.O. Williams Since this chapter is devoted to changes I have observed in my half century I shall jump from one subject to

another as I go along since one subject sometimes brings to mind something else and the whole project is "Random Memories". I have done no research; just depended on memory.

The first time I was ever in Carrizozo, New Mexico was in January 1917 as I think I have already stated somewhere. At that time there was a backshop and a roundhouse in service, a repair track for repairing bad order cars, cabooses track for both eastward and westward cabooses as each conductor was assigned his own caboose. There was a switch engine on duty, all engines changed there, and all engine crews changed as well as freight trainmen. Passenger trainmen ran through from El Paso to Tucumcari.

There was a set of train dispatchers around the clock and the Chief Train Dispatcher at that time was named Donaldson. I can remember that the rip [repair in place] track foreman was named Miller. Some of the trick dispatchers were Walter La Fleur, and D.A. Saunders. These and several others I cannot remember at this time were moved to El Paso in 1924 at the time Southern Pacific took over and set up all the headquarters in El Paso instead of Tucumcari and Douglas. The dispatchers at Carrizozo were combined with the others all in one office in the main building at 416 North Stanton Street, which was my headquarters for my half century, although part of my time was out at stations on the line.

There were about 200 employees at Carrizozo at that time. First to go was the back shop with all engine repairs being done in El Paso. Then of course the SP moved the dispatchers out. There was also a Trainmaster's office there which I failed to mention. The SP left it there for a long time and then placed the entire East Line (El Paso to Tucumcari) under the Tucumcari Trainmaster. Eventually the rip track was abandoned and the work done in El Paso. The Store Department section at Carrizozo was under George Ferguson. He was part of the community in that he played the piano in some of the orchestras that played for the dances. These community dances were an institution in that part of the country. George Ferguson ended his career in the Store Department at Douglas, Arizona. He was not replaced when he retired.

With the coming of the Bonito water and better water treatment all over, the practice of changing passenger engines at Carrizozo was stopped. However, as long as the old consolidation, mikado or mallet type coal-burner engines were on freight the power was changed out so that mechanical forces could lubricate the engines, load them with coal and have them ready for the next train. When the coal mines at Dawson closed and all the freight engines were converted to oil they then began sending a crew over from the shop with pneumatic grease guns to lubricate the engines. They were filled with oil from trackside oil columns as well as with water and went on through with their trains. The next thing to go of course was the coal chute as there was no more need of that.

The New Mexico Division had a Roadmaster at Tucumcari, one at Duran and one at Alamogordo. With the consolidation of the Rio Grande and New Mexico divisions and the death of the Roadmaster at Duran, the Districts were changed so that there was one at Tucumcari, Carrizozo and the El Paso district was extended to Alamogordo, thus eliminating one Roadmaster's district at Duran. When we were instructed to put on Track Supervisors, their sole duty was to patrol their respective territories looking for defects, replacing broken track bolts, arranging with track gangs to make repairs or reporting to the Roadmaster what had been found so he could arrange for correction if it were more than the Supervisor could arrange. When we put on the Track Supervisors we were told that we would have to give up one Roadmaster on each Division to help defray the cost. Then the Carrizozo District was abolished and the Roadmaster moved from there.

Next an agreement was signed with the conductors to pay them a few cents per mile extra to give up the assigned cabooses. That way a caboose could be left on the train and not have to go to the expense of having to run an engine and crew to the rear end with the outgoing caboose each time and remove the incoming caboose. An arrangement was made to have an automotive vehicle available so that the callboy could take the conductor and rear brakeman out to where the caboose would stop, trade crews and then bring the incoming crew to the station where they could register in. The engine stopped at the water and oil columns for servicing so the head brakeman and the engine crew could trade off there by the station.

Since I retired they have now cut out Carrizozo as a sub-division point where freight crews changed as outlined above just as Duran was cut out in January 1929. With the coming of the diesels they run through from El Paso to Tucumcari where the crews are changed by automobile as outlined above, the

radio equipment changed over from SP to CRI&P [Rock Island] and the train is again on its way in about three minutes. The engines and cabooses now run through from El Paso to Kansas City and return. There is a suitable division of units of equipment in the pool so that each road furnishes its share.

So now the train order office has been closed, all tracks except two sidings, and now Carrizozo is just another station on the railroad. The only employees there are now are the Assistant Signal Supervisor, Jack Pruett, and about four trackmen —a far cry from the 200 or so EP&SW employees of 1917.

Approximately the same kinds of changes have taken place at Tukumcari as at Carrizozo. When the EP&NE [El Paso & Northeastern] built the Dawson Railway they made a terminal at Tukumcari for the crews on that line. The terminal for the CRI&P [Chicago, Rock Island & Pacific] crews and the EP&NE Main Line crews was at Santa Rosa and was operated by the CRI&P. As has been explained elsewhere, after the EP&SW got into the picture they were not satisfied with the service the CRI&P was giving them between Tukumcari and Santa Rosa. They gave the CRI&P three choices; sell to the EP&SW the 61 miles of track between Santa Rosa and Tukumcari; lease it to the EP&SW, or the EP&SW would build a new connection from Torraine to Dawson and abandon the Dawson Railway entirely and cut out the coal haul between Santa Rosa and Tukumcari. The survey for the new railroad was actually run as I saw a request from the U.S.G Survey for the profile of the line. I passed the request on to our Chief Engineer to see if there was any such information in his files and he had inherited this information from the EP&SW Chief Engineer's Office in 1924 at the time of the merger.

The CRI&P chose to lease the track to the EP&SW and that same lease is in force today. As a result of this change the terminal at Santa Rosa was abandoned and the one at Tukumcari was expanded as it then became the terminal for the EP&SW crews from both the Main Line and from the Dawson Railway, as well as the CRI&P Main Line crews. This was on July 1, 1907.

The Dawson Railway train yard was north of the roundhouse as was their depot. With the change in status the old Dawson Railway back shop and roundhouse served all. There was a 75-foot turntable that was changed to a 100-foot somewhere along the way and in 1939 with the coming of the 3800 class mallets the 126-foot table was installed as previously explained. To handle the traffic now flowing into the terminal it became necessary to build a new switching and train yard West of the CRI&P depot. The EP&NE depot was moved down along the South side of the CRI&P Main Track and West of the passenger station where it was used as offices for the Trainmaster, Roadmaster, Train Dispatchers, telegraph office and was a place of considerable importance. The EP&SW had their Eastern Division offices in Tukumcari with the Division Superintendent and Division Engineer with their respective staffs located there. The Master Mechanic for that division was also located there. Switch engines worked around the clock. Some shifts required more than one switch engine. The water supply was a problem in the days of steam so there was series of wells drilled along the North side of the new train yard with three wells on the South side at the extreme West end of the yard. These wells were all pumped by Cook vertical steam pumps supplied from a central boiler plant. Along toward the last of the days of steam the SP company tried to develop some wells a mile north of town and it was while working as a relief pumper in 1928 that J.B. Dawson, the Division Engineer of the old New Mexico Division having been told of my background came out to interview me on one of his inspection trips and transferred me to the Engineer Department of his staff.

Tukumcari was a lively place, however with the coming of the Southern Pacific the Division Offices with the Superintendent, Division Engineer and Master Mechanic with all their people were transferred to El Paso. The CRI&P seemed to throw their trains together in Kansas City without regard to destination — just so it was westward. When these trains got to Tukumcari the Southern Pacific spent about three hours blocking the trains and putting them back together. Blocking was the term for putting all cars for one destination together and then putting the blocks in the train in station order so that upon arrival at any given destination the block could be removed from the train by a switch engine in a minimum of time.

There were perhaps 200 people involved in all the operations there, not including train and engine crews. There was a repair track for repairs to cars found to be defective in trains. This called for a crew of car inspectors to look for these defects.

With the coming of the felt lubricating pad and as further development in car building [i.e., the roller bearings for car journals] the I.C.C. changed the requirements for train inspections that suddenly there

was no more car inspection other than the rolling inspection given each incoming train by the outgoing crew standing on both sides of the track looking for defects as the cars roll into the yard. Next an agreement was made to give the trains some kind of blocking in Kansas City so the switch engines with their crews and yardmaster were cut off. Those with enough seniority were permitted to displace in El Paso Yard.

However, before the car inspectors were removed from Tucumcari there was an effort made to speed up the inspection of trains as all the efforts were to expedite the movement of trains through yards. Most of the time lost on freight in transit was delay in yards. It was not worthwhile to spend huge sums for better track and more powerful locomotives to get trains over the road faster and lose all of it in train yards on inspections, servicing, switching and the many other activities that used time.

In order to speed up inspection of the trains it was decided to remove alternate tracks in the train yard, give each train a rolling inspection, as it entered the yard and then have inspectors on small motorized vehicles run down each side of the train on roads provided where the alternative tracks had been removed. The idea was to replace a brake shoe here or make an adjustment there so as to hurry the train through the yards.

Now this is all gone.

The last time I was in Tucumcari there was not a vestige of the extensive Mechanical Department servicing area left. The old roundhouse as well as the attractive addition that was added in 1928 was gone; so was the water and fueling facility. The coal chute was gone, the sanding facility was gone, and all of the tracks that had served that area were gone except the balloon track for turning equipment.

While I was still working, the restaurant in the passenger station had been closed as passengers ate on dining cars so passenger trains no longer made dining stops. The main dining room was converted into a telegraph office and the people moved out of the old telegraph office in the old EP&NE depot. The kitchen area was converted into rest room and storage areas. What had once been the lunch counter area was converted into office space for the yardmaster and agent's forces. On my last trip there since my retirement, there were two people in the old passenger station, a telegraph operator and the combination Agent-Roadmaster's clerk.

Trains now pull up to the station to stop. The incoming head end crew detrains and the outgoing crews boards the engine while a member of the Mechanical Department force pulls out the SP radio and inserts a CRI&P instrument in its stead or vice versa, depending on direction the train is traveling. While this is going on an employee with a company vehicle has taken the conductor and rear brakeman to a spot where the cabooses will come to rest. The crews are swapped as is the radio and away they go. I have heard an officer say that if a train is in Tucumcari more than three minutes it has been there too long.

As I knew it over the years the railroad portion of Tucumcari is dead. Surely the freight trains still run there but all the other activity is gone, as are the people that made the activity possible. This I guess is progress but for an "Old Rail", steeped in the tradition of more than half a century it is saddening. I think of the man-hours that went into the planning of all those facilities, the arguments and persuasions for appropriations to make them possible, the people who by the sweat of their brows and the brawn of their arms brought it into being. I had the same feeling when I saw Fairbank, Arizona for the last time and on a trip through the weed-grown rusty tracks of the El Paso Union Passenger Depot.

Jump from one subject to another.

I have talked of the consolidation class locomotives the EP&SW was using when I first came on the property, like the SP3420 at the El Paso Union Depot, the 3800 class [2-8-8-4] and the 2-8-2 mikados that were the main stay of the Southern Pacific freight service. There was also an engine called the Southern Pacific type, which had a third cylinder, which operated a crank in the center of one of the main axles. This engine was also restricted to 35 miles per hour account that was what it was counterbalanced for. These engines were numbered in the 5000 class.

When the diesels began to make their appearance on the property many of the locomotive engineers were afraid to operate them. The first thing that had to be done was to send all of the Roadforemen of Engines back to the factories and educate them in the operation of the diesels so they could come home and instruct the engineers. Several different kinds were tried as I saw Fairbanks Morse engines,

General Motors and several others. The Company even had six diesel-hydraulic engines built in Germany and gave them a trial. Mr. Corbett told me that they did that, not because they thought the diesel-hydraulics might develop into a better engine for the purpose, but to show General Motors that the Southern Pacific was not forced to buy from them. The principal objection was the excessively high price of replacement parts for General Motors diesels. However at this time I think General Motors has the diesel market about monopolized. I never became familiar with the different kinds of diesels as I did with the steam engines, although I have ridden thousands of miles in the cab of diesel locomotives inspecting the railroad.

Another change that I saw during my half century was the Bataan Memorial Trainway through downtown El Paso. Through this trainway all the trains enter and leave El Paso on the Southern Pacific underground.

When the Southern Pacific built into El Paso in 1881 the town was very happy to have them lay the Main Track down Main Street past San Jacinto Plaza. The station was where the First City National Bank now stands between Stanton and Kansas Streets on Main Street. As the years went by and business district was no longer on South El Paso Street, Overland and San Antonio but began to spread north of the tracks, the trains entering and leaving town caused considerable delay to traffic on the many streets crossing the tracks. When I first came back to the railroad in 1928 I was living at the YMCA at the corner of Oregon and Missouri Streets. One morning I went downtown to breakfast and then headed for the Southern Pacific office at Stanton and Franklin Streets when I found all the crossings blocked by a long freight train. As a result I was a few minutes late to work. Bill Champagne was acting in the capacity of Office Engineer, although the New Mexico Division had no one actually designated as such, came over to me and said, "Williams we go to work at 8:00am in this office". When I explained that I was delayed by a train at a crossing he merely told me to start earlier next time.

Over the years there had been agitation about getting the tracks out of the streets. The old EP&SW Main Track was in the alley north of Main Street and was used by the Southern Pacific in those days as a westward Main Track with eastward trains coming in over Main Street. After about half a century of kicking the idea around there eventually evolved a concrete plan. The USA paid for all the bridges over the "Big Ditch" including the Cotton Avenue overpass. The City of El Paso, the State of Texas and the railroad split the remainder three ways. The actual work was started in the late 40's and the first train was operated through the new trainway in 1952 with our mayor Dan Duke, a passenger engineer on the Texas and Louisiana Lines of the Southern Pacific, at the throttle. This was constructed while I was Office Engineer so I had very little to do with it but it came to haunt me in later years. After I was Division Engineer the complex completion report to the ICC had not been completed and there was a pair of cost analysts assigned to the job continuously. The trouble was that I could find no way to make Tom Carr, the head analyst, get into high gear and complete the job. At one time he went out on line for some chore with his helper and got a track motor car demolished. After the formal hearing he was removed from service and I thought now that I was rid of him we would get the job done. But to my surprise the General Manager reinstated Tom after he had been off six months on the argument that the Southern Pacific had never discharged anyone permanently for getting a motor car hit by a train. Finally after the Rio Grande Division was abolished Carr had the choice of taking separation pay or moving to San Francisco so he took the pay. V.W. Abbot finally made the completion report about 10 years after the job was completed.

On a single-track railroad, which most of the old Rio Grande Division was, the trains were operated under train orders issued over the signature of the Chief Train Dispatcher. Of course in the area where CTC was installed the train ran on signals only. It was obvious that when two opposing trains were to meet one of them had to get out of the way. These meets were controlled by the Dispatcher through the train orders, the timetable and the book of rules. One rule was that a westward train of the same class had right over and eastward train. There were several classes of trains: passengers were first class; scheduled freight trains (in the timetable), were second class; extra freight trains or extra passenger trains for that matter were third class and work extras were at the bottom of the list.

When approaching a siding where two trains were to meet, the train that took the siding had to slow down enough to permit the head brakeman to run ahead, unlock the switch lock and line the switch for entry into the siding. When the train was in the clear and as the caboos passed over the entry switch

the rear brakeman dropped off to close and lock the switch. When this was done and the train pulled down far enough to clear the Main Track the block signals would clear for the opposing train. After the opposing train had passed the head brakeman had to go ahead to let the train out. In order to save time on schedules and particularly where the siding was on a grade, spring switches were installed through which a train could pass and after the train was gone the switch points would assume their normal position for Main Track operations.

In the area between Carrizozo and Tucumcari the country is at an average elevation of more than a mile or so there are some severe snowstorms. If a switch filled up with snow between the switch point and the stock rail when a train sprang the switch the snow would be compressed into ice and the switch would not assume its normal position. Therefore a device was invented that would turn on electricity to warm the rails when it started snowing and thus keep the switch points clean of ice. These of course were called switch heaters.

Another simple piece of safety equipment that was devised for installation in block signal territory is the high water detector. This little instrument is especially valuable in this desert country where the cloudbursts may occur many miles from the railroad and the storm water come boiling down a dry arroyo and at times overtax the drainage structures provided, runs over the track and wash out the railroad. These detectors are set at a predetermined height beyond which it is deemed advisable to inspect a structure before letting a train over it or stop the trains altogether if deemed advisable. The device consists of a float in a 4" pipe that has holes drilled in it to admit the water when the flow gets up to the detector. The float merely rises as the water rises until it reaches the desired height where electrical contact is made and the block signals are set at stop indication. Instructions in the timetable, which all train and enginemen are to have with them at all times they are on duty, tell the crews where the device is and what action to take if it is actuated.

Many, many derailments are caused by failed journal or axle bearings, particularly in the days when they were lubricated by oily waste. The axles first run hot and as the heat increases the steel becomes incandescent and finally lets go. The railroads have now installed at many locations hot box detectors. These detectors are actuated by the ultra violet rays given off by a heating journal. If any of these are picked up by a detector it actuates the signals to stop the train and at the same time begins to count the axles passing so that the crew when the train comes to a stop, can read off the machine which axle ahead of the caboose is running hot. They may then go directly to it, determine the seriousness of it to see if it may be moved carefully to the next siding to a setout spur. The Chief Dispatcher is notified that the car has been set out and he in turn tells the Mechanical Department so they can send the wheel truck out there, change the wheel and make the car ready to be handled to its destination without being delayed going through the rip track at some terminal.

Switching cars in flat yards to get them in the proper order for inclusion in a train is a thing of the past where large numbers of cars are handled. Gravity yards have replaced the flat yards. The gravity yard essentially is a yard where there are as many as 64 or more classification tracks leading out from a raised area over which the cars are pushed by a switch engine. There is a tower at the top of the hump with a console containing a large number of electrical switches, lights on a miniature model of the yard, a computer hooked into a scale and to many other items so that the tower yardmaster with the consist of the train that is being switched lying before him can push a button as a car is pushed over the hump to open the switch to the track that car is destined for. So the car rolls over the scale the weight is recorded and as it is rolling down the hill will continue to the track designated. There are retarders along the track so that the yardmaster may permit the car to roll to the far end of the designated track or if the track is about full, actuate the retarders to grip the wheels and slow the car down so the impact will not be great when it couples into the cars already on the track. Thus the cars for any particular destination can all be assembled on one track together. Another switch engine known as the trimmer comes in and withdraws the cars from the classification tracks and assembles them into a train with the various blocks in station order for easy removal at destination as previously explained.

Radio communication between the caboose and the engine has greatly facilitated the handling of trains although the train and engine men resisted the use of it to begin with. I accompanied Mr. H.J. McKenzie, President of the Cotton Belt, from El Paso to Lordsburg one time and he told me that his railroad had all the engines and cabooses equipped with two way radios but the crews would not touch

them. I think it was eventually settled by paying them more money to use an instrument that was given to them to make their jobs easier as well as speed up train operation. The radios are now hooked up for direct telephonic conversation between trains and the dispatchers or any other telephones on the property.

At one time the Company inaugurated a policy of over loading cars 10% over their rated capacity and in this manner handle more goods as adding 10% more cars to the fleet would do. At that time we were procuring all our slag ballast from the pit at Douglas, Arizona and hauling it to points whenever needed on the Tucson and Rio Grande divisions. That sag ballast weighs 3330 pounds per cubic yard and the ballast cars held 33 yards. When we began overloading them 10% we began to have trouble with broken flanges, broken wheels and in some cases there were derailments. The Mechanical Department kept telling everyone that the over load on the cast iron wheels was the cause. Finally it was decided to run a test train of slag from Douglas to El Paso with a number of observers along such as the Chief Engineer, Division Superintendent, Division Engineer, Master Mechanic and a number of carmen and others to inspect the train at intervals checking wheels and bearing temperatures. I was the Division Engineer and my contribution consisted of driving the Hi-Railer, a Pontiac station wagon that ran on the track, to follow the train. Eventually the Vice-President, System Operations, gave in and instructed the men that when the time came to change a set of wheels on any of the slag cars they were to be replaced with steel wheels but he did not give up his 10% overload.

One change I saw come and go was the extension of the El Paso Union Passenger Depot Yard westward to handle longer passenger trains. As I recall this was about 1928 or 1929. All the tracks were extended so that they would hold trains as long as 22 to 24 passenger cars. This was very useful during World War II, as there were thousands and thousands of soldiers handled through there on troop trains at that time. After the war passenger business began a slow but steady decline. The Southern Pacific bought new streamlined trains and engines in an effort to provide better service and woo of the traffic back to the rails. It was a losing proposition. The private automobile and Government Aid highways to all points of the USA killed the railroad passenger train. Buses and airplanes took some of it but the private automobile really did the job.

Changes have been mentioned as they came to mind and in no particular pattern, but the greatest and most far reaching change within the half century span of my career had been the replacement of the steam engine by the diesel. There is no part of the entire railroad complex upon which the diesel has not had some effect. Track maintenance has become less expensive because there is not the hammering of the counterbalances and the side rods to make the track rougher. The advent of ribbon rail with the absence of joints has also contributed to this. There is no longer a need for a huge dependable water supply; all the water a diesel needs is in the radiator. Huge stockpiles of coal have vanished; check a diesel over and refueled it with a lubricator job and it is ready to go. Diesels are operative about 98% of the time against 50% or 60% perhaps for steam as there are no boilers requiring a wash job after every trip. Their dependability has made it possible for the automobile companies to use box cars in transit with auto parts as warehouses for their assembly plants around the nation. The computers makes it possible for them to know where a car is at any minute and to schedule assembly lines based on delivery at a predetermined time. Freight subdivisions have been lengthened and the forces necessary to man those subdivision points have been eliminated.

Another development brought on by the tax situation as well as the every increasing demands of the labor unions for more money every time there is a meeting for a new contract is that the railroads are leasing everything they can instead of buying as the cost of leasing can be deducted as an operating expense for tax calculations. Furthermore there are so many taxes connected with every name on a payroll that the companies save money every time they can take a name off the payroll. The Government tax for the companies' portion of the Railroad Retirement tax for each employee as well as employer's liability tax for each person with other charges makes it desirable to keep the number of people on the payroll at a minimum. One way of course is to lease equipment, particularly automotive equipment, and then let the manufacturer's representatives maintain the equipment. - *To be continued.*

* Next month we'll conclude E.O. William's recollections of the changes he's seen over fifty years of working for the Southern Pacific and El Paso & Southwestern.