Competition among builders of steam locomotives in America was always pretty intense. This was no less true when it came to the builders of steam logging locomotives. This article demonstrates this point very well.

In 1922 the logging locomotive market was divided between the 3 main builders of geared engines, Lima, Climax and Heisler. They also fought with Baldwin and ALCO rod engines for the remaining loggers dollars when it came to logging locomotives.

Often one of these manufacturers would work for months to secure an order for the sale of even one logging lokie. This was the case in May, 1922. Heisler's West Coast sales representative, The Whitney Engineering Company of Tacoma, Washington had been working hard to secure a sale of a big 3-truck Heisler to the Coos Bay Lumber Company of Oregon. By Spring 1922, Whitney felt they had the Coos Bay order “in the bag”. All that was about to change.

Included in this article is just one of several letters written by John P. Whitney himself back to the Heisler factory announcing the shocking news that a 4th geared locomotive manufacturer had just entered the West Coast market and had stolen away the Coos Bay Lumber order!

Who was this new competitor in the field that had caused such a stir? Why no less than the Portland, Oregon based Willamette Iron
& Steel Co. This company had become famous with loggers in their sturdy construction of donkeys and other steam powered logging devices. You can tell from the tone of the included letter the shock and dismay portrayed with the introduction of this new competitor in the already crowded field of logging locomotive builders.

Even though this letter to Heisler was written long before the days of instant information of the Internet, you can see that the Whitney Engineering boys have already done some research on what type of locomotive Willamette would be building and how they were able to score this coup by hiring away a Lima design engineer. They also surmised that Willamette must have offered the Coos Bay Lumber folks some financial incentive to convince them to cancel the order for the Heisler and order the first ever Willamette.

Any hope that this all was just some rumor was dispelled in November of that same year when Willamette Iron & Steel Works parked on Front Street in Portland it's shiny new construction number 1 in the form of 70-ton 3-truck Coos Bay Lumber #10 ready for shipment to her new owner.

The sign hung on the engine proclaiming this to be “The First Locomotive Built In The West” was incorrect, as a number of small builders in San Francisco had been turning out locomotives for years, and even the Southern Pacific had built locomotives in their Sacramento shops. However, the point was clear, Willamette was now firmly in the locomotive construction business.

Another 32 Willamette’s would follow Coos Bay #10 out of the Portland shop (see page 7 for Medco #4) before Willamette would finally pull the plug on the locomotive manufacturing operation all together. In the meantime, Lima would respond to this upstart competitor with the Pacific Coast Shay and Heisler would answer with the West Coast Special Heisler. The correspondence pertaining to the development of these models to answer the Willamette locomotive is equally fascinating but I will leave that for another day.

For now, we have seen a glimpse into what the “sales wars” between the builders of logging locomotives was the like “back in the day”.

---

**The Backstory on the FRA Fifteen Year Inspection**

by Dave Larsen

**INSPECTION RULES**

Visitors to the Oregon Rail Heritage Center today are likely to encounter a dedicated group of volunteers slowly taking the SP4449 apart for its Federal Railroad Administration mandatory fifteen year inspection. In spite of the large number of volunteer workers, the process may extend into 2014 based upon what is found after disassembly and cleaning. The main focus, but not the only one, is the condition of the boiler.

There are currently four levels of required inspection. At the end of the steam era, 1948, the Interstate Commerce Commission established a steam locomotive inspection requirements based on a specific time frames, monthly, quarterly and annually. These inspection requirements were appropriate for locomotives in regular service on railways and were designed to ensure that steam locomotives were safe. However, once steam locomotives disappeared from regular service and began being used sporadically on excursions, the old rules became a huge burden. For instance, if the SP 4449 ran one day in a month, then it was required to pass a monthly inspection and so on up the chain. This was the result of inspections based on time and not service.

Today, the four levels of required inspection are based primarily on “service days”. Service days are counted as any day the boiler has a positive pressure and there is a fire in the firebox. The required inspection must be performed when the locomotive reaches the required number of service days or within a prescribed time limit whichever occurs first.

Each required inspection is different from the others. So, when the SP&S700 has its annual inspection, it will also undergo the 92 day procedures and the 31 day procedures even if it only had 25 service days in a year. The SP4449 will undergo all four levels before its return to service. These

---

![Image of a locomotive](https://via.placeholder.com/150)

**Four Levels of Required Inspection**

- 31 service days - (368 calendar days max.)
- 92 service days - (368 calendar days max.)
- Annual - (368 calendar days max.)
- 1472 service days - (15 calendar years max.)

---

Page 2  June 2013  Pacific Northwest Chapter National Railway Historical Society *The Trainmaster*
new rules for steam locomotive inspection have only been active since January of 2000. The backstory of how these changes came to be and how they continue to evolve is the purpose of this article. One member of the ORHF board has been involved and continues to be involved since the inception of this movement, Doyle McCormack.

THE BACKSTORY

In 1990, Bill Withuhn, who at that time was the Smithsonian Curator of Transportation, invited a number of key people, approximately 18, representing Class 1 Railroads operating steam, tourist railroads and professionals whose specialty was repairing or rebuilding steam locomotives, to join in a group in order to preserve the knowledge of steam locomotives. By this time, much of the rail talent that had maintained and built locomotives in the steam age was rapidly passing and the knowledge, like the experiences of World War II veterans, would be lost forever. It was decided that this group would create a repository for information so that anyone who wished to work on a steam locomotive would have access to the accumulated knowledge.

This group later became known as the Engineering Standards Committee (ESC). Doyle is one of the founding members and feels very privileged to have been chosen for this group. He continues to attend multiple meetings each year as the task continues to evolve.

One of the first long projects that the ESC undertook was research into current industry practices in the inspection and repair of boilers. The standards for industry repair practices are governed by the National Board Inspection Code (NBIC). At that time the code had nothing that specifically related to steam locomotives. This oversight could cause major problems for a licensed boiler repair facility attempting to apply existing NBIC codes to a steam locomotive boiler. The final result was an addition to the NBIC specifically dealing with steam locomotive boilers.

The next large project for the ESC was the drafting of a revision of the federal inspection requirements for steam locomotives, Title 49, Code of Federal Regulations, Part 230. This revision was an attempt to move towards the inspection code as it is currently on the books. However, when the proposed changes were submitted to the Federal Railroad Administration (FRA), they were largely ignored.

On June 16th, 1995, there was a boiler explosion on a steam locomotive being used on the Gettysburg Railroad that resulted in several injuries. Both the FRA and the National Transportation Safety Board (NTSB) investigated and issued reports. There is a shortened version of the NTSB report available online. The bottom line seems to have been poor oversight and cutting corners on federal regulations. This accident was the catalyst for change. There was political pressure applied to the agencies to keep the public safe and also support the continuing use of steam power. The FRA then rediscovered the proposed rule changes suggested by the ESC.

The first meeting between the federal agencies and the ESC took place at Strasburg, Pennsylvania. Doyle describes the initial meetings as tense. The government representatives treated members of the ESC as outsiders. In the end, over several years of negotiation, Part 230 was rewritten and updated to include such technological advances as ultra-sound testing (UT) of boiler metal thickness. Today the UT crosses can be seen on the boiler of 197. Each cross represents a measurement point. Also, every locomotive is now required to have certain safety features installed, not required under the old rules.

One of the most important changes that came about as a result of the joint work resulting in the new FRA regulations was the requirement that some FRA inspectors undergo training in the inspection of steam locomotives. This training is called Steam School and it takes place when needed at the Steamtown National Historic Site. Today, the relationship between the FRA inspectors and the Friends of 4449 is cordial. This is probably due to the intense level of perfectionism that has made the 4449 a reliable excursion engine.

THE FUTURE

Members of the ESC continue to collect and refine the data concerning the repair and rebuilding of steam locomotives so that the people who work on our engines and many others across the country will have up to date information on best practices. As Doyle put it, “The process continues to evolve.” The members of the ESC today are, “Hands on steam people.” Each member represents different facets of the steam locomotive industry today including ownership, restoration, construction, operation and inspection. The members represent class 1 railroads, short line operators, well known tourist railway operations, independent contractors specializing in the restoration or operation of steam power, boiler manufacturing and representatives of the FRA.

Other members of the ESC are working with American Society of Mechanical Engineers to update the codes regarding the building of new steam locomotives. The existing regulations date back to 1952.

Special Thanks

The author would like to thank Doyle McCormack for making time to be interviewed for this piece. The author would also like to thank Gary Brandt for his excellent work on summarizing the FRA inspection process. This document is currently on view in front of the 4449 work area.

June Membership Meeting - June 21st - Program
SP 4449’s 15 Year FRA Inspection
by Mark Kramer
President, Friends of SP 4449

www.4449.com
In Remembrance of our Fellow Chapter Member

Randy Rock by Keith Fleschner

The Chapter and many members lost a dear friend Sunday May 19, 2013. My friend Randy Rock passed away after suffering a stroke earlier in the month. Randy was a chapter member from 1998. He was an active board member, in the first year of his second term. My email is full of messages from Randy with ideas and thoughts on the future of the Chapter. Randy was also active on the Rolling stock committee, some of my fondest memories are of our work supporting the Port of Tillamook Bay Railroad excursions, over several years. When the chapter started taking the Mt. Hood to National Train day it was Randy who spent long hours getting the car ready, some of the informational signs he made are still on the car. Randy also worked many shifts as a Carman on the Holiday Express; he also donated the equipment and his expertise for the tent sound System. Randy used his years of experience in the sound business to maintain and operate the public address system for Antique Powerland during Steam-Up. Randy was a true gentleman, I can never remember a sour word. Rest in peace Randy.

A Memorial celebration of life for Randy will be held on June 8th at 1pm. The location is Wi-ne-ma Christian Camp, 5195 Winema Rd, Cloverdale, OR 97112. The gathering will be in the dining hall and will be informal.
PNW SHORT LINES
by Arlen L. Sheldrake

For those wondering about the future of the Willamette Shore Trolley operating north of the Sellwood Bridge, the answer is yes, it will. As part of the Multnomah County project underway to replace the Sellwood Bridge, the trolley line was terminated at the Bridge and further north in order to use the line as a haul road into the project. At the completion of the Bridge project in early 2016, the rail line will be restored thus allowing the trolley to return to running to the South Waterfront area. Some may remember the discussion of putting streetcar tracks in the new Bridge now versus waiting for a possible future streetcar project, this idea has been dropped. However, the bridge and approaches are being designed and built to accommodate future installation of streetcar tracks. Willamette Shore Trolley will celebrate their Grand Opening on July 4, 5, & 6 with departures from Lake Oswego between 10 a.m. and 4 p.m. After nearly three years without passenger service, the Willamette Shore Trolley gladly announces its re-opening for scheduled trains, charters, and excursions. Fares are free for this grand opening event. The regular scheduled train service begins Thursdays, July 11th. The round trip takes approximately 30 minutes with two Vintage Council Crest replica streetcars. The operation will be between Lake Oswego and just south of the bridge. More information: http://oerhs.org/wst/. From a WST flyer received 5/11/2013.

On April 24th the main waiting room at King Street Station reopened after the 1963 installed suspended ceiling was removed and the original ornate plaster ceiling was restored. Trains New Wire 4/17/2013. The city of Seattle maintains an excellent project web site with lots of photos and project information: www.seattle.gov/transportation/kingstreet.htm.

On April 22nd Tesoro Corp. and Savage Cos. announced they formed a joint venture to develop and operate a new crude-by-rail unloading and marine loading facility at the Port of Vancouver USA in Vancouver, Washington, subject to approval by regulatory agencies and port commissioners. To be operational in 2014, the new facility is designed to initially handle 120,000 barrels of crude per day. A potential near-term expansion would boost daily capacity to 280,000 barrels. “Building upon the recent success of the rail unloading facility at our Anacortes, Wash., refinery, where we have been delivering mid-continent crude oil via unit train – this project is the ideal next step for Tesoro as we drive additional feedstock cost advantage to the remaining refineries in our West Coast system,” said Tesoro President and CEO Greg Goff. The joint venture will own the crude unloading and marine loading facilities and will enter into a land lease agreement with the port for an initial period of ten years. Savage will oversee and manage the design, construction and operation of the facility on the joint venture's behalf. Progressive Railroading 4/23/2013.

Some interesting information from Bob Melbo, State Rail Planner, Oregon Department of Transportation – Rail Division: of the track miles in this state, Union Pacific operates 37%, Genesee & Wyoming collectively (Portland & Western and Central Oregon & Pacific Railroads) controls 29% and BNSF operates 10% for a total of 76%. Consequently, three-quarters of the rail system in Oregon is operated by three organizations. And 18 other entities operate the remaining 24%. 4/24/2013 email.

On April 24th TriMet hit a major milestone as the first bridge segment was poured for the Portland-Milwaukie Light Rail Transit Bridge over the Willamette River. Kiewit Infrastructure West, the bridge contractor, cast the first of 78 concrete segments for the bridge deck. Two concrete form travelers have been erected at each end of the west bridge tower. Each form traveler will support 200 tons of concrete to be cast into 16-foot long by 75-foot long segment that will make up the future roadway. Once the concrete achieves a specified strength, post-tensioning tendons (treated-steel cables) are pulled tight by a jack before the form traveler is moved. The bridge deck segments constructed from each tower are expected to join together in spring 2014 at the bridge center point over the Willamette. This will be the first cable-stayed bridge for the region, extending 1,720 feet over the Willamette River that will carry light rail, buses, bikes, pedestrians and a future Portland Streetcar extension. RT&S 4/24/2013.

Schneider National Bulk Carriers recently launched a bulk intermodal service that will move 40-foot tank containers of liquid bulk chemicals across the United States by rail and road. Current origins are Houston and Marion, Ohio, and current destinations are Los Angeles, Seattle and Portland, Ore. Multiple future origins include Chicago and multiple
Some facts about the 100 year old Broadway Bridge: Type: Riveted steel truss with double-leaf bascule; Opened: 1913, Willamette River mile 11.7; Designers: Ralph Modjeski (Chicago), Strobel Engineering (Chicago) bascule span, Theodor Rall (Chicago) lift span mechanism; Main span length: 278 feet; Center Height to water: 90 feet; Cost: $1.6 million plus upgrades; Operated/maintained by: Multnomah County, built by City of Portland; Daily traffic crossing count: TriMet buses – 111, Streetcars – 110, cars and trucks 25,400, Bicycles – 4,400. Color: Red (to match Union Station). Seismic upgrades: None as of 2013. National Register: Listed. Streetcars ran across the bridge from 1913 until 1940 and trolley buses from 1937 to 1958. In 2012, streetcars returned as part of the new Portland Streetcar system. A $10.5 repainting project and a $10 million Rall wheel replacement project are pending. From Happy 100th, A Big Red Rare Bascule handout.

The Altamont Press Discussion Board (www.altamontpress.com) had an interesting posting on May 4th, Great Old SP Coast Daylight Film that referenced a www.youtube.com available video “Southern Pacific Railroad 1937, Daylighting the Padres Trail”. During the entire 20-minute movie, the beautiful Daylight locomotives never once used their steam whistle but instead consistently used their air horns. When asked why in a posting, a poster responded that SP management had determined the air horn was less expensive to operate thus ordering engineers to use the air horn in most situations. This information has been confirmed by Daylight historian Doyle McCormick.

The May 3rd La Grande Observer carried a for sale announcement from the Wallowa Union Railroad asking for bids by May 10th for three BUDD RDC units with a minimum bid of $150,000 for all three FOB location. The units are: Two RDC 1s: WURR #10, ex-ORRX-10, BC-10, PGE-10; WURR #11, Ex-ORRX 11, BC-11, PGE-11; One RDC 3: WURR #31, Ex-ORRX 31, BC-31, BN-2350, GN-2350. Before being sold to Wallowa Union, these units were owned and used by ODOT on the three-year Lewis & Clark Explorer excursion train that ran between Linton (NW Portland) and Astoria.

The centennial celebration run of the Yakima Valley Trolley on June 21st is in jeopardy. The plan was to reopen the Selah line from Yakima to Selah that has been closed since 2005 due to vandalism. The centennial run plans have been stymied by the blockage of the line by a contractor working on the $97 million remodel and expansion of Davis High School who buried a section of track. Yakima Herald-Republic 5/9/2013.

Chapel car 5 Messenger of Peace gets an organ! An Estey Organ Company 1880s pump organ, a “schoolhouse” model, similar to the organ donated by the company to the Messenger of Peace in 1889 has been acquired by the Northwest Railway Museum and is installed and operational in the car. Northwest Railway Museum May 7th mailing.

Sound Transit broke ground April 26th on extending Link light rail to a new station 1.6 miles south of Sea-Tac International Airport. The elevated station and guideway for the South 200th Link extension will offer congestion-free 40-minute rides to downtown Seattle. This line along with the University Link extension is scheduled to open in late 2016. Sound Transit press release 4/28/2013.

ODOT No. 1 and No. 2 now have names. Oregon’s new Talgo trains are now named Mt. Jefferson (ODOT No. 1) and Mt. Bachelor (ODOT No. 2). More than 1,200 people participated in a month-long survey to name Oregon’s new Talgo passenger trains and these names topped the lists by several hundred votes. Oregon Department of Transportation 5/14/2013 press release.

Design of WSDOT’s federally funded Advanced Wayside Signal System project is nearly complete and BNSF crews will begin construction this summer. The project includes upgrades to control points, sidings, and turnouts with state-of-the-art digital components, resulting in increased operational flexibility, added safety, increased reliability and the potential for future higher speed travel. These signal upgrades are being applied throughout the 300 mile corridor in Washington. The $60.1 million project will be the third of six projects going to construction in 2013 following switch replacement in the Corridor Reliability South project between Vancouver, WA and Nisqually, WA. The signal upgrade work is scheduled for completion in 2015. WSDOT Rail Division April 2013 Monthly Highlights 4/10/2013.
The 2014 Friends of SP4449 calendar is now on sale at the Oregon Rail Heritage Center gift shop. Again, chock full of gorgeous pictures of that “only remaining operable streamlined steam locomotive of the Art Deco era.” All the pictures are great but my favorite two are: May, crossing the drawbridge near Wishram and December, night shot at Union Station. ORHC is open Thursday through Sunday, 1 to 5 p.m. Another great Chris Fussell production.

On May 4th U.S. District Court Judge Ann Aiken denied the Albany & Eastern Railroad's (AERC) motion for a preliminary injunction against Linn County and the case should go to trial but she strongly recommended that the parties should initiate settlement negotiations. Linn County's decision that a 2.42 acre transloading facility at Crabtree, Oregon that opened in October 2012 does not fall within the proper county zoning code of limited industrial. The site housed a lumber mill in the 1930s and 40s and in 2009 the railroad cleared, graded and rocked it for railroad construction use. Last summer, the railroad created an asphalt-based log yard and moved in a portable office unit. Logs are transloaded from truck to rail and moved to Rainier, Oregon. AERC contends Linn County zoning ordinances are preempted by the ICC Termination Act. Albany Democrat-Herald 5/14/2012.

Twenty-one years ago, the Oregon Museum of Science and Industry relocated from bustling Washington Park to a gritty, hard-to-reach pocket of Portland's inner-eastside industrial area. Now OMSI sits in the midst of a booming district it helped spawn, and it's hoping to cash in. The museum is commissioning a six-month study by ZGF Architects to prepare an OMSI District Plan that will chart future growth of the museum plus commercial develop of six vacant acres to the south that OMSI purchased in 2005. The surplus property combines rare waterfront footage next to a planned MAX stop and the future two-minute hop by transit to downtown and Portland State University. “I'm hopeful that the museum will have a road map to development that we can start activating as opportunities develop,” Paul Carlson, OMSI senior vice president. OMSI expects that the new MAX, bus and streetcar service [Fall 2015] will enable close to 30 percent of its 800,000 annual visitors to arrive by transit, a considerable increase from the current situation. The Portland Tribune 5/16/2013. [In early May, Paul and a ZGF consultant met with Ed Immel and me with the intent of keeping ORHF, one of OMSI's neighbors, apprised of what OMSI was undertaking.]

---

Southern Oregon NRHS Chapter

Southern Oregon Chapter Medco #4 Fundraising Campaign

Restoration on Medco #4, the last Willamette geared locomotive in Oregon, is 80% complete. We need another $50,000 to complete the restoration.

In order to keep the project going we need to raise at least $20,000 this year. One of our members will match all private donations received by November 1, 2013.

EVERY DOLLAR DONATED WILL RESULT IN 2 DOLLARS TO THE PROJECT

Also one of our members has offered $1,000 if 50 individuals donate $20 or more before November 1, 2013.

Please make your tax deductible donation by check to “SOC NRHS” and send to the address below or donate online at soc-nrhs.org

Southern Oregon Chapter – NRHS
P.O. Box 622
Medford, OR 97501

Thank you, Allen Dobney, Chapter President

Medco locomotive No. 4 was a Willamette locomotive (it looks like a Lima Shay but it isn’t) built originally for the Owen-Oregon Lumber Co. This is a rare piece of railroad equipment. Willamette Iron and Steel only built 33 locomotives. Medco No. 4 is one of six Willamette locomotives that have escaped the cutting torch. The No. 4 began and ended it's career in the forests of the Cascade Mountains around the town of Butte Falls, east of Medford Oregon. It became the Medford Corporation (Medco) locomotive No. 4 in 1932 after the financially troubled Owen-Oregon Lumber went into receivership and was reorganized by the creditors as the Medford Corporation. (from: http://www.soc-nrhs.org/Medco4.htm)
Each year the Chapter recognizes a Member with the Jack Holst Memorial Award. The three most recent Jack Holst recipients, as available, conduct the selection process. During the year we accept nominations by any means, but we are also free to nominate anyone within the organization.

This was the third and final year of my participation in the selection process, and it was no easier this year. There are so many great members doing good work. We want to select a member to represent all the good that you do.

I'm happy to report that Steve Hauff was named the Member of the Year for 2012. The award was announced at the Chapter's annual banquet, held on May 4th. Despite not being able to attend the banquet, Steve nonetheless received a prolonged ovation.

It is particularly fitting that Steve Hauff receive the Jack Holst Memorial Award, as he has much in common with its namesake. Both Steve and Jack share a passion about steam locomotives, especially in logging. These two gentlemen are recognized for their writing and editorial contributions. Steve joined the Chapter in 2004, and debuted as Editor of The Trainmaster in the April 2008 issue. He continued in this “interim” role for over four years until retiring with the August 2012 issue. He produced many Special Edition Trainmasters such as those for the 50th Anniversaries of the zoo and the zoo steam engine Oregon. Steve was part of the team that brought you Steel over the Willamette celebrating 100 years of the one-of-a-kind Steel Bridge. These high-quality publications are often our first introduction to members of the general public, and serve the Chapter well as tools of education and outreach for new members.

Steve is also a seasoned public speaker. Mr. Hauff's presentations were packed to capacity at the “Cascade Rails” 2011 NRHS Convention, and his presentations at Chapter memberships meetings have all been well attended. Beyond the Chapter, Steve has been a consistent voice for historical education and preservation. We look forward to hearing and reading his contributions for many years to come. A list of past Jack Holst Award recipients is located at http://www.pnwc-nrhs.org/jack_holst.html

Thank You Note from Steve Hauff

Shortly after arriving home from vacation, I received a package from Ron McCoy. Admittedly, my first reaction was, “Oh no, what has the Chapter gotten me into this time?” Upon opening it, I was knocked back on my heels, speechless. (Yes Keith, speechless – infrequent, but it does occur.) Gathering my tattered faculties, I found myself staring at the plaque, focusing on the name Jack Holst.

In my youth, I had met Jack on several occasions, and was fortunate enough to have learned much about railroad research techniques from him, and from the data that he accumulated. His preliminary research was the initial basis of our book on the Willamette locomotive and his data still provides information to current day writers and researchers. His legacy will be felt long into the future.

To be associated with Jack's memory in this manner is a great honor. I cannot adequately express my thanks to the Pacific Northwest Chapter leaders and membership for this recognition of my own meager efforts. Thanks to all. Steve
A question regarding early passenger car air conditioning systems was brought up at the National Train Day event. During research in the PNWC library on this question these books were some of the ones found containing very good photos and excellent information about passenger cars. The information and many of the photos come from the car manufactures and the railroads and operators that used them. Other photos are from private collections. These books and many others on this subject are available for member checkout from the PNWC lending library at Portland union Station.

**Passenger Car Catalog** by Kratville Publications (1968)

This book contains good photos and detail specifications. From the introduction in the book: “This roster illustrates every Pullman heavyweight steel car built for and operated by The Pullman Company. Also shown are certain railroad owned sleeping cars built by the company and to company plans. “With each type is an illustration and basic floor plan. Modifications of floor plans are also given or an explanation of differences. Included is type's intended use... and specific assignment data. “Illustrations include, generally, cars as built”.

A second section titled “Mechanical Equipment” contains much interesting information on the different systems in the cars such as interiors, air conditioning, electrical, ventilation and other systems.


The Union Pacific Railroad's own equipment diagrams with good detail specifications are shown for each car series and are followed by exterior and interior views, construction views and track views. Many photos show interior arrangements. The last section contains typical Painting and Lettering diagrams.

**Northern Pacific Railway - Diesel Era** by Lorenz P. Schrenk & Robert L. Frey (1988)

Most books on the history of one specific railroad tell, throughout the book, of the passenger equipment that they ran. I've included this very good history book of the Northern Pacific mainly because of the section on powered rail cars. These were used on branch lines where passenger traffic was light and the railroad could not use the solution of “discontinuance of service” to reduce the cost of lightly patronized passenger trains. The chapter discusses the McKeen Motor Car, EMC “Doodlebugs” and Budd RDC’s with excellent pictures.

**Motive Power of the Union Pacific** by William Kratville & Harold E. Ranks (1958)

This is another book with a good chapter on Motor Cars. The chapter is called “Meet Mr. McKeen”. Essentially McKeen was the first to commercially build the powered motor car. Then came EMC - EMD and Pullman with their own designs and gas electric models. Included are many good photos and information on the McKeens.
May Membership Meeting Minutes  
Pacific Northwest Chapter - National Railway Historical Society  
Held on May 17, 2013

The meeting was called to order by President Keith Fleschner at 7:33pm.
Gary Thompson was recognized as a new member.
Keith announced that there are 'get well' cards on the front table to sign for Randy Rock who has recently suffered a stroke.
The April minutes were brought up and Trent Stetz made a motion to approve the minutes and Ken Vannice seconded. The membership voted to approve the April minutes.
George Hickok announced that there is not an itemized Treasurers report this month but all accounts balance. Bryan Ackler made a motion to accept the report that was given and Rolf Schuler seconded. The membership voted to accept the report. George Hickok then announced that the printing of the second 4449 poster has been completed and the marketing plan is being finalized.
A big Thank You was given to Trent Stetz for putting together a successful banquet and a successful National Train Day.
Keith Fleschner announced that the work on the S2 at Antique Powerland is going slowly and he will be back at it on this weekend.
Jan Zweerts, engineer on the P&W, announced that are now long oil trains coming through Oregon, three to five a week.
Ron McCoy announced to the members who were not at the banquet that the Jack Holst Award recipient of the Year for the Chapter is Steve Hauff.
Al Baker announced the next four programs; June: 4449; July: end of steam in South Africa; August: Railroads in Finland and several other countries, and September: Cascade Crossing (S.P.)
Jean Hickok announced George Hickok’s birthday (tomorrow) and set out a cake.
The meeting was adjourned at 8:00pm.
Jean Hickok presented a very fine snack.
George Hickok gave a very interesting program on the operating equipment that is hidden in the cabinets in the railcars.

Respectfully submitted by Jim Hokinson, Secretary.

George’s Presentation  
(Photo by Trent Stetz)

50 Years ago in the June 1963 Trainmaster....

THIS AND THAT
PRINEVILLE, OREGON-No city tax in Prineville again this coming year thanks to the city railroad. City set a budget of almost $1,000,000 but earnings of the Prineville Railway will cover most of this. The railroad has been the city’s principal income for years. It runs 18 miles to Redmond junction, carrying lumber and crops to the main line
MCCLoud RIVER R. R. OF NO. CALIF. – Saturday June 22nd Pacific Locomotive Assn. and the Bay Area Electric R.R. Assn. and the Bay Area Electric R.R. Assn. are going to enjoy a ride behind steam power, through wondrous scenery with Mt. Shasta in the background. Cost - $12.00 from McCloud to Barney and returning a full 112 miles. Train will consist of the 2-6-2 # 25, some empty log flats, 2 gondolas and a caboose, and will leave McCloud at 10 o’clock a.m. and return around 6:00 p.m. Numerous photostops.
Shakopee, Minn. May 15, 2013
UP launches billboard safety billboard campaign.

Celebrating the 100th anniversary of this world unique bridge, this 60-page book tells the story of Portland's Steel Bridge in text, with dozens of historic and current photos. Available for just $14.99 plus $5.00 shipping or pick up your copy at a membership meeting and save $5!

Order online at: www.pnwc-nrhs.org

Send your check payable to PNWC-NRHS to:
PNWC-NRHS Steel Bridge
800 NW 6th Ave. Rm 1
Portland OR 97209-3794

Questions: steelbridge@pnwc-nrhs.org

The Trainmaster is the official newsletter of the Pacific Northwest Chapter of the National Railway Historical Society. It is published monthly for the benefit of its members. Articles which appear in The Trainmaster do not express the official position of the organization on any subject unless specifically noted as such. Material from The Trainmaster may be reprinted in other publications provided credit is given as to the source, except in cases where the article originated in a third party publication and special permission was given to The Trainmaster to print the article here. Please address contributions and correspondence to:

Attn: The Trainmaster Editor
PNWC-NRHS, Union Station, 800 NW 6th Ave Rm 1
Portland OR 97209-3794
Voice: 503.226.6747 Fax: 503.230.0572
Chapter email: pnwc@pnwc-nrhs.org
Website: http://www.pnwc-nrhs.org
ISSN: 0041-0926

Editor: Trent Stetz 503.643.1494
Circulation: George Hickok 503.649.5762
Mailing/Distribution: Jean Hickok 503.649.5762
George Hickok 503.649.5762
TM Liaison/Reporter: Arlen Sheldrake 503.223.7005

Bill of Lading
First Willamette Order.............................................Page 1
Backstory on FRA 15 Year Inspection.....................Page 2
June Membership Meeting Program........................Page 3
In Remembrance of Randy Rock............................Page 4
PNW Shortlines..............................................Page 5
Medco #4 Fundraising Campaign.........................Page 7
National Train Day 2013..................................Page 8
Jack Holst Award Recipient: Steve Hauff.............Page 8
In the Library and Archives..............................Page 9
Lending Library.............................................Page 9
Chapter Meeting Minutes..................................Page 10
50 Years Ago in the Trainmaster .........................Page 10
UP Billboard.................................................Page 11
Steel Bridge Book Available..............................Page 11
Officers, Committees & Contacts........................Page 11
Calendar....................................................Page 12
Mission Statement..........................................Page 12

Chapter Officers
President Keith Fleschner 503.516.9272
Vice President Mark Reynolds 503.638.7411
Treasurer George Hickok 503.649.5762
Secretary Jim Hokinson 503.635.4826

Chapter Directors-at-Large
Vacant 2013-2015
Ken Vannice 2013-2015 503.244.8732
Ron McCoy 2012-2014 503.310.4811
Christopher Bowers 2012-2014 503.577.0063
Jean Hickok 2011-2013 503.649.5762
Trent Stetz 2011-2013 503.643.1494

Committee Chairs
Activities Ron McCoy 503.310.4811
Archives William Hyde 503.666.5530
Auditor Bob McCoy 360.459.3251
Car Host Mark Reynolds 503.638.7411
Concessions Vacant
Chapter Rep., Oregon Rail Heritage Foundation
Keith Fleschner 503.516.9272
Elections Jim Loomis 503.253.3926
Excursions Jim Long 503.313.7382
Flanger Restoration Ron McCoy 503.310.4811
Library Dave Willworth 360.608.1102
Meeting Programs Al Baker 503.645.9079
Membership Diana Mack 503.723.3345
Rolling Stock George Hickok 503.649.5762
Chief Mech. Officer Keith Fleschner 503.516.9272
Car Rental Agt. Peter Rodabaugh 503.701.7040
Safety Officer Bob Jackson 503.231.4808
S-2 Restoration Keith Fleschner 503.516.9272
Webmasters Jim Long 503.313.7382
Mark Whiston 503.533.7005
**Membership Meetings:** St. Mark’s Lutheran Church, 5415 SE Powell Blvd. 7:30 pm (Guests Most Welcome!)  
Forward program ideas to Al Baker, 503.645.9079 or albaker33@comcast.net

**June 21:** SP 4449’s 15 Year FRA Inspection, Mark Kramer, President, Friends of SP 4449  
**July 19:** End of Steam in South Africa, newly acquired photos by Alfred Mullett  
**August 16:** Railroads in Finland, Russia, Germany and Austria, videos from an October 2012 trip by Ed Immel  
**Sept. 20:** Cascade Crossing, Oakridge to Cascade Summit, TRAINS Ultimate Railroad DVD by Kalmbach, 2008. Late Southern Pacific era coverage.

**NOTABLE NON-CHAPTER EVENTS:**

Now - June 30  *Streetcars Build a City*, Exhibit, Architectural Heritage Center, Portland, www.visitahc.org  
June 12  *Train Robbery*, Eagle Cap Excursion Train, Elgin OR, www.eaglecaptrainrides.com  
June 16  *Father’s Day Special*, Garibaldi – Rockaway, Oregon Coast Scenic Railroad, www.ocsr.net  
June 29  *2nd Annual Double Header (Steam!)*, Oregon Coast Scenic Railroad, www.ocsr.net  
July 4, 5, 6  *Willamette Shore Trolley Grand Opening*, http://www.oerhs.org/wst/  
July 20  *Two Rivers*, Eagle Cap Excursion Train, Elgin OR, www.eaglecaptrainrides.com  
July 27-28  *The Great Oregon Steam-Up* at Antique Powerland, Brooks, OR, 7am to 6pm, www.antiquepowerland.com  
August 3-4  *The Great Oregon Steam-Up* at Antique Powerland, Brooks, OR, 7am to 6pm, www.antiquepowerland.com  
August 16-18  *Snoqualmie Railroad Days*, www.railroaddays.com  
August 31  *Two Rivers*, Eagle Cap Excursion Train, Elgin OR, www.eaglecaptrainrides.com  
August 31-Sept 1  *Affair on Main Street*, North Pend Oreille Valley Lions Club, www.lionstrainrides.com  
Sept 19-22  *Milwaukee Road Historical Association Convention*, Rockford, IL, www.mrha.com  
Oct 5-6  *First Autumn Colors Train Ride*, North Pend Oreille Valley Lions Club, www.lionstrainrides.com  
Oct 5, 12, 19  *Fall Foliage*, Eagle Cap Excursion Train, Elgin OR, www.eaglecaptrainrides.com  

**PNWC – NRHS MISSION**

To preserve and interpret Pacific Northwest railroad history and historical artifacts for the education and enjoyment of current and future generations.