



pacific northwest chapter

# THE TRAINMASTER

FEBRUARY 1983

NUMBER 249

PACIFIC NORTHWEST CHAPTER

NATIONAL RAILWAY HISTORICAL SOCIETY

ROOM 1, UNION STATION PORTLAND, OREGON 97209

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## CHAPTER TIMETABLE OF EVENTS

- Friday February 18 7:30pm The regular monthly meeting of the PACIFIC NORTHWEST Chapter will be held at the Union Pacific Clubhouse at the corner of North Russell and Interstate Avenue.
- The program will be a music, dissolve slide program entitled " In Retrospect-Steam and Rails in the West", by Terry Parker.
- Also "Member's Newsreel" featuring slides of recent happenings in the area. Please remember-no more than six slides by any one person.
- Saturday March 5 All Day The Fifth Annual Railroadiana and Model Railroad Swap Meet will be held at the National Guard Armory on NE 33rd Drive off of Marine Drive. More information on the enclosed flyer with this issue of the TM
- Friday, March 18 7:30pm Regular monthly meeting of the Chapter will be held at the Union Pacific Clubhouse. Program will be a movie feature.
- Friday, April 15 7:30pm The regular monthly meeting of the Chapter will be held at the Union Pacific Clubhouse.
- Saturday and Sunday, May 14&15 The "Cascades/Deschutes Special. A special Amtrak train will depart Portland's Union Station for Bend and return via the Deschutes/Columbia Rivers. A flyer with complete information will be mailed shortly.

MEMBERS ARE REMINDED THAT DUES ARE DUE. ALL PAYMENTS MUST BE RECEIVED BY MARCH 15TH. MEMBERSHIP CHAIRMAN JOHN HOLLOWAY REPORTS THAT RETURNS HAVE BEEN EXCELLENT SO FAR AND ARE AHEAD OF LAST YEAR,

SUMMARY OF MINUTES OF CHAPTER BUSINESS MEETING - January 19, 1983

The meeting was called to order by President Ben Fredericks at 7:10 PM in the Union Pacific clubhouse. A quorum of 35 members was present.

Solarium Sleeper SPMW 7117: President Ben Fredericks reported on the Chapter's attempt to purchase a sleeper to exchange with the Southern Pacific for car 7117. Two ex-UP sleepers have been inspected for possible purchase and exchange but neither car was acceptable. This leaves the Chapter without any possibilities for exchange. The Southern Pacific has given the Chapter three or four months longer to find a suitable car to exchange. The Chapter will go back to the used equipment firm in Houston for other possibilities. Ben asked the membership to advise him of any other suitable cars which may be available.

Spokane, Portland & Seattle Golden Spike Site Marker: Ben Fredericks reported that the marker will be dedicated at 11:30AM on Friday, March 11, 1983. The B.N. public relations department in Seattle has given its permission for the Chapter to organize the dedication ceremony. Walt Grande passed around copies of the wording for the marker. Rachel Immel moved, John Holloway seconded, that the Chapter appropriate the amount needed for the marker sign. Motion passed. President Ben Fredericks appointed John Von Gaertner, Chairman, Roger Phillips and Mary Lou Weaver as a committee to organize the ceremony.

Chapter Computer: Larry Miller reported on the possibilities for a Chapter computer which include Radio Shack, Osborn, Apple II and the IBM personal computer. The Radio Shack and Osborn have limited memory capacity. Ken Keeler suggested looking at the Commodore VIC computer. Rachel Immel suggested checking out what is offered at the computer show early in February before buying. Walt Grande asked if we know whether or not other chapters have computers. The general feeling of the members present was that a bit more checking of possibilities is desirable. Terry Parker moved, seconded by Ken Keeler, to authorize the purchase of a personal computer for the Chapter, brand not specified, with the final decision on a specific computer to be made by the computer committee. Motion passed.

1983 Chapter Budget: Treasurer Larry Miller reviewed the 1983 Chapter budget. Rachel Immel moved, seconded by Ken Armstrong, to adopt the budget as presented. Motion passed.

The meeting was adjourned at 8:00 PM.

Respectfully submitted,

Chuck Storz, Secretary

## AMTRAK ANNOUNCES REGIONAL FARE

Amtrak is now selling a regional "All Aboard America" fare for \$125. The plan allows 30 days for the trip and a stop-over in each direction besides the destination. Return travel may be over an alternate routing. The western region includes all lines west of El Paso, Denver, Albuquerque and Wolf Point, Montana. For example, a passenger could travel to Los Angeles by way of the Coast Starlight and return via the Desert Wind/Pioneer for \$125. The fare can be used in sleeping cars with payment of the appropriate accommodation charges. Two adjoining regions cost \$225 while all three regions are \$299. Fare savings are substantial such as \$147 saved on a Seattle-Los Angeles roundtrip.

\* \* \* \* \*

The article reprinted below from the November 8, 1982 Railway Age should be of interest to members since FMC is located in Portland

# FMC prototypes: Advancing the state of the carbuilding art

*Today's freight-car market is in the doldrums—but tomorrow, FMC believes, will be another story. So FMC is busily designing, building and testing prototypes at its own risk.*

Three theories about the freight-car business appear to be marching along, hand in hand.

First: The market will get better. It may not soon, if ever, reach the frenzied-activity levels of the mid-1960s or of 1979-80, but it will get better.

Second: When it does, freight-car buyers and lessors, railroads and railroad customers, will be demanding more value for the dollar.

And third: Carbuilders who have maintained a healthy level of product-development effort through the lean years will be the builders that buyers and lessors will turn to.

FMC's Marine & Rail Equipment Division is a believer in all three theories—and it has put its money where its beliefs are, designing, building and testing prototype cars at its own risk, with confidence in tomorrow's market and the place FMC can have in that market.

• **New—but strong.** FMC is, of course, a relative newcomer to the carbuilding business, a builder without the long and often glorious history of an ACF or a Pullman Standard. Its plant, down by the water on N.W. Front Avenue in Portland, Ore., used to be the Gunderson Brothers plant, and Gunderson Brothers was best known as a builder of heavy-duty barges. But, the brothers figured that building railcars—which like bargebuilding is a metal-cutting and -bending business—might be a natural adjunct to the barge-construction business. So in 1963 they branched out. They didn't get to be all that big in the railcar market, and there wasn't much

that was fancy about their cars. But Gunderson became known as a builder of rugged, durable, utilitarian equipment. Eventually the Gunderson operations were acquired by Chicago-based FMC Corp.

Oregon is a long way from some of the big railcar markets, so one move that the company made was to begin operating a plant in the East. It was a move that didn't pan out, in large part because the market promptly went into one of its valley periods. Portland once again became the railcar facility for FMC. What has happened since then has been rather dramatic as the Marine & Rail Equipment Division has turned itself into a major producer.

Today, FMC can comfortably turn out 6,000 cars a year, working five days a week with one shift on the production line and two shifts in support operations. It could go to 7,000 cars a year without running into problems.

Today, FMC bills itself as "the custom freight car builder," but it's set up to handle both volume and small-lot orders. The emphasis, as in the old Gunderson days, is on the quality of the car that is rolled out the door.

• **R&D for a full line.** Today, unlike yesterday, when it was known mostly as a builder of plain-vanilla cars (most recently, boxcars for such buyers as Railbox and Ite), FMC is known as a full-line builder. One reason is that FMC has been willing to make the required investments in research and product

development and tooling to expand the product line and to prove the products in prototype form.

Over the past few years, FMC has put out five prototypes for test—six, if you include the modified Ite IMPACK car built for test by Trailer Train. Thus far, it hasn't had a problem with any of these prototype designs.

What has FMC been up to?

—There was FMLX 1776, a 100-ton coal car built with a fabricated draft arm/sill, which FMC engineers figured would be at least as good as a car equipped with a cast sill. FMLX 1776 and a cast-sill car were coupled together and run together for a year and, FMC says, its theory proved out.

—Then there was a 105-ton coal-car design, a tub design with a modified through centersill which resulted in a low, low center of gravity, 70 inches loaded and under 39 inches empty. A utility liked what it saw, and bought a production run.

—Car No. 4669 was a mill-type gondola, 104-ton, which was designed for mill steel and scrap service. It incorporated what FMC regards as a few improvements over the Railgon design, including a car-end that is built "like a Sherman tank," to resist the banging-around that mill-gon car-ends inevitably get. It's a heavy car, but not one which FMC people regard as over-designed, considering the service which such cars see.

—Car No. 45201 is a 4,750-cubic-foot-capacity covered hopper car which FMC de-

scribes as "a modification of what's already out there." It's a Plate B car, something that FMC did not have before. It has one-piece side sheets, something that FMC did not have before. It has a lower center of gravity. With it, FMC tested modifications in the bolster area along with different gates and roof design. This car has been through about 50,000 miles and one inspection on Santa Fe thus far, and there have been no complaints.

Then, there is FMLX 7500, a 7,500-cubic-foot-capacity boxcar designed for light-density lading. This is a prototype built in response to expressions of interest from Burlington Northern and a number of paper companies, companies that found it impossible to meet weight minimums in standard boxcars for loading of bulky but lightweight paper products. It's a car that could find use in other industries with similar problems, with products that bulk-out long before they weigh-out. Cereal manufacturers are interested, and so are producers of insulating materials. Thus far, the car has been in service hauling products of Georgia-Pacific, but plans are being made for it to go for a test to a large producer of fiberglass insulation. In the meantime, FMLX 7500 has been running on at least three major western roads, one of which has already put in an inquiry for purchase.

A sixth prototype might be considered to be the five-platform intermodal car built for IteI as part of Trailer Train's test program. It is—and it isn't.

The IMPACK car, originally designed and built by Santa Fe, isn't new. What is new is the five-unit configuration, plus changes that Trailer Train specified, plus use of certain aluminum components to keep the average platform weight under 25,000 pounds.

• **Thinking things out.** As it happens, IMPACK is one of two examples of how FMC is reacting to car-design demand, in which FMC is not going with the herd. The covered-hopper prototype is the other.

W.R. Galbraith, division vice president-sales, notes that on occasion FMC did in fact consider designing its own intermodal car—just as about every other full-line carbuilder has done. But, Bill Galbraith says, FMC didn't want to come up with what would be just another "me-too" car, so it took a different route.

For FMC, this meant hooking up with a familiar customer—IteI, which had brought the patent rights to the Santa Fe Ten-Pack from the individuals at Santa Fe who held them.

FMC does not have an exclusive agreement with IteI to build IMPACK. Each acquisition by IteI is a new deal. But FMC has built all of the IMPACK cars produced thus far—two 10-platform cars which have been thoroughly tested by Burlington Northern and the five-platform car for Trailer Train. And FMC will build the IMPACK platforms, some of four units and some of eight, ordered by Southern Pacific for delivery beginning before the end of the year.

So far as FMC is concerned, there has been no clear-cut decision yet as to what type of intermodal car will be needed. But, Galbraith says, the IteI IMPACK design appears to be out in front, with the Santa Fe cars having run up millions of miles in revenue service. What the Trailer Train prototype offers is the capability for handling longer trailers, units up to 50 feet in length or up to 48 feet with nose-mounted refrigeration units.

As for the covered-hopper situation, FMC also looked at the possibility of getting into the design competition after specifications were decided upon for what would be the "high-performance" covered hopper car.

FMC decided not to get into the running, one reason being that the railroad that has been its principal customer for covered hopper cars was making no real demands for design improvement, except for a desire to get cars with a lower center of gravity. The prototype which FMC now has out running did this, dropping the loaded center of gravity to 96.1 inches.

At this point, the high-performance covered-hopper design sweepstakes, officially, has just four carbuilders who have evidenced interest. It also has just one actual car to be put to the test, a Thrall-built which was shipped to the Test Center at Pueblo Oct. 26 to be put through its paces.

• **Support: it's there.** Meanwhile, how is FMC faring? It's not going to build 6,000 cars this year—nothing close to that—although activity is picking up, with the order from IteI for the 200 Southern Pacific IMPACK cars. And, FMC people will say, they're taking a barb or two from headquarters and from other divisions that may be faring better in the recession. But, people in Portland also note, there have been the good times, the times when the division's contribution has been significant. As Bill Galbraith puts it, there is recognition that in the railroad freight-car business, there is no way that anybody can go out and create a market. "What we do is to go out and fight for orders when we see need,

when we see demand—and what we also do is to try to make sure that we have the proved designs that will meet the needs and the demands."

This is a philosophy that goes back a while, some of it to the Gunderson days. It goes to the mold loft.

Mold loft? That's a shipbuilding term. But for FMC's Marine and Rail Equipment Division, it's also a railcar term. It's a way of doing things, doing things right the first time.

To those who aren't familiar with the large-building or shipbuilding business, the construction process might seem to be pretty simple. It isn't. Plates have to be cut and shaped to exact dimensions. All welds, not just some, are inspected.

What a mold loft is is a large enclosed wood-floored room in which the lines of a vessel are laid out and exact molds or templates are made. Computers do a lot of the work today, but the initial fit-up work still can be done in the loft, the pattern-shop, and it still is.

The result is that when steel is delivered to the line for construction of a car, it fits. There's no delay, even on a prototype, in which production employees stand around while the engineers figure out adjustments and order cuts to fit.

FMC people put it simply: The mold-loft kind of approach, coupled with computer technology and the extremely-accurate and fast cuts that can be made with a plasma-arc burning torch and FMC's other numerically-controlled burning machine, makes a better car.

• **"We can be the best."** What FMC preaches to its own people is the quality sermon. As Bill Galbraith puts it, FMC will not often be the lowest-price carbuilder—"but we can be the best."

What this means is that when FMC puts a car out, "We've been there before. We know what we're doing and the people in the plant know what they're doing."

In Galbraith's words, "We can prove a design, through what we do with our prototype. We can show results, being honest about our successes and our failures, and sometimes things do look better on paper than they do in the shop."

FMC, he says, has saved itself a lot of dollars—and has saved customers as well—through the use of marine techniques which can have a cross-over into railcar manufacturing.

"We go into every developmental effort hoping that it's going to be beneficial to us in some way," Galbraith says, "and there's always fallout value, even if a specific project doesn't work out. One thing we want to be able to tell the customer is that we're not experimenting with his order. We want to be able to tell him that we know—that we've been there before." ■

RIO GRANDE ZEPHYR CALLS IT QUILTS

The Denver and Rio Grande Western's Rio Grande Zephyr will be making its last trip between Denver and Salt Lake City April 23 and 24th. The following day the operation will be taken over by Amtrak and will be equipped with Superliners. At this time we do not have more information since it had just been announced that the trains were going to make their last runs. The "Rio Grande Zephyr" is the last non-Amtrak intercity passenger train left in the United States. It is supposed that the present steam-equipped train will be taken out of service and replaced by Superliners. People wishing to ride the line should make reservations as soon as possible since "last trips" will be made by many. The train operates from Denver on Saturday, Mondays and Thursdays and eastbound from Salt Lake City on Sundays, Tuesdays and Fridays. It is not recommended to try to make the close connections between the Pioneer and the Zephyr at Ogden but if the odds are with a person it can be made. The one-way fare between Denver and Salt Lake is \$81.35 with special family fare rates. The special Amtrak fare offered on page 3 is not good on the Zephyr but can be used to get to or from Denver.

VIDEO VISION

Shortly after Ed Immel's letter appeared in the September issue of Railfan (page 4), the Chapter became the recipient of two video tapes from Youngsound Productions. We want to thank Youngsound for the addition to the Chapter's library and also the opportunity to review their offerings.

The two tapes received were (1) Railfair Sacramento '81 and (2) 4449-On the Rails Again. The Railfair piece is probably Youngsound first effort at putting a video story together. It includes a female reporter doing standups in front of engines, railfan interviews, shots of 4449 and 8444/3985 coming to Sacramento and various engines moving over museum property. For those of us who saw Railfair, this tape appears to have been quickly put together and does not include all the engines nor does it tell the sad story. However, because of the quality VCR's give viewers today, if you did not attend Railfair you have an opportunity to see some of the equipment that graced Sacramento.

Youngsound really improved production quality 100% when "4449-On the Rails Again" was made even though Railfair and this one were made concurrently. The tape begins with a longshot near Burbank Junction after the 4449 left Railfair on the way to Los Angeles. The stability of the camera and sound quality made the massive GS-4 almost jump through the TV screen. Return shots up the coast are also seen including a Gaviota meet with Amtrak's #11, a horseshoe curve and the Salinas Valley. The program proceeds with shots of the Chapter's excursion out of Oakland, including shots along the Bay, Davis, Sacramento Valley, the Redding trestle, a freight meet near Dunsmuir and a cab ride from Grass Lake (watch Doyle drive!) to the photo run-by near Mt. Shasta. This is a must tape for anyone and hopefully, future material from Youngsound will be a sharply produced.

Youngsound Production. 7625 Hihn Road Ben Lomond, CA 95005

Ben Fredericks

UNION PACIFIC HELPS CHICAGO COMMUTERS

No, the Union Pacific is not operating commuter trains out of Chicago but they are making their lot a bit easier.

Chapter members may have noticed during the summer and fall months some Union Pacific trains heading up the Columbia River Gorge with what appeared to be orange worms on some cars in front of the train. These orange worms were really new electric interurban cars for the Northern Indiana Commuter Transportation District. The shells and trucks of the cars were built in Japan and then moved to Cleveland for final assembly by General Electric. When finished the cars were put in service on the Chicago, South Shore and South Bend Railroad.

The movement of the body shells from Japan to Cleveland presented some unique problems for the manufacturer, Nippon Sharyo Seizo Kaisha Limited; for their trading partner, Sumitomo Corporation and for the American President Lines, the trans-Pacific shipper which agreed to move the shells the entire distance under a single bill of lading.

The shells arrived at the Port of Tacoma wrapped in heavy plastic and canvas coverings. On the ocean crossing they were secured to pedestal mounts on the open deck. Once they arrived in Tacoma they were secured to one of 25 flush, steel-decked, 89 foot flatcars the Union Pacific had on hand. The pedestal mountings used on the ocean voyage were bolted directly to the flatcars. It was determined that 12, high tensile bolts, seven-eighths of an inch thick were sufficient to hold the loads all the way to Cleveland.

The first five shells arrived in Tacoma the APL ship President Cleveland on May 5, 1982. The first car was unloaded at 9:00am and the fifth one had been secured on the flatcars and released for shipment by 4:30pm. The cars arrived in Cleveland by way of the Union Pacific and the Norfolk & Western on May 13th. On May 27th six more of the shells were unloaded at Tacoma for further movement to Cleveland. The shipments will continue through the early part of 1983.

Each of the first two moves of car shells was accompanied by two two containers of skirts and sensitive electronic controls for later installation. The containers traveled in different trains than the shells with 21 other APL containers in regular intermodal service to Cleveland.

From UP Info

PORT OF TILLAMOOK BAY

Motorists traveling near Rockaway, Oregon some weekdays might see a SD9 lettered for the Southern Pacific. It may look like an SP train but it is really the Port of Tillamook Bay train to or from Batterson. Starting from the middle of January POTB crews have been handling all the switching not only on their own industrial park at the old Tillamook Blimp Base but also for the SP in Tillamook itself along with taking the trains to Batterson for exchange with SP trains that originated in Hillsboro.

PORTLAND'S FIFTH ANNUAL

# RAILROADIANA & MODEL RAILROAD SWAP MEET

ADMISSION \$1.25

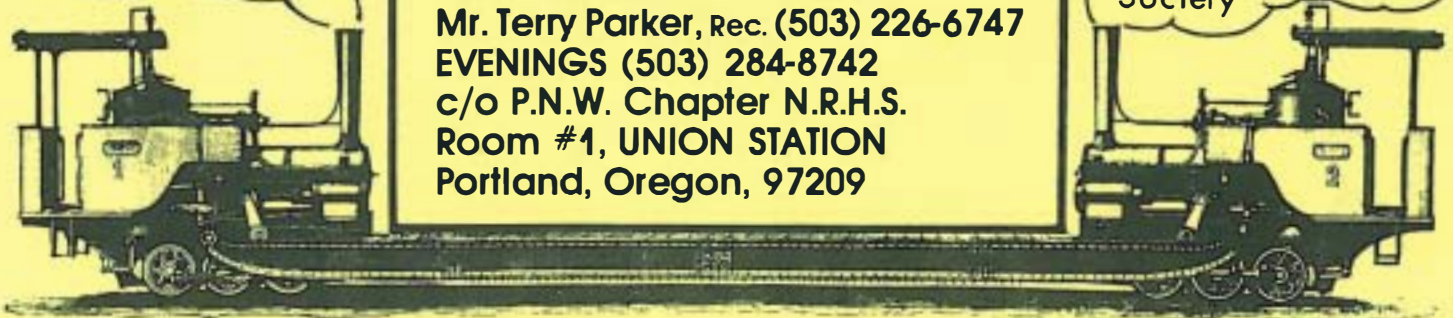
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Etching from Early American Locomotives  
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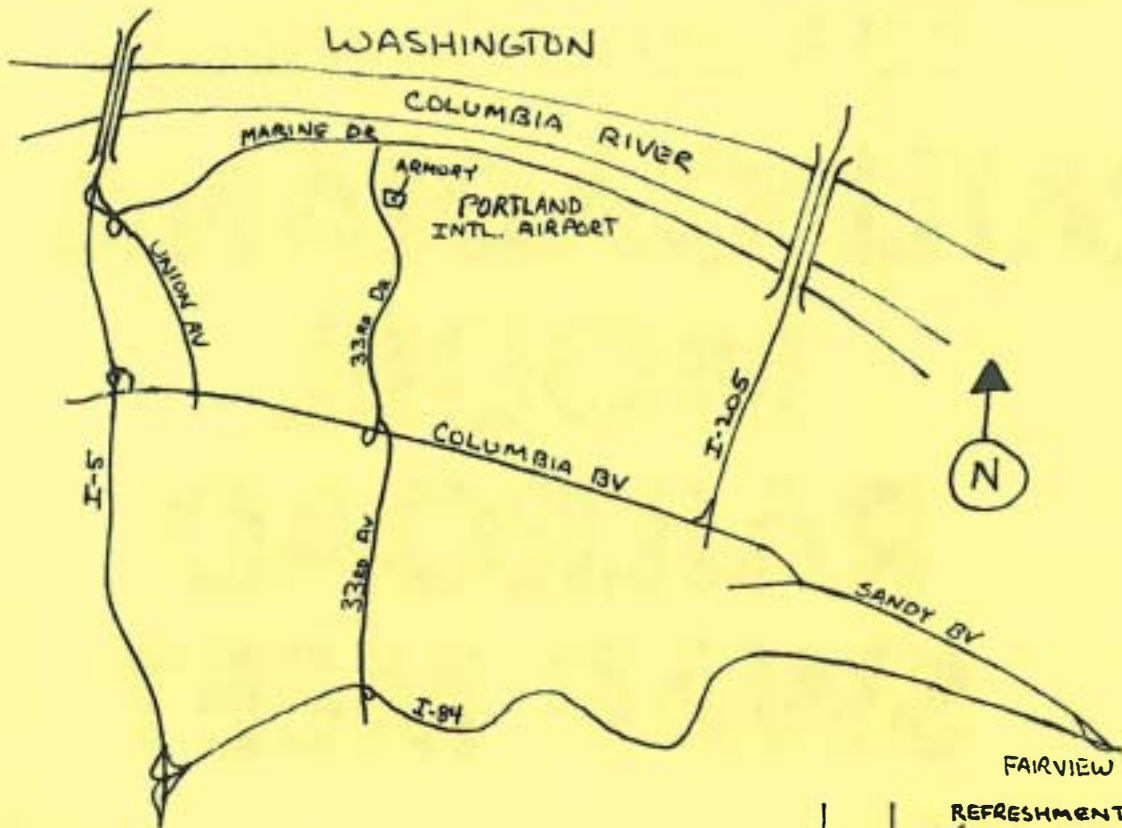
This remarkable double locomotive was the product of Charles Brown and featured a lever drive. It was built in 1878 at Brown's Winterthur factory for the narrow-gauge Villa Real and Villa Regoa tramway in Portugal. (Recent Locomotives, Fig. 175)

## SATURDAY, MARCH 5, 1983

Sellers: 8 am - 4 pm

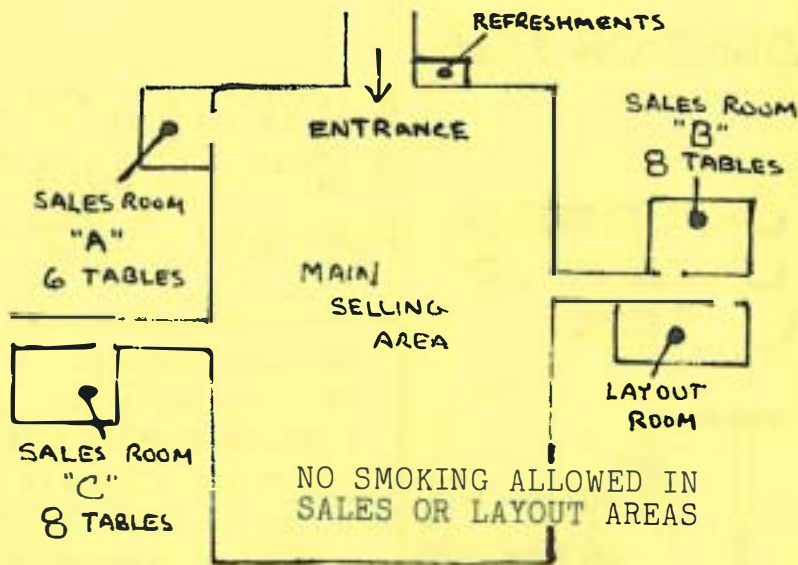
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Membership in the National Railway Historical Society and the Pacific Northwest Chapter is open to all persons 16 years of age and over who are interested in railroads and railroad history. Dues for the Pacific Northwest Chapter are \$16.50 a year. Membership includes six issues of the NRHS Bulletin (national publication) and nine issues of the Pacific Northwest Chapter's publication The Trainmaster. The Pacific Northwest Chapter meets on the third Friday of the month except during July, August and December. Meeting location and time are given in the monthly issues of The Trainmaster. Write to the Pacific Northwest Chapter at the address at the top of this page for an application or for more detailed information.

Feb 1983

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