

The Call Letter

of the Northwest Vintage Radio Society
Portland, Oregon

Vol. 19

January, 1993

No. 1

This Month:

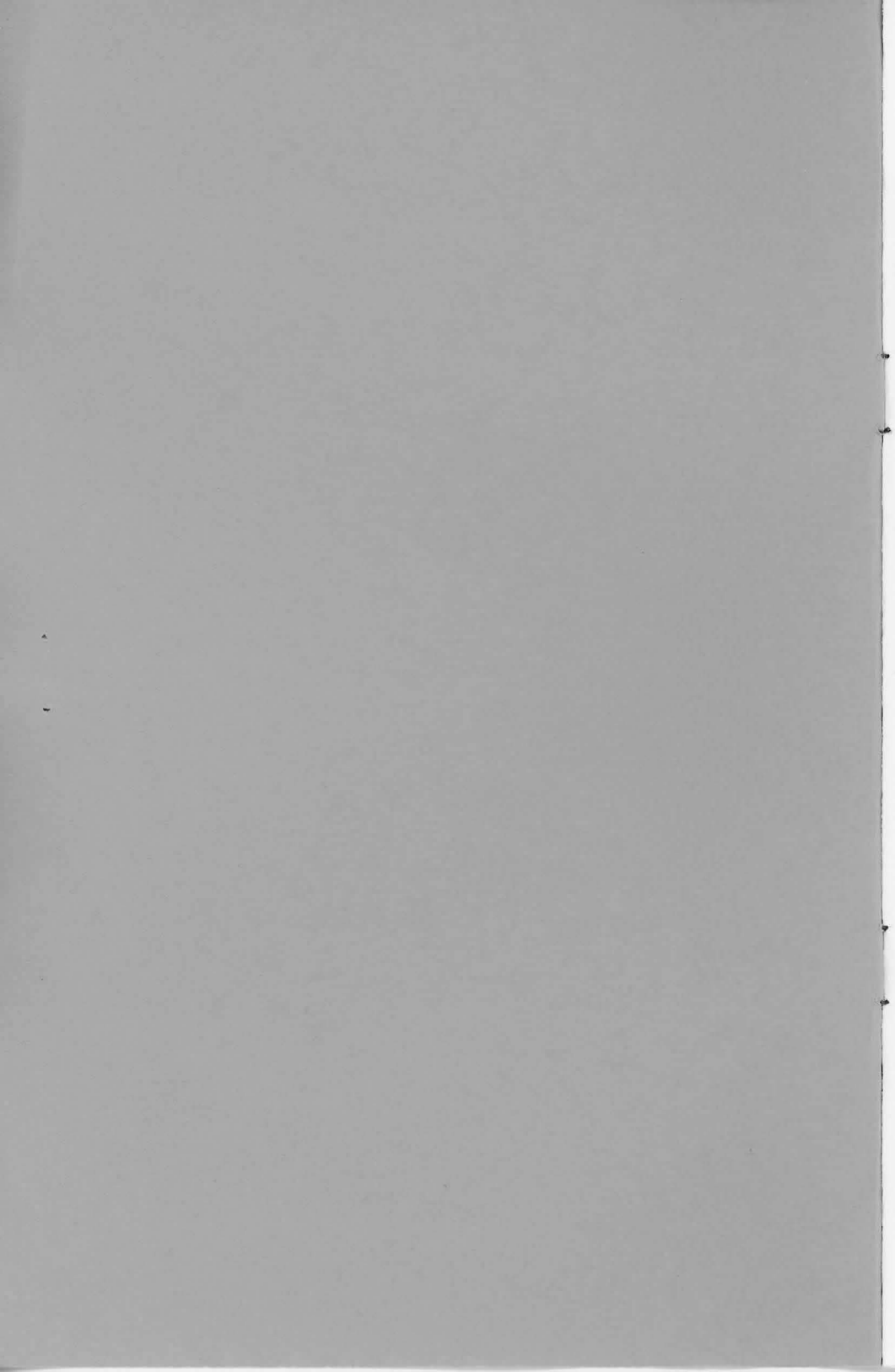
- January 9th Meeting at the NVRS Museum
- Feature Story by David Rutland
- Dues Are DUE !!

Next Month:

- The Return of the "Hunkerdyne"
Call Letter Art Comes Alive
- Meeting on February 13th at the NVRS Museum
- History From Tex Sloat

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Meeting Minutes

Membership meeting of the Northwest Vintage Radio Society

The December meeting was called to order at 2:10 PM on December 19th, 1992 by President Speed Feldshau. There were 26 members and guests present.

Old Business:

Last month's minutes were approved as published in the Call Letter. Ed Charman gave the Treasurer's report. The Call Letter costs \$55.48 to publish last month. The Society received \$55.00 from dues, recovered \$50 from coffee Mug sales, returned \$192.95 from the resale of books, and returned \$35 from the coffee fund. The society paid \$349 for building rental on the next two swap meets, plus a \$25 registration fee, and a \$150 refundable cleaning fee. The report was accepted as presented. Dues for 1993 are due!

Books were still available to be purchased at this meeting.

Two swap meets for 1993 will be heavily promoted. The first one will be on May 8th, 1993. Old phonographs will be included. There will be a dual scale for table fees: Members will pay \$5 per table, non-members will pay \$10. There is also a discussion about a \$2 per person admission fee. The second swap meet will be in

September.

Ed Charman reported that the Society will purchase liability insurance for 1993. The carrier will be Ohio Casualty, and the premiums will be approximately \$250 per year.

Dick Karman reported that the constitutional changes of a few years back negated the need for a member to be "voted in." He also stated that there is a need for a current copy of the constitution to be reprinted and distributed to all members.

Frank Rasada reported that museum remodeling was going well thanks to Dick Dielschneider. The next step is to move the heating plant to the basement. Volunteers will be needed for the task. New lights have been installed in the main floor meeting room, but the first floor bathroom is yet to be completed.

New Business

Frank Rasada reported that the society should care for the trash after meetings, in that the museum does not have garbage pickup. President Speed Feldshau volunteered to be responsible for the trash after it is collected.

The election of officers for 1993 was held. Results: President, Speed Feldshau; Vice President, Gordon Phillips; Treasurer, Ed Charman; and Secretary, Joel Camicia. Member at large will remain Dick Karman, due to the past president serving a second term.

The idea of giving a door prize for certain meetings was discussed. The President shall pursue it further.

Leads & Needs

There was no report of Good and Welfare.

Mike Parker has a huge 1942 Zenith Phono/radio chairside combination for sale.

A woman contacted the society and has some radio program transcription for sale. Her phone number was given to Rudy **** to follow up on.

The meeting was adjourned at 2:45 PM. A Christmas dinner/party followed.

Submitted by

Art Redman, NVRS Secretary.

Portland's Early Radio Club

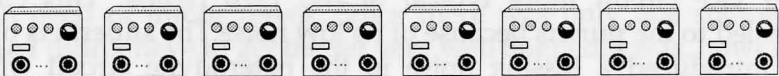
By Jim Mason

This is a brief history of the formation Portland's Earliest Radio Club, circa 1925.

In December 1925, Sid Goodwin, radio editor of the *Portland Telegram*, suggested formation of an organization of radio listeners in the area to pursue locating and eliminating the problem of local interference. Three weeks later he reported very little interest in the project. Hallock and Watson also promoted the formation of a listeners club over station KFJR. Early in March 1926, a committee was appointed by the Oregon Radio Trades Association which scheduled meetings to elect officers and a board of directors; to adopt a constitution and by-laws; and to begin a membership drive. The club was open to all listeners in the greater Portland area.

The primary purpose of a small dues assessment was to hire trouble shooters to locate and help eliminate (and if necessary pursue legal action against) sources of problems such as power lines, "outlaw amateurs," violet ray and other medical devices, and other sources not yet identified. One of the major source of interference was the Federal telegraph spark station KEK, located east of Hillsboro. This operated on 706 meters with a power of 5 Kw, making it impossible to tune out as far west as Tillamook, and south and east to Yamhill and East Multnomah counties.

We will pursue more about this predecessor to our Society in future editions of the Call Letter.



Hi Fidelity Circa 1945

by David Rutland

Toward the end of World War II I was working on a secret war project in Pasadena, California, as an electronics engineer. During my college days I had become interested in hi-fidelity sound equipment as a hobby and had built my own amplifiers and two and three way loud speakers. This is the story of how enthusiasts like myself obtained high quality music programs to play on our "Hi-Fi's".

Most of us that collect old radios enjoy the "tone" of great consoles of the '30's and it is still amazing to me that they were able to produce such good quality using the AM broadcasting system and the simple vacuum tube amplifiers. But we all must agree that there is a vast difference of quality between those radios and the modern stereos and CD players. This difference is, of course, due in large part to the increased range of audio frequencies that modern systems can reproduce.

AM Broadcast

The AM broadcast system, which has served in its basic form for so many decades, was designed to transmit audio over the range from about 100 to 5000 Hz while a good stereo is expected to reproduce from 20 to 20,000 Hz. It's the nature of AM broadcast that a station takes twice as much room (or bandwidth) on the dial as the highest audio frequency that it transmits. So AM stations were placed as close together on the dial as 10 KHz (10,000 Hz) which meant that if one wanted to receive high audio frequencies to increase the fidelity of your system you would most likely get a 10,000 Hz beat note from a neighboring station. This sounds like a very high pitched squeal which, to say the least, is not at all conducive to high fidelity listening.

A well known supplier of radio frequency coils for us hobbyists in those days was the Miller Company. They made a kit for a high fidelity AM broadcast receiver which used the old fashioned (in 1940) TRF circuit more typical of the 1920 radios. This circuit appealed to the purists because of its low noise. The superhets of the day introduced a hissing noise in the heterodyne circuit which,

when you tried to obtain a wider frequency response became quite noticeable.

However, the reason that I mention the Miller tuner is that I remember the 10 Khz filter that you could switch on to eliminate the squeal from the adjacent station. I built myself a tuner using an alternate way to get hi-fi AM sound. In order to reduce the hiss I used a very low noise superhet circuit with a variable bandwidth feature. Thus I could increase the band width until I heard the 10 KHz squeal and then back off a little until it was gone. Powerful local stations could be received on a wider bandwidth than those farther away.

Collectors of communication receivers might be interested to know that my variable bandwidth tuner used IF transformers from Hammurland's Super Pro. I still have this vacuum tube tuner and it still works!

Early FM Reception

Of course the great early radio engineer, Armstrong, had the solution for the noise and bandwidth problem -- Frequency Modulation or FM. What a long time it was before it was recognized as a far superior system for accurate sound reproduction.

By the beginning of World War II the FCC (Federal Communications Commission) had authorized FM transmission as we know it now but without the stereo. Commercial stations were licensed to broadcast on a band around 50 to 60 MegaHertz, about one half of today's band (88 to 108 MHz). Back East several stations were on the air, including, I believe, those of Armstrong and Westinghouse. Everything in broadcast radio, including the early 441 line television, came to a halt with Pearl Harbor. In Los Angeles only one FM station was on the air, KHJ-FM. A Mutual Broadcasting network affiliate, KHJ was owned by Don Lee, an automobile dealer. They were always thought of as ahead of their times and Don Lee had the FM station on top of Mount Hollywood, the high peak right above Hollywood.

Now here was the possibility for me to get real hi-fidelity and so I looked for an FM tuner. They weren't building them during the war so in 1945 I had to settle for an old chassis without a front panel and in need of minor repair. Since there was only one station to receive I didn't have to get the set very well aligned. I was, however,

to find a test oscillator at work to align the IF section which, in those days required delicate adjustment to provide the proper wide bandwidth.

Since I was in Pasadena not directly in sight of Mt. Hollywood I couldn't just use a short piece of wire for an antenna. I therefore got a 6 meter directional amateur radio antenna and installed it on the roof.

Now I was ready to really hear some good music over my home-built three-way speaker. Or perhaps it was my studio Altec speaker with multi-cellular horn and 15 inch woofer? But I was in for a little disappointment at first.

The problem lay with the program material available to broadcasters in those days. Of course for the general public there were the scratchy shellac records made to stand up to the eight ounce (that's right, one-half a pound not 8 grams) pickups or tone arms. I remember my first "four ounce" and by 1945 the studios were using one ounce (30 gram) pickups.

But the studios didn't always play shellac records, they had vinyl pressings. Many of these were 16 inches in diameter. They had the same size grooves as the 78's but ran at 33 1/3 RPM so that you could put 15 minutes of program on each side, adding up to the length of the old radio shows, one-half an hour for both sides. When visiting Camp Irwin in the desert north of LA on business many of us, electronic engineers and some hams, visited the camp broadcasting station. Every military camp had its own station which broadcast through the ac power lines. Most of the time they played these 16 inch "transcriptions" as they were called which were distributed by the Armed Forces Radio Service. All the old programs were on these large vinyl records and I was able to scrounge a few to take home. Of course I had to build a 16 inch turntable to play them, but that's another story.

But these didn't have the fidelity I would have liked. Part of the problem lay in the telephone lines used to transmit radio across the nation. Ordinary telephone lines generally do not have a frequency response above 3000 Hz. But the Bell people put two of these lines together to provide about twice the bandwidth and leased these lines to all the networks. The bandwidth was satisfactory for AM radio but fell far short of the capabilities of FM. Unfortunately for

me most of the big bands were playing in New York and Chicago and by the time they were transmitted to KHJ they sounded pretty bad, at least to a Hi-Fi fan like me.

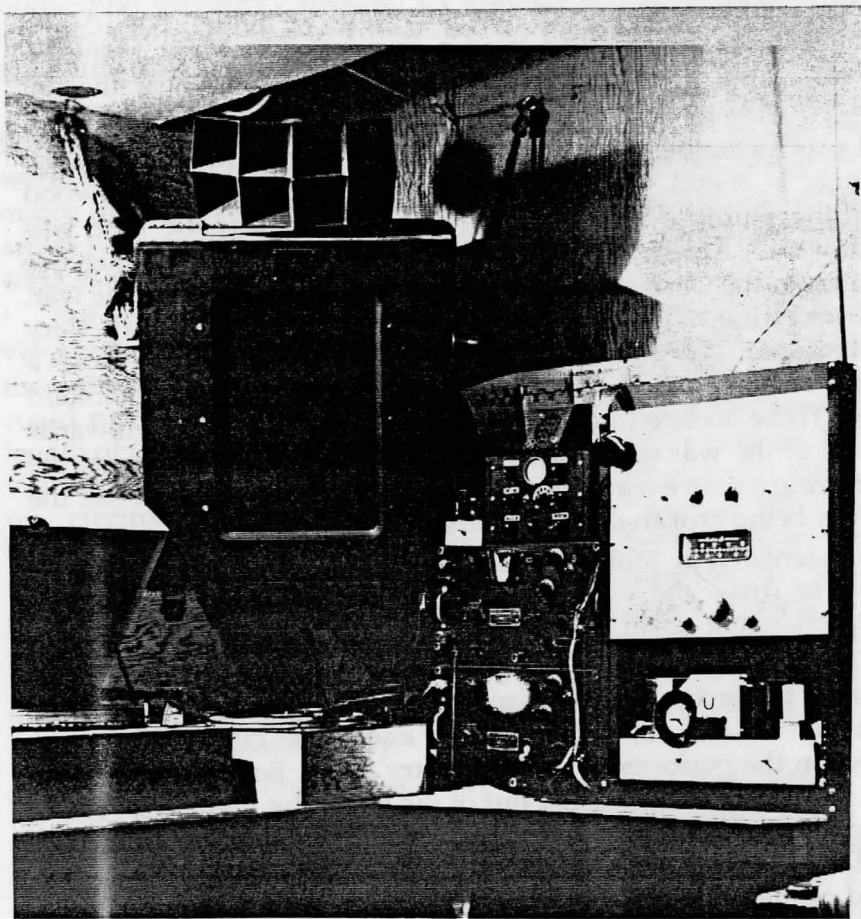
But I was in luck. Once a week Don Lee put on a live music program from their studios in Hollywood that went by RF link direct to their transmitter. This program played popular and semi-classical music and used a format that satirized classical music concerts. They called it Music Depreciation and had a very funny host. But the music was great, the orchestra was first class, and famous people were guests like Les Paul on guitar and Andre Previn on the piano (he's now a famous symphony orchestra director). And, don't forget my friends and I could hear the full audio range as good as today's CD's. Well almost as good!

I was fortunate to have another source of high fidelity material through a friend who had connections with the Hollywood recording studios. You must remember that magnetic tape was unknown in America in 1945 except perhaps to our intelligence services for the Germans had magnetic recorders all during the war. So all recording was done "direct to disc" as they used to say. Very sophisticated recording machines or "lathes" were used to move a cutting head across the spinning disc with a V-shaped diamond cutter. These acetate discs had an aluminum base, except towards the end of the war when glass was used instead of aluminum, the latter being a scarce war material. I still have some glass records, the majority being broken over the years.

Incidentally, it took an amplifier with 100 watts or more of power to drive the cutting heads. This was supplied by large amplifiers using small transmitting tubes such as the 807. Studio control rooms were filled with racks full of these monsters.

Since the recordings were made from the performers direct to disc there was no way one could edit and if the "cut" wasn't up to perfection the performers just had to try again. So now and then I got a rejected disc bootlegged out of the studio by my friend. These records had very little scratch noise, specially when they were new, and I built special turntables with low rumble (the bane of the record changer) to play them. In this way I was able to have music in my room with the fidelity of the LP's of the '60's while everyone else had to be content with scratchy shellacs.

This photo shows the corner of my room with the Altec speaker, the 16 inch turntable on the left, and on the right a rack with amplifier, hi-fi AM tuner, and panel-less FM tuner below. In between are two BC-342 surplus receivers with an oscilloscope on top.



Acquisitions

Jim Mason

1923 National Airphone Monodyne

Early '30s Norco Model 4 Cathedral

1933 Mende Volksempfänger ("German's People" radio)

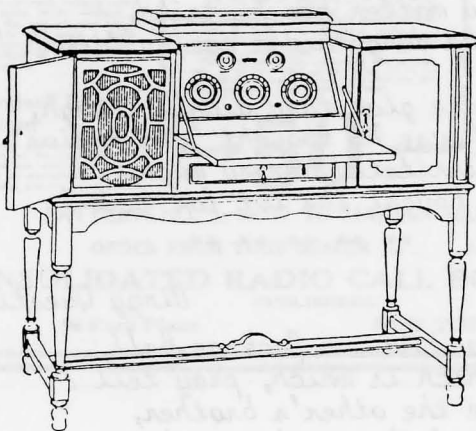
1936 Zenith Model 55-119

1948 Zenith Model 7H820 AM-FM

"Other Organizations"

The Puget Sound Antique Radio Association meets every 3rd Sunday in Seattle. Their next schedule event will be a radio auction in March. There is routine buying and selling at every meeting. For more information the Association president is Jerry Brandon (206) 854-4234.

The Alberta Vintage Radio Society is a new Canadian Based sister organization in Edmonton Alberta. They will meet routinely, and will publish a quarterly call "*Radio Waves*." We will hear more about them in future issues of the Call Letter. Their founder and current contact is Nap Pepin, P.O. Box 43012, Metropolitan Place Post Office, Edmonton, Alberta Canada, T5J 4M8.





ATMOSPHERICA

By J

The Radiophobic Autobuff

There was a man in Portland Town
Who dearly loved the past.
He owned a Briscoe and a Dart--
Antique autos, they were classed.

He polished up the shiny hoods,
He fixed every faulty part,
He drove 'round and 'round the town
To show off his work of art!

He bought a bunch of radios,
Made fifty years or more ago.
He "gussied" up the cabinets,
And made the escutcheons glow.

Then rounding up a power source,
He tried to make them perk;
But no matter how he tried,
The dang things wouldn't work!

I'm sure glad they didn't though,
'Cause he thought "old radios" stunk;
They irritated him so much,
I bought the lot for junk!

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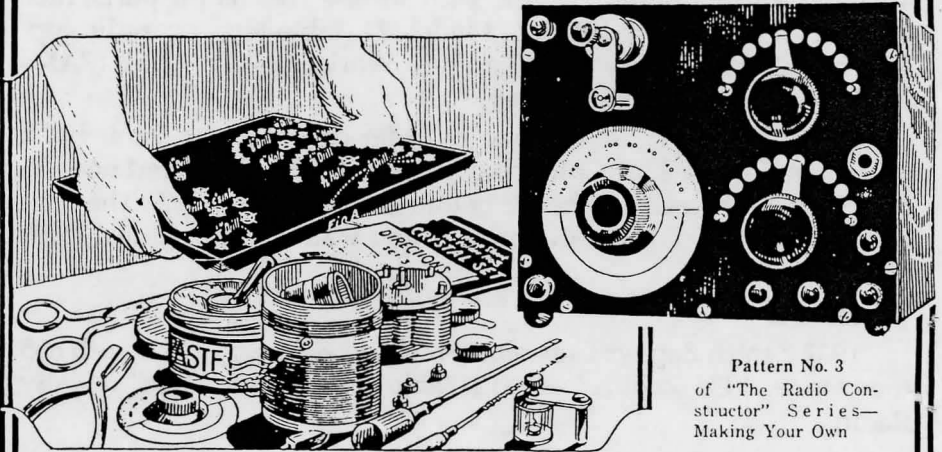
Dingy Question.

Mission, Ma, or Jackson Bell,
Which is which, pray tell?
Is one the other's brother,
Or his father or his mother,
Or are they unrelated, well?

your hands can make a

RADIO PHONE CRYSTAL SET

—at a fraction of what one would cost made up!



Pattern No. 3
of "The Radio Constructor" Series—
Making Your Own

Our Complete Instructions and Blue Prints Are Designed For Those Without Technical Knowledge

No Machine Shop or Heavy Tools

You can build this splendid, reliable radio phone crystal set quite easily without a machine shop, or the use of any heavy tools. These patterns will make a handsome looking instrument with all the improvements to be found in the expensive, ready-made apparatus.

Only Standard Parts Used

One of the foremost radio engineers has constructed this set for us, especially for the amateur, and he has used only standard parts that may be procured from any supply house, and that are lowest in price.

As Simple to Make as to Read

All the fun of building your own without any of the hardship. In this set of patterns we do not merely give you pictures of how the apparatus looks, — mere diagrams, but each and every pattern supplied is full size.

This does away with all fussy and calculating, as we have done all the testing out in our own shop, and you need not worry that the final instrument does not come out right.

Every Pattern is Full- Size

Take for instance the pattern for the panel. It is printed on heavy blue-print paper exactly the size of the panel to be used. The position of the holes and other markings are exact, so that all you have to do is to paste the pattern on top of your bakelite panel by means of ordinary library paste, and when dry drill right through the pattern wherever the marks are located.

Pattern No. 3

Complete radio phone crystal set, which when completed and hooked to aerial, phone and ground, is ready for action. You receive a Page Page illustrated Instruction Pamphlet. Size 8 1/2 x 11 1/2 inches. One Blue Print Pattern, plus 1000 instructions. Contained in a Heavy Two Color Printed Bookcase, 9 1/2 x 12 inches.

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SWAP SHOP

For sale

Halicrafter Model S20R receiver (\$85.00), Citizen B & W LC-TV backlight Model 08TA "pocket TV" (\$60). Scott MacGregor (503) 661-1294

Freshman Earl Spindle Leg Console, Cabinet needs work, chassis complete as is. (\$75.00), Stewart Warner "950 Series" 4-legged, sliding doors, console with second chassis for parts, nice original finish (\$125), Philco Model 21 table-top, or radio-top, speaker (\$45 or trade). Dick Karman, Work (503) 796-3153 (7AM-3PM Monday through Thursday).

LAST CALL - those wanting to order copies of the Bunis book on radios Edition 2, or *Collecting Novelty Radios* by Breed need to call Scott Macgregor at home before January 9th, 1993. The first order has been sold out! Call now if you want this good deal (503) 661-1294.

Wanted

1937 Zenith Zephyr Console 10-S-157 or 6-S-157; 1935 Zenith 835 tombstone, 1935 Zenith 5-R- 312 Table Set, "money talks" novelty Radio.