Publisher, Jim Cranshaw

214-286-1673

1922

old loop sto

What is a loop antenna? Will a coil antenna work if it is inside a house?

Second-class postage paid at Dallas, Texas

THE NEWSPAPER FOR THE HOBBYIST OF VINTAGE ELECTRONICS AND SOUND

THE HORN SP

How does a radio compass work?

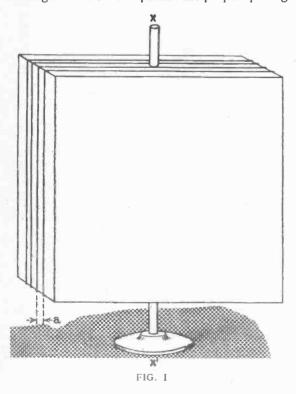
14.5

How many turns should be in a loop antenna to receive from a broadcasting station on 360 meters?

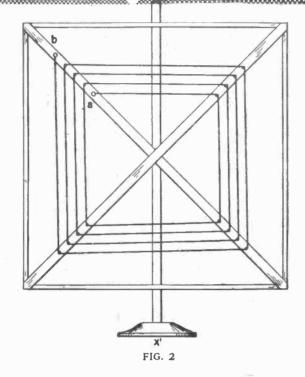
Loop or Coil Antenna

THE names loop antenna and coil antenna are used to designate the same

kind of an antenna. This antenna is mainly used in the reception of radio waves. It consists of a boxlike frame upon which is wound turns of wire. The frames may be of different sizes, but the usual sizes are 4, 6, or 8 feet square. They should be made so that they can be rotated around an axis, such as X-X¹ in figures 1, 2 and 3. Figures 1 and 2 show two different ways of winding the wire on the frame. In Figure 1 the wire has been wound on the outside of the frame. In Figure 2, the wire has been wound on the frame. Thus the wire lies in the same vertical plane. The distance between the turns of wire is called the spacing. This is represented at a in Figure 1. Figure 3 shows a good method of constructing the frame work for a loop antenna. The diagonal pieces aa^1 and bb^1 should be made wide enough at the ends to permit the proper spacing



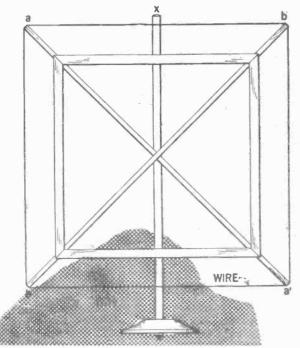
of the wire. The figures are not drawn to scale so that they cannot be used as working drawings. Figure 2 for instance shows turns of wire near the centre of the frame. In reality



Postal Indentification Statement, page 2

the turns of wire are placed toward the outer edge of the frame. In general it will be found that a coil antenna such as shown in Figure 1 is the most satisfactory kind to use. In constructing the antenna, as little metal, as possible, should be used.

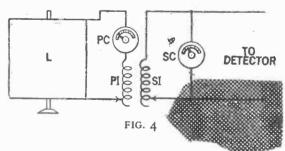
The antenna may be hooked up to the receiving set in a number of different ways. If it is desired to use a "tuner," the ends of the wire may be connected directly to the terminals to which the ground and the antenna lead-in wire would be connected if an ordinary type of antenna were used. This hook-up is shown in Figure 4. PC and Pl represent the primary



condenser and inductance of the tuner, and SC and SI represent the secondary condenser and inductance. L represents the coil antenna. It is to be noted that no ground connection is necessary.

Although a tuner may be used, none is necessary, for the selectivity is sufficiently sharp to cut out all ordinary interference. The method of connection in this case is shown in Figure 5. There is a variable condenser shunted across the loop and leads from each side of this condenser go to the detector. No inductance is needed, as this is furnished by the loop. Again no ground connection is made. This method of connection allows much fainter signals to be picked up than the first method. This is because the energy lost in the tuner in the first method is saved by the second method. One advantage of the first method, however, lies in the fact that, with the same capacity, a greater range of wave lengths can be received than by the second method.

The following data concerning coil antenna is given as a guide for making one. This data does not follow, in some respects, the formulæ that have been developed by radio engineers for the design of these antennæ. However,



coil antennæ made according to these descriptions have given good results.

To receive 360 meters. Coil made as in Figure 1. Frame four feet square. Ten turns of wire. Spacing 3 inches. Tuner to be shunted across the coil as shown in Figure 4.

To receive 600 meters. Coil made as in Figure 1. Frame four feet square. Ten turns of wire. Spacing one-fifth of an inch. Condenser only to be shunted across coil as in Figure 5.

To receive 3,000 meters. Coil made as in Figure 1. Frame six feet square. Fifty turns of wire. Spacing seven-sixteenths of an inch. Condenser to be shunted across the coil as in Figure 5.

These examples ought to enable one to make a coil antenna with some assurance of success. The following simple rules apply:

A longer wave length requires more turns if the size of loop and spacing is unchanged. Conversely shorter wave lengths require fewer turns.

FIG. 3

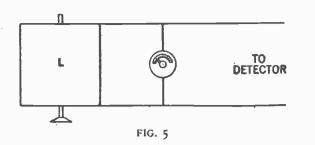
For the same wave length and spacing, increasing the size of the loop diminishes the number of turns required. The converse of

this is true. For the same wave length and dimension of coil, decreasing the spacing decreases the number of turns required. This factor makes a very considerable difference in the number of

turns. The converse of this is true. Ordinary No. 18 bell wire is a satisfactory wire to use.

RADIO COMPASS

RADIO wave consists of electromagnetic and electrostatic lines of force. These sweep the coil antenna and affect it. Considering only the electrostatic lines of force, it is seen that their effect upon the coil is as follows: (The effect of the electromagnetic lines of force is the same, as can be shown by a different process of reasoning). At any given instant the electrostatic lines of force have different intensities at different distances from the source of the waves. Also at any given instant the electrostatic lines of force have the same intensity at the same distance from the source of the waves. Electrostatic lines of force set up potentials in an object which they sweep. If in the same conductor one part is at one potential and another part at a different potential, a current will flow. Suppose the coil antenna is directed toward the sending station. One end of it is nearer that station than the other end. Hence the two ends are at different distances from the sending station, at any instant the two ends are swept by electrostatic lines of force of different intensity, which consequently sets up a different potential in the two ends of the coil. This difference of potential will cause a current to flow, thus enabling the signal to be heard. On the other hand if the coil is broad side to the sending station, the two ends are equidistant from it; they will be swept by electrostatic lines of



force of the same intensity; there will be no difference of potential established; no current will flow and no signal will be heard.

Thus it is seen that when the coil is directed toward the sending station, full strength signals will be heard and when it is at right angles (broadside) to the sending station no signals will be heard. At intermediate positions the strength of the signals will vary from zero to full strength. It is the facts just stated that make a coil antenna a radio compass.

The method of using a coil antenna to determine direction is best described by an example. A coil antenna is set up free to rotate. It carries a pointer which passes over a circle graduated in degrees; the zero point of the circle being to the north. A signal is picked up after proper tuning. The coil is rotated until the signal is just about to become too faint to hear. The position of the pointer is then read. Say this is 164 degrees. The coil is again rotated in the same direction until the signal reappears with the same intensity at which the first reading is taken. Another reading is taken. Say this is 196 degrees. The average of these two readings 164 + 196

gives you the position at which the coil is broadside to the station. In this case it is 180 degrees. This is the north and south line as o is at the north. The transmitting station then is at right angles to this direction. The transmitting station of the example lies in an east and west line. Whether it is east or west of the coil can not be told by any simple radio method, but this general direction is usually known.

For greater accuracy, four readings should be made and their average taken. The third and fourth readings are approximately 180 degrees from the first and second reading and are obtained by continuing to turn the coil around. However, unless the coil has been specially designed for a radio compass, it is not worth while taking these extra readings as the first two will give as great an accuracy as the coil will allow. The cause of inaccuracy of an ordinary designed coil will not be discussed in this article.

A coil may be mounted inside a room and will receive signals as well as if mounted outside unless the room has a great deal of metal in it. However, if a coil is used as a compass inside a room, there is likely to be an error due to that fact. Thus a radiator in the room will pick up the radio waves and re-radiate them, thus becoming a secondary source of waves. This will affect the loop, causing it to show a direction wrong by as much as 10 degrees in some cases.

It has been found that coil antenna diminish the interference due to static. This is a great advantage in their use. In general, the smaller the loop, the more the static is diminished. Another advantage lies in the fact that, because of their directional characteristics they eliminate many interfering stations. Other advantages lie in their compactness and ease of construction. In conclusion, it is desired to point out that for any given condition, such as wave length and kind of apparatus to be used with it, there is a certain sized, spaced, etc., loop that will give better results than any other loop. With this article for a guide a few trials ought to produce this one best loop for you.

RADIO BROADCAST. May, 1922.

Dear Jim:

.

We are enclosing a check for ten 10 more issues of THE HORN SPEAKER for Donald.

I ordered a subscription for him as a Christmas gift last year, and he thoroughly enjoys it. He had a back issue lying around that an "enthusiest" from Kensselaer, New York, had given him, and I took the information from that. He was pleasantly surprised (I wrapped up the Nov. and Dec. issues you had

So we are grateful for the renewal reminder, to continue receiving the very unique THE HORN SPEAKER. To be honest, I find myself looking through and reading each issue as Donald finishes them.

Continued success in the future. Cordially, Donald & Carole 27 East Wiggand Dr. Glenmont NY 12077

POSTAL IDENTIFICATION STATEMENT The Horn Speaker (USPS 956120) is published monthly, except July and August by Jim Cranshaw, 9820 Silver Meadow Dr., Dallas, Texas 75217. Subscription rates are \$5.50 per

letters

Enclosed is a check for \$5.50 Dear Sirs: for another year subscription.

I wish you could print some articles on some of the radio cabinet makers and possibly something about some of the more fancier ones like the one's Zenith used in the

mid-1920s. Sincerely yours, Ivan L. Johnson

313 Alice

Deer Park TX 77536 EDITOR A good idea. If anyone can contribute to such an article, please let me-know. I'd like to print some 10 X 12 or smaller photos of the cabinets. Credit goes to you for the idea.

year, \$11.00 two years. Secondclass postage paid at Dallas, Texas. POSTMASTER: Send address changes to The Horn Speaker, P.O. Box 53012, Dallas TX 75253.

Subscribers, advertisers, photo-

Dear Jim,

Thank you for the subscription reminders. Sorry I've taken so long.

My present collecting interest lie primarily with Radio Equipment by the John Firth Co. (Firco).

I would like to buy or trade for anything by the Firth Co.

Sincerely, Larry Wright 131 Hilltop Drive Lake in the Hills, IL 60102.

Hi Jim-

Here is my check for renewal of Horn Speaker.

You are doing a fine job with the paper, and I look forward to receiving my copies.

I was lucky in that I became interested in radio, at age 10, in the

> graphers and writers, please use the following address; THE HORN SPEAKER P.O. BOX 53012 DALLAS TX 75253

The Horn Speaker; Box 53012; Dallas, Texas 75253 -- January 1979

mid-twenties. By the time I started high school people were in the process of changing from battery sets to AC sets, and most of my parent's friends were only too glad to have me haul off their old obsolete sets. I wish that I had been able to save some of them!

I look forward to the establishment of the Houston Vintage Radio Assn. While several of our QCWA members are interested in old equipment, I haven't met anyone so far who is interested in reconstruction or rebuilding.

Keep up the good work. I hope to come to one of the auctions up in DAL, and maybe get to meet some of you fellows.

> 73, Guy Allen 2307 Poinciana Houston TX 77018

EDITOR.....Write anytime.

Jim:

I like your publication, especially the articles on repair & refinishing and would like to see more of the same instead of the old radio ads & magazine cut-outs.

I only wish there were more activity such as your paper in New England. Everybody in the ads seems to be from South & West.

Merry Christmas

Wally Worth

2 West Elm Ave.

Wallaston MA 02170 EDITOR...We will give you or anyone else help to form a club in your area.

Even though only a few subscribers from New England run ads, the circulation for The Horn Speaker is very good in the states that have a zip beginning with a zero.



WAVES GRAND OPENING FEATURED VINTAGE RADIOS AND PHONOGRAPHS

On December 1, 1978 Waves celebrated the grand opening of their oldtime music shop, located at 32 E. 13 St. in Manhattan.

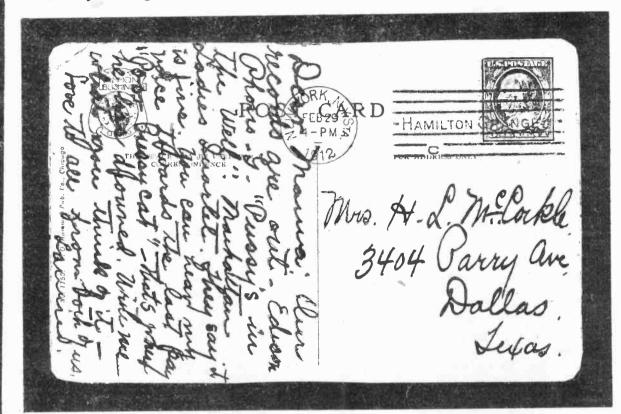
The shop, first of its kind in the area, will feature the largest selection of vintage radios, phonographs, 78rpm records and related materials available anywhere.

Equipment on display consists of receivers from the days before commercial broadcasts up to and including early T.V. sets.

Represented are top manufactures such as Philco (known for their classic cathedral style), Atwater Kent, R.C.A., Zenith etc.

As proprietor Bruce Mager said, "It was a time when there was magic in the air. Families were drawn together, huddled around a wooden box, for the first time able to hear events as they happened or be entertained by such greats as Amos and Andy."

Waves is located at 32 E. 13 St. between University Pl. and Fifth Ave. on the same premises as Mike's Records. Store hours are from 11-7 Tuesdays through Saturday. For more information call (212) 989-9284 during business hours.





WHATEVER HAPPENED TO THE PUSSY IN THE WELL By Billy Bragg

One day, quite by accident, I picked up a copy of D. Magazine. As I thumbed through page after page, I came across a display of old POST-CARDS. The cards were dated 1912, and in the upper left corner, the name EDISON seemed to jump out at me. Upon closer inspection, I found the postcard had been written by an Edison Recording Star.

After a long series of phone calls, I got my hands on that postcard. The ink was a bit faded, but I was still able to read the message.

New York. February 29, 1912... "Dear Mama: Our records are out---Edison Phono---"Pussy's in the Well". Manhattan Ladies Quartet. They say it is fine. You can hear my voice towards the last say, "poor pussycat"---that's when he has drowned. Write me what you think of it. Love from both of us. Laurie".

Quick as a wink, I got my Blue Amberol Catalog, and there it was, number 1905. As it turned out, this was the only record recorded by the Manhattan Ladies Quartet. Next, I looked through my records, and called my collector friends, but no "Pussy's in the Well" could be found.

The postcard was addressed to: Mrs. H. L. McCorkle, 3404 Parry Ave., Dallas, Texas.

When I found out that there was no longer a house at the Parry address, I got down my trusty Telephone Directory. I called EVERY McCorkle in the Dallas phone book. I made a lot of new friends, but it was another deadend street. " Run an add in the Newspaper" I told myself, but that was no help either. Well it was back to the magazine article, where I found a second postcard from Laurie. This card was written 6 months later, on August 5, 1912. Laurie was still singing, but had moved from New York City to Sacandaga Park, New York. By this time, she had met a man named Joe, and she had plans to travel with him to Gloversville. That was it, no more leads, and no place to go.

At this point, it was time to look on the bright side of things. At least I had a POSTCARD signed by an Edison Recording Artist. Also, Assuming that all Blue Amberol Records were recorded in numerical order, I could now date my cylinder records. All records with numbers larger than 1905 must have been recorded after February 29, 1912.

If anyone has the record, or more information, I would appreciate hearing from then. I am dying to hear what Laurie sounded like.

> Billy Bragg 2001 Plymouth Rock Richardson TX 75081



OXFORD JR. TALKING MACHINE



The Horn Speaker; Box 53012; Dallas, Texas 75253 -- January 1979

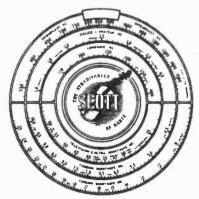


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SPECIAL ONE DOLLAR OFF OUR ADVERTISED PRICE ON ORDERS RECEIVED BEFORE 12/15/78! THIS BOOK WILL BE OFF THE PRESS AND READY TO MAIL ON OR BEFORE 1 DECEMBER 1978.



purpose of establishing the current value of classic sets

for insurance purposes.

PUBLISHERS OF THE CLASSIC RADIO NEWSLETTER

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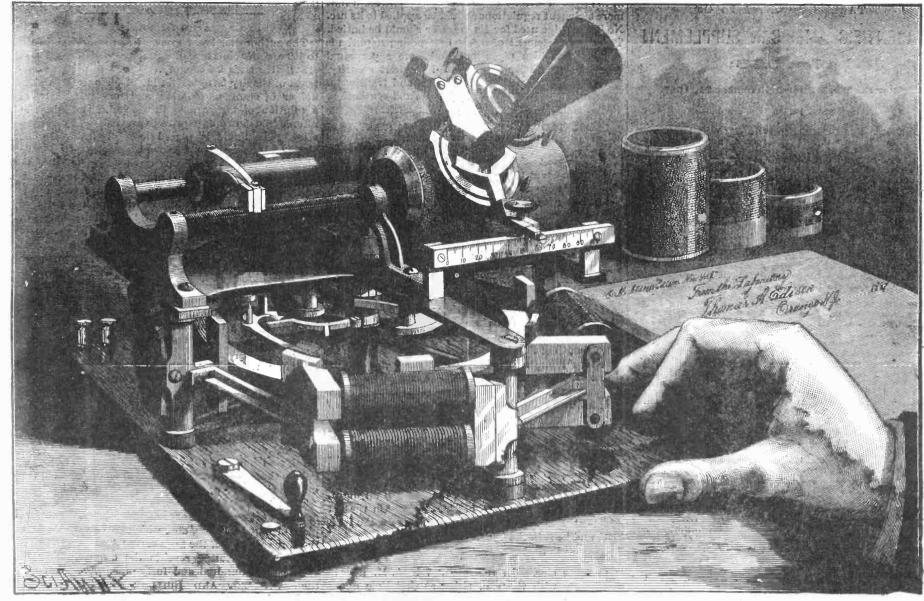
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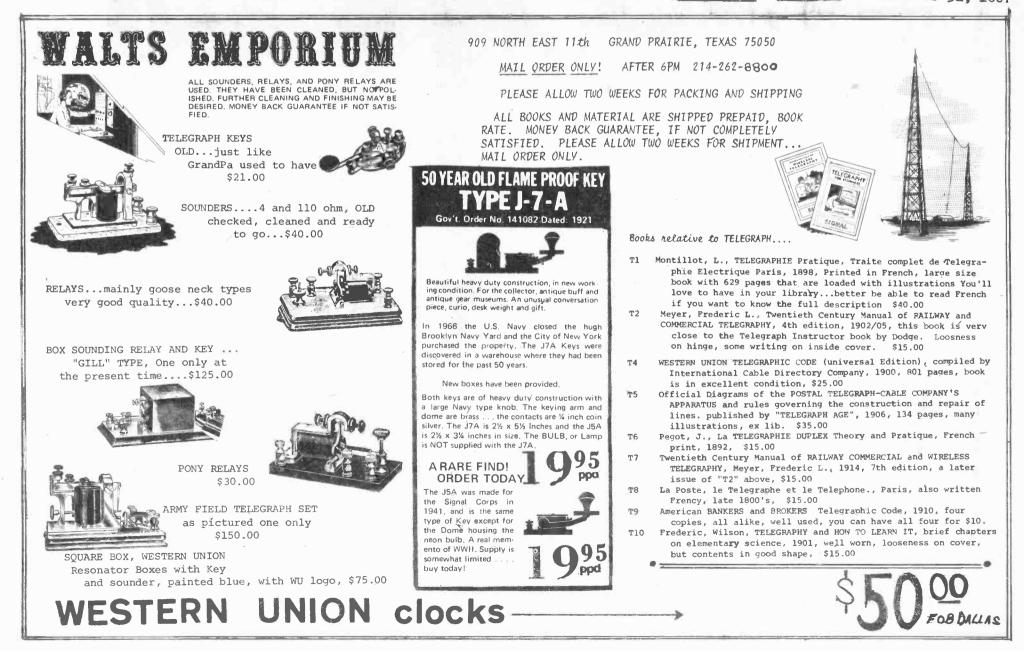
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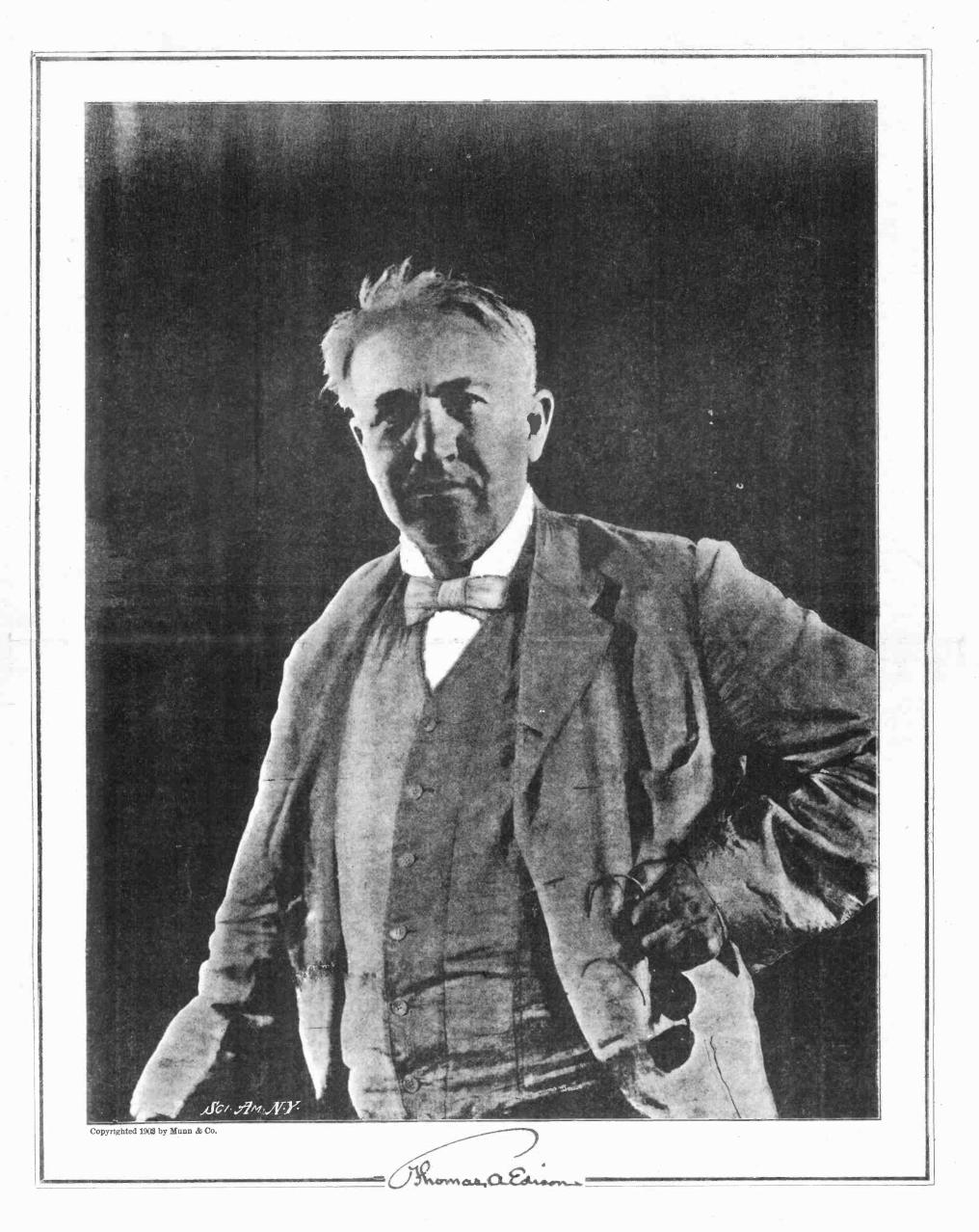
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The development of this 1887 Edison phonograph was Themas A. Edison's response to the Bell and Tainter graph ophone. Scientific American December 31, 1887







SOUTHERN CALIFORNIA ANTIQUE RADIO SOCIETY

Glenn Streeter, famous for his H-10 power supply, "Professional Reproductions," rare radios and the president of SCARS, sent us a copy of the <u>California Antique Radio</u> <u>Gazette</u>, the official journal of SCARS. This journal contains a two page color spread of a 1908 1P-76 type crystal receiver.

- SCARS West conference was held from 1:00 p.m. on November 3 with an auction, a contest, a banquet, etc. through the evening of November 4, 1978. Roy Maxson was scheduled to be the guest speaker talking about Alexanderson Station in Hawaii and first navigation flight from San Francisco to Hawaii.

At the August 19, 1978 business meeting, "A motion was passed to request association with ARCA (Antique Radio Club of America), on the condition that SCARS remain an indedendent organization," mentioned this Vol. 3, No. 4 of SCARS official journal. It also writes, "Next year we have lined up meeting facilities at Burbank Lockheed Ham Shack and San Clemente, and are looking in the Santa Barbara area for a meeting place." Glenn said, "SCARS floats around the southern area of California," which he explained that moving around gives more collectors a chance to attend one of the SCARS meetings, held four times a year.

"Featured at these meetings are contests, swap sessions and talks by members and guests on subjects of interest to collectors," said the club.

SCARS has members nationwide and can be contacted by writing to: Gary Durkee, secretary; 3703 Maryland Ave., Baldwin Park CA 91706. Dues are \$7.50 annually.

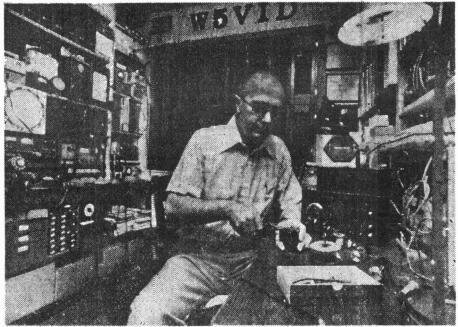
VINTAGE RADIO AND PHONOBRAPH SOCIETY

George Potter, newly elected secretary of the North Texas Chapter of VPPS, gave some interesting information about their auction, which will be held instead of their regular meeting on February 17, 1979. Starting at 1:00 p.m., activities are scheduled to begin with a check in of sets. "The sale will be 6:00p.m. till?" George said.

He slso mentioned "If items are unrelated, they will be sold last. Minimum bid will be \$10.00," and he added, "Both collectors and the general public are invited." "The place, he said, "Is in the same room," which is not hard to find, "at the Texas Power and Light Building in Richardson, Texas."



Ralph Muchow, well known as a president of the Antique Radio Club of America, proudly presents a part of his amazing collection. The ARCA, one of the largest national clubs, plans to hold its 1979 meet at Ralph's home town, Elgin, Illinois. To contact him write: 819 Forest Avenue, Elgin, Illinois 60120 or call (312(741-0573.



Frank Cooper, president of the new Houston Vintage Radio Association, repairs one of his many radio and wireless sets dating back to the fledgling days of the medium. Despite their age, he keeps most of them in working order.

Houston Chronicle Saturday, December 2, 1978 The Houston Vintage Radio Association was featured in the

featured in the November 1978 The Horn Speaker. To know more about HVRA Write to Frank Cooper at 4215 Ravine Drive, Friendswood, Texas 77546, or call 5 (713) 482-6781.



One of the expected auctioneers is Bob Sullivan, who is now the chairman of the board of directors, which allegedly controls the national efforts of V.R.P.S. The group is also expecting the talented Jay Hauteman to auction.

Asked what might be available at the auction, the response was, "Some good consoles are expected."

Incidently, the other officers of of the "national hierarchy" are John Alford, vice-chairman, Don Brockman, secretary and Earl Mc-Donald, treasurer. The North Texas Chapter, as far as we know at the present time is the only chapter but there are rumors that there will be more soon in spite of some opposition, has elected Glen Zook, president; Bobby Bush, vicepresident; George, we mentioned earlier and Kathy Thompson, treasurer.

V.R.P.S. can be contacted by

writing; Vintage Radio and Phonograph Society, P.O. Box 5345, Irving TX 75062.

Proudly, the local chapter of V.R.P.S. has selected the January meeting of the third Saturday evening of the month, which is the 20th, to be dedicated to Atwater Kent and Edison.

VIBRANT INTERNATIONAL ORGANIZATION

INDIANA HISTORICAL RADIO SOCIETY The Indiana Historical Radio Society now has members from New York to California and overseas who receive our quarterly Bulletin.

The I.H.R.S. midwest conference with the Antique Wireless Association will be held on April 21, 1979 at the Auburn, Cord, Duesenberg Museum at Auburn, Indiana.

The INDIANA HISTORICAL RADIO SOCIETY is composed of a group of individuals "Preserving For Posterity" all types of memorabilia of the radio industry. Most of our members are avid collectors of antique, vintage, of classic radio sets and associated equipment such as horns, speakers, and headphones. Other members are interested in radio advertising items. Some members collect and swap old radio shows on tape or cassettes and many members are amateur radio operators.

Four meetings are held each year in various areas of Indiana. After a brief business meeting we have guest speakers or programs pertaining to the golden age of radio. Old receiver contests, exhibits of radios and electrical equipment, mall shows, museum projects, auctions of old radios and parts, flea markets and swap meets are all part of the activities planned each year.

Our editorial staff publishes a quarterly illustrated IHRS BULLETIN. All members and associates may submit material and "Wanted" or "For Sale" ads at no charge. Each IHRS BULLETIN has articles on the repair and restoration of old radios, and many features on radio pioneers and manufacturers are also included. These fine IHRS BULLETINS are now collectors items.

The INDIANA HISTORICAL RADIO SOCIETY has expanded from thirteen dedicated collectors in 1971 to a vibrant international organization. We now have associate members from coast to coast and overseas. Residents of Indiana may become active, voting members. Out of state residents desiring membership in our society may become associates with all the privileges except voting. Our membership committee welcomes all true radio historians and screens antique dealers and speculators from our hobby.

If you are interested in this facinating piece of our heritage, contact; ED TAYLOR, 245 N. Oakland Avenue, Indianapolis IN 46201.

A POLICY TOWARDS CLUBS The Horn Speaker, dedicated first of all to its readers and the hobby, has prepared a policy toward clubs,

societies, etc. The Horn Speaker is independent of any organization that wants national affiliation or control of local clubs or chapters. The activities of such organizations in the general news area will be published on the merits of what is news or what the readers want to know.

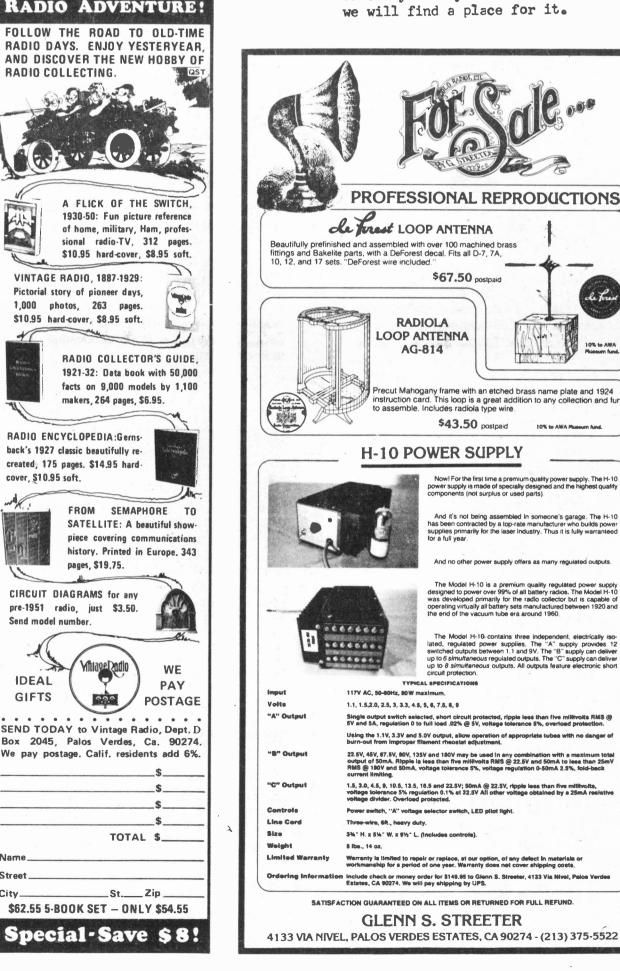
The section "CLUB NEWS," is designated as free editorial space for the clubs to tell about news and benefits of their clubs. The Horn

W CAR Speaker will give equal space to all. Of course, advertising space belongs to the person, club, society, etc. that pays for it.

The Horn Speaker will treat all organizations equally. There will not be any geographic discrimination. The Horn Speaker does not promote or discourage any organization, at the expense of another.

The Horn Speaker is dedicated to the hobby, whether the reader choses to enjoy it by being a club member or an independent.

The Horn Speaker welcomes an essay on the benefits of belonging to either a national or local organization to be published under "CLUB NEWS." Or, if an independent wants to write an essay on why he does not belong, we will find a place for it.



~

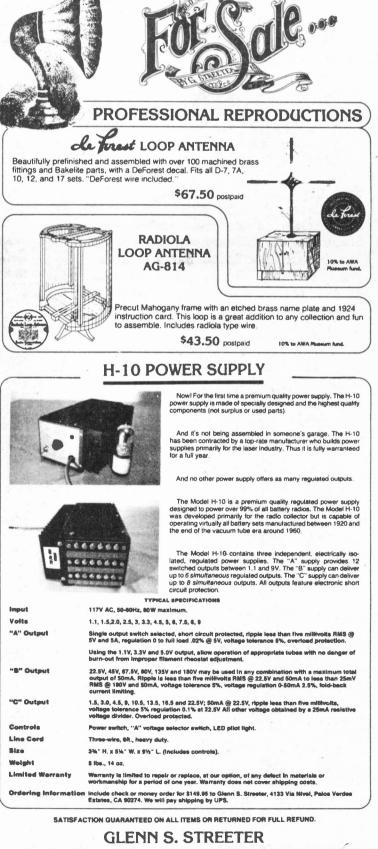
IDEAL

GIFTS

Name.

Street_

City___



page 12



THE SONOCHORDE

Is the first loud speaker to appear with a horn of gutta-percha. It is designed for use without any field-exciting current. It is indeed a quality instrument, made by The Boudette Mfg. Co., 79 Beach St., Revere, Mass.

1923



Rates for THE HORN SPEAKER One year.....\$5.50 Two years.....\$11.00 Special rates for one year (mailed in envelope) First class.....\$10.00 Foreign Air Mail...\$16.00 Mail address: THE HORN SPEAKER Box 53012 Dallas TX 75253

BACK ISSUES

All 10 back issues for 1973...\$8.00 Single issues...\$1.00 each
All 10 back issues for 1974...\$6.00 Single issues...\$.75 each
All 10 back issues for 1975...\$5.00 Single issues...\$.75 each
All 10 back issues for 1976...\$5.00 Single issues...\$.75 each
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The Horn SpeakerP.O. Box 53012Dallas, Texas75253



Classified ad rate: 6¢ per word. Photo ads: \$2.00 extra.

Deadline: 20th of the preceding month.

PHOTO ADS ONLY \$200 EXTRA

SPECIAL PHOTO ADS will be repeated at no extra charge up to 3 times unless you cancel.

MISC.

PROFESSIONAL-CW operators, retired or active, commercial, military, Gov't, police, etc., invited to join Society of Wireless Pioneers, W7GAQ/6, Box 530, Santa Rosa CA 95402.

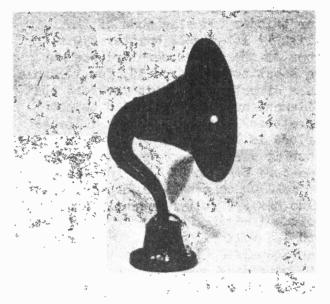


Jerry Hoffert at the controls of his crystal set.



FOR SALE: Gilfillan Peter Pan cathedral \$275. or best offer. Have many more old radios, send \$1. for list. Chuck, 925 Starlite, Grants Pass, Oregon 97526. Ph: 503 L76-1078.

FOR SALE OR TRADE



FOR SALE: Brown British horn cira 1926. Unusually small size (12 inches tall, 7 inch bell). Excellent condition, working. \$115.00 ppd. Greg Dockter, 2519 Ave. C, Bismarck, N. Dak. 58501.

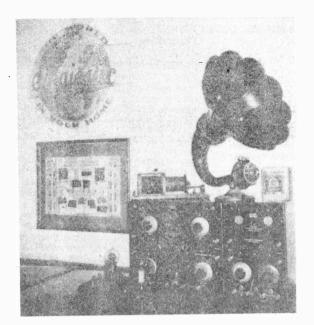
FOR SALE - NEW AUDIO INTERSTAGE TRANSFORMERS: Universal replacement for Single or Push-pull plates to single or push-pull grids. When used single plate to single grid, ta taps available for 1:1.5, 1:3 or 1:6 turns ratio. \$6.25 each, 2/\$12. or 4/#22.00. Add for parcel post shipping; 0.9 pounds per transformer. OLD STYLE CLOTH COVERED WIRE: 18gauge AC line cord in gold or brown. 20¢/ft or 16¢/ft for 100' or more. OK to mix colors to get 100'. Add \$1.50 shipping. NEW CRYSTAL SET PARTS: Crystal detector assembly w/crystal \$1.50. Crystal holder + arm + whisker 85¢. Galens crystal 65¢. Gat's Whiskers 2/50¢. Fahnestock clips 10/80¢. Phone tips 10/75¢. Add 75¢ shipping. NOTICE: Crystal set part prices will go up 20% January 15, 1979. AUTHENTIC HORN SPEAKER CORDS: 42' long \$3., 10' long \$4. State second choice - discontinuing these items. Add \$1. shipping. Write for latest availability. SASE for more information and wire samples. Robert Goodman, 7943 Ponce, Canoga Park CA 91304.

OVER 100 early battery & A.C. radios, phonographs (cyl. & disc) & tubes and speakers. You pickup, no shipping. Dexter, 104 North Ave., Abington MA 02351, Tel: 617 878-3177.

TRADE: Green can A.K. TA Breadboard 2-Stage A.F. Amplifier for TA detector-one or two-stage amplifier. Ross Smith, 1133 Strong, Elkhart IN 46514.

FOR SALE: High-voltage capacitors for Hallicrafters 7-inch television sets. Send SASE for information. C. H. Sarver, 256 West 88th St., New York NY 10024.

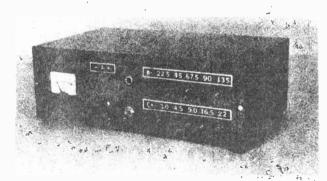
FOR SALE OR TRADE



FOR SALE: Kennedy, Marconi, Federal, Amplion, DeForest, plus wireless & crystal set and rare tubes. SASE for list of 86 select items. Glenn Streeter, 4133 Via Nivel, Palos Verdes Estates CA 90274.

FOR SALE: Old battery and A.C radios, related items etc., dial lite hoods made for Radiola 17 and 18. SASE + 15¢ stamp for information and lists. WANTED: 3" - 4" Marco vernier dials. Franklin Haas, 207 West 30th, Hutchinson, Kansas 67501.

FOR SALE: Battery cable. In addition to the 10 conductor cable we sell we now have an authentic four conductor cable. Each conductor is cloth insulated and of a different color. Both cable types are housed in a brown cloth knitted sheath. The cost of either cable type is 75¢/ft. plus shipping. Order from Olde Tyme Radio Co., 2045 Lyttonsville Rd., Silver Spring MD 20910.



FOR SALE: Solid State "A", "B" and "C" power supply for operation of 1920's battery radios. Price \$109.50 postage psid. Send SASE for information to: Gary Schneider, 6848 Commonwealth Blvd., Parma Hgts, OH 44130.

ATWATER KENT REPLICAS Bread Board switches - \$10.00, front plates for variometer, variocoupler, and Tll tuners - \$8.50. AK thumb nuts, SASE for sample. Replicas of any dial or knob. WDll or UV99 adaptor - \$5.50, 2 for \$10.00pp.

K. Parry, 17557 Horace, Granada Hills, CA 91344.

FOR SALE OR TRADE

Photo ads: \$2.00 extre.

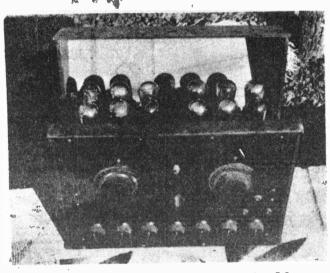
FOR SALE OR TRADE: No. 1, 2 and 3 QST magazines and Edison Home Phonograph - will trade for antique radio gear. Also Fleming Valve. Paul Giganti, 2429 San Carlos Ave., San Carlos CA 94070.

FOR SALE: 1926-48 reproduced schematics. Alignment procedures available free. T.V. schematics also available. Quick quality over night service. Send \$2.00 each to: J. S. Antaki, Antakamatics, 311 Bear Ridge Rd., Pleasantville NY 10570.

FOR SALE: Battery and A/C sets, horns and speakers, few mags and books, some test equipment. SASE for list. A. Patscheck, Box 195, Wimbledon N.D. 58492.

FOR SALE: Brunswick-Blake-Collender Company "Vltona" tone arm with head, has three position, three needles. Kenneth Lappin, Lappin Radio, 210 N. Goodwin, Urbana IL 61801.

FOR SALE: British Xtal set; Radiola III, III A and 16; Crosley 51 & Trirdyn. Trade Radiola V, others, SASE . W6THU, 1545 Raymond, Glendale CA, 91201.



FOR SALE: Early battery radio 12 tubes rare. Best offer over \$250. or trade for outside horn phonograph. Chuck, 925 Starlite, Grants Pass, Oregon 97526. Ph: 503 476-1078.

FOR SALE: All (8 pcs.) potmetal parts for Victor 10-50 - 1051, 1070 & 955. Cast as original, in bronze and aluminum. Have gears and and potmetal part for tone arm on 940 & 860. Material for turntable. SASE for prices. Tony Provenzano, 144 W. Prospect St. Waldwick N.J. 07463. 201 445-7898.

ANTIQUE T.V.s From 1930s - 1940s. Large quanity send \$1.00 for list. Chuck, 925 Starlite, Grants Pass, Oregon 97526. Call 503 476-1078. Also have over twenty radios from 1930s, consider any offer on these by phone.

FOR SALE OR TRADE



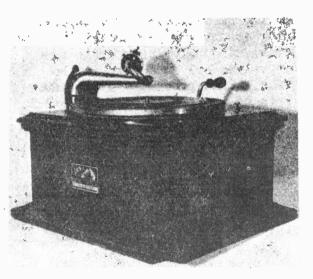
SOLD OUT! But only temporarily. The new improved units will be in stock next month. There will be a small increase in price as parts and labor are going up.

but I am excepting orders now at the 1978 price. Order now and save! The H-10 is small (32"X54"X92"),

but it packs more power with less ripple rms than its nearest compeditor. It's peerless!

See our ad for more details. Glenn S. Streeter, 4133 Via Nivel, Palos Verdes Estates CA 90274.

FOR TRADE: Atwater Kent 1926 wooden window display. Folding 3 section 48" X 22" fully extended. Paintings in excellent condition. Guy Martin, P.O. Box A, Azuss, California 91702.



FOR SALE: Victor VV-VI: works, excellent appearance, \$90.00, shipping. From Tinfoil to Stereo, brand new (Same) \$9.00 pmd. Evolution of the Phonograph, six part serial (November 1955 thru May 1956 Radio News), complete, \$20.00 ppd. Greg Dockter, 2519 Ave. C, Bismarck, N. Dak. 58501.

SELL BATTERY AND ELECTRIC RADIOS for the new collector. Also radio books, magazines and tubes. SASE for radio or publication list. Radio Americana, Box 161, West Hurley N.Y. 12491. page 14

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DISPLAY ADS CAN BE CHEAPER THAN MAILING LISTS

YOU ARE THE ONE WHOM WE WANT TO HELP

LET US DO THE MAILING

DID YOU KNOW THAT FOR ONLY \$50.00 YOU CAN BUY ONE FULL PAGE AD 10-1/8" X 13-3/8" THE EQUIVALENT OF SENDING IN POSTAGE ONLY 385 PIECES @ 234 15 6 EACH (NOT EVEN COUNTING THE COST OF PRINTING, ETC.) **\333**

1/2 PAGE IS \$25.00 6-5/8" X 10-1/8" or 5" X 13-3/8" THE EQUIVALENT OF SENDING ONLY 192 PIECES @ 134 166 15¢

1/4 PAGE IS \$12.50 THE EQUIVALENT OF 83

ADS MUST BE GOOD ENOUGH FOR OFFSET REPRODUCTION EXTRA CHARGES IF AD DOES NOT FIT PURCHASED SPACE.

> THE HORN SPEAKER 9820 Silver Meadow Dr. Dellas TX 75217 (214) 286 1673

FOR SALE OR TRADE

WOULD TRADE some good used UX201A tubes for good used UX199 & UX120. Jack Emery, Box 84, Lexington, Michigan 48450.

FOR SALE - Collection of 25 radios of 20s and 30s, Grebe, Music Master, Radiola, early electrics, speakers, also four nice phonographs, all for \$950. or offer. SASE for list. SALE OR TRADE - Rider Radio Vol. 1-5 abridged, 11, 12, 14, 15, 16, 18, PA 1. Want Vol. 1, 2, 3 and 9. Anyone have Ozarka 16 tube chassis? For sale or not would like to hear from you. Ray Miner, Ft. Madison, Iowa 52637. Ph: 319 372-1271.

FOR SALE: Selling Rider's Manuals, singly or sets. Also early Sams' Photofacts, Supreme, factory manuals. Lawrence Beitman, Box 46, Highland Park IL 60035.

FOR SALE: ELMAC PMR6A mobile receiver, power supply and manual, \$25.00; nice Crosley Dynacone speaker. \$20.00; Crosley 50 needing dial and minor cabinet repair, \$30.00; Radiodyne WC-17, nice but warped lid, \$50.00. Add postage. George Hausske, 1922 E. Indiana St., Wheaton IL 60187.

FOR SALE OR TRADE: Battery sets, parts etc., Large list SASE and dime. Chet Wisner, 1011 Main St., Dalton MA 01226.

Snuggle Up and Enjoy. . .

A WORLD OF TALK AND MUSIC PROGRAMS THE FCC DOESN'T WANT YOU TO TUNE IN ON The Medium: The Products:



FM SuperSnooper FM SuperSnooper It's the ideal companion to FM portable radios Plugs into the radio's earphone or MPX out jack. Transfers readily from one radio to another Consists of SCA adapter, audio amplifier with volume control, and 8-ohm speaker in an attractive plastic case Content bib earpicitizer mod fidelity and is Features high sensitivity, good fidelity, and is self-powered with a 9-volt transistor radio

require SCA connection inside -- a point that can easily be found by probing, instructions provided. Not a kit. * \$26.00

Kraco FM Car Converter



Here's just the thing for the per-son who has put off buying FM for the car, and a chance to hear FM-SCA in the bargain! Even if your car already has FM, now you can add SCA at modest cost. SCA adapter neatly concealed in this sensitive car converter, which

SCA FM sca FM radio. This adapter connects easily to any car AM radio through your AM car input D Thumbwheel tuning Complete mounting hardware, instructions included. * \$37.97

FM-SCA Adapter This is SCA circuitry at its best! Features of this adapter include excellent tone quality, low voltage requirement, squech circuit, and instructions for installing in or on FM radios Free with your a-dapter is a copy of the article, SCA: Radio the FCC Doesn't Want You to Own, which dis-cusses the SCA service and your legal right to tune in, and shows how to tap into portables, car radius and tuners to receive SCA. This article is for people with or without an electronics background. Kits include full assembly instructions. *\$13 kit; *\$18 assembled unit (\$17 in quantity of two or more.) FM-SCA Adapter

(\$17 in quantity of two or more.)

• Two-part article, SCA: Radio the FCC Doesn't Want You to Own, described above, only *25 cents * for postage and handling.

• A listing of FM and FM-SCA stations can be found in the latest edition FM Atlas and Station Directory, a 112-page guide which also gives data on stations' music formats, stereo, Dolby, network affiliations – and more! * \$3.95 postpaid by "book rate," \$4.50 by first class mail.

 Also available: Custom, low-cost FM-SCA installation in or on the radio of your choice. Send a self-addressed, stamped envelope for information. For buyers of the FM SuperSnooper we will install a free MPX out jack or modify the earphone jack for SCA if you write and make arrangements to mail your radio, as well as include remittance to cover mailing back of the radio to you.

• FM DX TAPE. Here's a full-fidelity, 15-minute, reel-to-reel tape that cap-tures the ultimate in the FM listening experience. Contains excerpts of actual long-distance receptions, with tips on how to recognize FM DX and tune in FM stations as far as 2,600 km under the right conditions. Includes a sheet listing all of the nearly 100 stations on the tape in order of their appear-ances, 7½ i. p. s. * \$1.50

SCA TAPE. This cassette will whet your appetite as to what can be heard on FM-SCA. You'll hear background music, commercials and medical news for physicians, talking book for the blind with a hint as to the pomography these services spew forth, as well as "network relay," and the rock music of WPLJ New York heard between ABC radio newscasts. * \$2.75

Various special-interest groups and the Federal Communications Commission have conspired to keep these devices off the market, but now you can legally listen to FM-SCA programs in your home or car, and on portable radios.

Depending upon where you live, your FM radio can double as a receiver of special background music, talking book for the blind, doctor's programming, farm news, network relay, and other programs meant for special groups or places. Over 900 stations are sending out SCA programs concealed from you, the listener, by multiplex technologybut our gadgets unscramble these spe-cial programs with the clarity and reliability of your own local FM stations!

You can legally own a radar detector, a police scanner, and listen to other people's CB conversations, but a gentle-man's agreement among radio manu-facturers has kept FM-SCA off the mar-ket. Now you *can* tune in these broad-ners the acid ext all the programming casts, too, and get all the programming that your FM radio can give you.

If you're technically inclined, buy the FM-SCA adapter, kit or wired, and make the connections yourself inside your FM radio, tuner, receiver or car radio. If you're not into electronics, you'll find the FM car converter, the FM SuperSnooper, or custom SCA installations the way to go!

Ordering Information:

Order from FM Atlas Co., Adolph MN 55701, Utget from FM Atlas Co., Adolph Mit 5970 (U.S.A. All prices postpaid, except add \$2.00 per order for electronics items going to Can-ada and to PO box addresses in the United States. Payment by bank or postal money order will speed up receipt of your order. COD orders accepted only with a 20% deposit.

More FM Goodies:

• Enlarged copy of the new FCC FM coverage curves, both the F(50,50) and the F(50,10) interference curves with instructions for do-it -yourself computing of station coverages. □ Supplied in celluloid folder. * \$3.00. • Update your copy of the FM Atlas with computer listings for your state or region Write for further information.

••• Order today from FM Atlas Co., Adolph, Minnesota, 55701, U.S.A. Satisfaction guaranteed, with 90-day return privilege on any product. Please write before returning any items, and describe the problem in detail. ••• [Minnesota residents add 4% state sales tax.]

FOR SALE OR TRADE

FOR SALE OR TRADE: Philco 53-642 A.C./Batt. portable, working, brown plastic cabinet, good exc. small crack one side \$22.50. I pay postage, or trade for 1942 or earlier wood cabinet table radio. John G. Bayusik, 311 Grandview Ave., Hamden CT 06514.

FOR SALE: Paper condensers; .00025, .0005, .001, .002, .003, .004, .02, .04, .06 at 600V, \$1.00 per dozen. Daniel Gaidosz, 342 West River Rd., Orange CT 06477.

COLLECTORS: Page after page of Classifieds from other collectors, hams, CBers, hobbyists in "Electronics Trader", only 10¢ a word. Next four big issues only \$2.00. Electronics Trader, Box 1333, Sun Valley CA 91352.

FOR SALE: Old Radios, speakers, etc. Sale or trade. SASE. Rosenthal, 507 S. Maryland Ave., Wilmington DE 19804.

FOR SALE OR TRADE

FOR SALE: Send SASE for list of 1920's tubes, parts, magazines and other items of my usual goodies. List to be mailed early January. Gary Schneider, 6848 Commonwealth Blvd., Parma Hgts., OH 44130.

FOR SALE: Antique Ammeter in polished wooden case and has a mirrored scale. 7-1/8" X 7-5/16" X 3-1/8" deep. Mfd. by Queen & Co. Phila., Pa. Best offer. J. Albert Warren, Box 279, Church St., Waverly PA 18471.

FOR SALE: Tubes for radios of the thirties and fourties, brand new in original factory boxes. Very reasonable, send us your list of requirements for a quotation. Daniel Gaidosz, 342 West River Road, Orange Conn. 06477.

OLD RADIO MAGAZINES, 1919 and later. SASE for complete list. K. Parry, 17557 Horace St., Granada Hills CA 91344.



WANTED: Crosley "Harko Signor" or "Ace" 1 tube 1922 or 23? Like a model "50" but little longer case in good or better condition. Information to: Troy Cantrell, 331 North Stine Road, Bakersfield, California 93309.

CATHEDRALS WANTED: Restorable AC sets. Also the following in working or restorable condition: Edison R4 radio, Edison radio/phono models C1, C2, C3 and C4 (consoles), Radiols III amp and Models TI, 20, 24 and 26, Zenith 3R and 4R, AK Bread Boards (particularly 5 and 9) DeForest D7, 10 and 12. Please send price and description. Also looking for RADIO NEWS, Mar., July and Sept. 1926.

Pat O'Hern, Box 55456, Houston, Texas 77055.

WANTED: Western Electric 1-B and 2-C receivers; also Columbia phonograph, floor console model using 1-226, 1-210 and 2-281's with the l4-inch Kolster dynamic speaker, made circa 1927-8. Also home-entertainment radio-phonographs made through 1940's that are equipped with automatic record changers. Please describe and state price in first letter, and include snapshot if possible. Curtiss R. Schafer, George's Hill Road, Newtown, Connecticut 06470.

WANTED: RCA Radiola 20, Kennedy, Gilfillan, Pilot Super Wasp, AK, AC Dayton XL 25, Grebe Synchrophase, Cathedral and other pre-1935 table radios; Vintage horn or cone loudspeakers, headphones and tubes. Please state model, condition and price with reply. Dave Pearce 673 Sylvan Ave., North Vancouver, B. C. Canada V7R 2E8.

WANTED: Electric pickup, high impedence for 1926 or 1927 Victor Electrola or Brunswick phonograph. Bob Scott, P.O. Box 1694, Wayne, N.J. 07470. Phone: 201 696-1278.

WANTED: Atwater Kent type 11 tuner. Have other early AKBB parts for trade including rare pair of good AKBB audio transformers #3509. Also early horns, speakers, tubes, parts etc. to trade or will buy. Bill Pugh, 2126 E. Myrtle, Phoenix AZ 85020. Tel: 602 943-6782.

WANTED: Wood table model plug-in radios, especially Cathedrals. Also outside horn phonographs, music boxes, needle tins, record dusters, catalogs, etc. Lloyd, 4618 Adams St., Hollywood FL 33021.

WANTED: TUNING DIAL FOR A VICTOR R-32. Dave Bittner, 11761 Coleman St., Manassas VA 22110. The Horn Speaker; Box 53012; Dallas, Texas 75253 -- January 1979





WANTED: Any early AC Radios using Kellogg 401 tubes or Cardon 373 tubes, including tubes, parts, original literature. Rosenthal, 507 S. Maryland Ave., Wilmington DE 19804.

WANTED: Power pack & ampl. chassis for Radiola 67 complete with good xfmrs. or will buy or trade for complete radio. Cabinet unimportant. Jim Pollard, 4107 Loma Alta Dr., San Diego CA 92115.

WANTED: Old electro-medical (quack) machines like induction-coil shock devices, ozone generators, electric belts, violet ray. Wanted also spark-gap disthermy and old X-ray. O. Lindan, 1404 Dorsh Road, Cleveland OH 44121. (216) 382-7113 evenings.

WANTED: A picture of a Zenith Cathedral model L. A poleroid will do. Most of the grill on mine is broken and lost. Need picture for restoration. Also need chassis for Jackson Bell model 84 (Ryders VIII Misc. Pg 803) Russ Goodlive, 1401 Franchere Pl., Sunnyvale CA 94087.

WANTED: 1933 Emerson Mickey Mouse radio. Write or call collect. Les Sims, 5551 W. Lover's Lane, Dallas TX 75209. Ph: 214 352-9757.

WANTED: Always buying car radios, parts and literature of the 30s, 40s and 50s. Please price and describe. Especially wanted, Ford 1930s models. Cash paid. Marvin Roth, 14500 La-Belle, Oak Park MI 48237. WANTED

WANTED: Need top and speaker for Philco model 514, Pg. 147 second ED. of V. R. Also need antenna and detector coils for Emerson BA-199/ BA-201 radio, Emerson PT #5AT-422, 5AT-423, Pg. 82 first ED of F.O.T.S. John G. Bayusik, 311 Grandview Ave., Hamden CT 06514.

WANTED: Western-Electric microphones; 639 (Birdcage), 633 (Saltshaker), or Eightball. E. D. McDonald, 922 Tanglevine, Dallas TX 75238.

WANTED: Riders Vol. 15, must contain all Scott pages 15-1 thru 15-50. Cash or have Riders Vols 14 - 12 -9 - 8 - 7 - 6 for trade. Need escutcheon plates including dial escutcheon for Scott 4. W. 15. J. Cunningham, 675 W. Ardmore, Roselle IL 60172. 312 894-2370.

WANTED: Driver for A-K, model H horn speaker and A.F.T.s for A-K model 20 compact. If originals not available, would like replacements to fit in original cans. Lane Poulter, 6344 Garwood Ave., Las Vegas NV 89107.

WANTED: Dial Bezel for Zenith 6V27 "Farm" Radio. Uses $6\frac{1}{2}$ " glass. Please send drawing and price first letter. Mark Oppat, 31800 Balmoral Dr., Livonia MI 48154.

WANTED: Can anyone I.D. my Philco Radio? It has dark green metal cabinet (table type), A.C. chassis, has same tube compliment as my Radiola model 18. Appears similar to schematic for Philco model 87, except has one #71A tube where #87 has 2 #45's. I need top and an appropriate speaker. Has anyone a rebuilt or good used 211P4 picture tube (or equivalent)? Also need schematic for Philco model 38-12. Does anyone have a schematic or list of Xtals useable with a Saturn 100 B.C. transceiver, model M.M. 2 made by Muasvrematic Co. of New Hampshire? John G. Bayusik, 311 Grandview Ave.,

Hamden CT 06514.

WANTED: Majestic model 91 chassis and speaker, or complete radio if price is reasonable. Will buy outright or barter equal value in restoration work. Vintage Restorations, 1422 Carter Hill Rd., Montgomery AL 36106 Tel: 205 263-6750.

WANTED: "Radio News" for March 1925, also "Radio News" for all months of 1922 - all with covers. Albert Warren, Box 279, Church St., Waverly PA 18471.

WANTED: Spark type Diathermy Machines or gaps from same. Condition unimportent as long as gaps intact. Bob, W6ME, 4178 Chasin St., Oceanside, Calif. 92054.

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