

# The Jersey Broadcaster

NEWSLETTER OF THE NEW JERSEY ANTIQUE RADIO CLUB

September 1998

Volume 4



## MEETING/ ACTIVITY NOTES

Reported by Marv Beeferman  
and Marsha Simkin

Discussion at the August meeting centered on our upcoming swapmeet on Saturday, October 10th at the National Guard Armory in Freehold N. J. Thanks goes out to the enthusiastic support of those members who volunteered to help out. A straw poll of vendors at the AWA Annual Conference in Rochester supported this new date...far enough away from the Conference date to prevent saturation but late enough in the season to offer a final booster shot for Winter doldrums survival. Remember to get your reservation in early since there is limited inside space. A circular with all the details was enclosed with the August Broadcaster; if you misplaced yours, contact Marv Beeferman for a copy.

In conjunction with the swapmeet, some new guidelines were offered and agreed to at the meeting. First, for walk-around-auctions, it was decided to limit entries to 10 items, with a maximum of three on reserve. If time permits, a second round of sellers will be used to capture items beyond the 10 item limit. Second, it was suggested that swapmeet dates be firmed up at least three months in advance. Expect to vote on upcoming dates at September's meeting. Third, the Armory fee has gone up to \$450, slowly approaching the Hightstown Country Club rental price. This might prompt the club to consider again charging entrance fees in order to at least break even. Another possibility to consider is the offer by one of our new members of a location in Southern New Jersey at a very reasonable and attractive price with space for over 100, tables provided and on-site food preparation facilities. More on this in the



## MEETING NOTICE

The next meeting of the NJARC will take place on Friday, September 11th at 7:30 PM in the Grace Lutheran Church, corner of Route 33 and Main Street in Freehold. Contact Marv Beeferman at 609-693-9430 or Phil Vourtsis at 732-870-7104 for directions. This month's program will feature our popular "show-and-tell" session; members are invited to bring an interesting piece from their collection or a recent acquisition for discussion. There should also be many tales to swap from those who attended this year's AWA Conference in Rochester.

future after discussion at an Executive Board meeting planned for October.

As you all now, club founder and past President Tony Flanagan is making a valiant effort in holding his own against some pretty frightening odds. Phil Vourtsis and I stopped by a few weeks ago to give Tony his Life Membership certificate; Mark Mittleman, a constant visitor, was also there. Although Tony is unable to respond by voice, it is easy to see that he does recognize visitors and is aware of the topic of conversation. Visiting Tony is perhaps some of the best medicine one can offer right now and it gives Kathleen a little break from a very difficult and trying time. If you're thinking about stopping by, please contact Kathleen beforehand so that she can suggest the best time. Also, contact Phil, Mark or myself if you might feel more comfortable in a group.

New members and visitors were introduced with interests in jukeboxes, 45 RPM record players (they both have tubes you know) and consoles. You might want to heed Mark Mittleman's advice regarding the growing scarcity of early, all-original 1920's radios. Mark said that he only found six for sale in a recent issue of Antique Radio Classified. Many are showing up with non-original or reproduction parts (especially DeForest). The theme was emphasized by Jerry Dowgin who added that a friend of his, after visiting approximately 250 antique

stores, saw only a total of 6 battery radios.

The highlight of the evening was a sneak preview of John Dilk's Mobile Museum which he planned to drive to Rochester for the AWA conference. A short description was offered in last month's Broadcaster, but nothing comes close to the real thing. What a concept and what a vehicle for it to take form in! Congratulations John, from all of us...the tour was quite impressive.

John said he started displaying his collection on shelves like most of us, utilizing his son's excellent carpentry skills to the fullest. But as most of us have learned, domestic demands sometimes take precedent and display space was becoming a premium. Things were getting pretty much out of hand.

After learning how inexpensive RV insurance was from his brother who recently acquired an RV, the brainstorm hit. But could a standard RV be depended on once it was stripped - would it be secure enough to support what John had in mind? And what about water leakage once the walls were removed? Enter DVHRC's Pete Graves who would be offering up at auction exactly what John was looking for...a 1973 Dodge Crown RV constructed from a single, fiberglass shell. No inside walls, no seams, no water leakage...just the thing.

Renovation was slow and tedious but nonetheless rewarding. John also had to  
(Continued on page 2)

**THE JERSEY BROADCASTER**, published a minimum of ten times each year, is the newsletter of the New Jersey Antique Radio Club (NJARC) which is dedicated to preserving the history and enhancing the knowledge of radio and related disciplines with special emphasis on contributions made by the state of New Jersey. Dues are \$15 per year and meetings are held the second Friday of each month at the Grace Lutheran Church, corner of Route 33 and Main Street in Freehold N.J.

Submissions are welcome in typewritten or diskette (5-1/4" or 3-1/2") form with formats in ASCII, WordPerfect, Word, etc. Photos in high contrast black and white are appreciated but color photos are acceptable. The Editor or NJARC is not liable for any buying and selling transactions or for any other use of the contents of this publication.

#### OFFICERS, BOARD OF DIRECTORS AND PROGRAM COORDINATORS

##### PRESIDENT:

Phil Vourtsis  
13 Cornell Place  
Manalapan, N.J. 07726  
(732)-446-2427

##### VICE PRESIDENT:

Jim Fisher  
344 Harrison Ave.  
Manville, N.J. 08835  
(908)-725-7476

##### SECRETARY/EDITOR:

Marv Beeferman  
2265 Emerald Park Drive  
Forked River, N.J. 08731  
(609)-693-9430

##### TREASURER:

Sal Brisindi  
203 Cannon Road  
Freehold, N.J. 07728  
(732)-308-1748

##### SARGEANT-AT-ARMS:

Dave Snellman  
Box 5113  
New Britain, PA 18091  
(215)-345-4248

##### TRUSTEES:

Mark Mittlemen (908)-431-1324  
Gary D'Amico (732)-271-0421  
Tony Flanagan (908)-462-6638

##### TECHNICAL COORDINATOR:

Al Klase  
22 Cherryville-Station Road  
Flemington, N.J. 08822  
(908)-782-4829

##### SCHEMATIC PROGRAM:

Aaron Hunter  
23 Lenape Trail  
Southampton, N.J. 08088  
(609)-267-3065

##### CAPACITOR PROGRAM:

John Ruccolo  
335 Butcher Rd.  
Hightstown, N.J. 08520  
(609)-426-4568

##### WEB COORDINATOR

John Dilks, K2TQN  
(609)-927-3873  
<http://www.eht.com/oldradio>

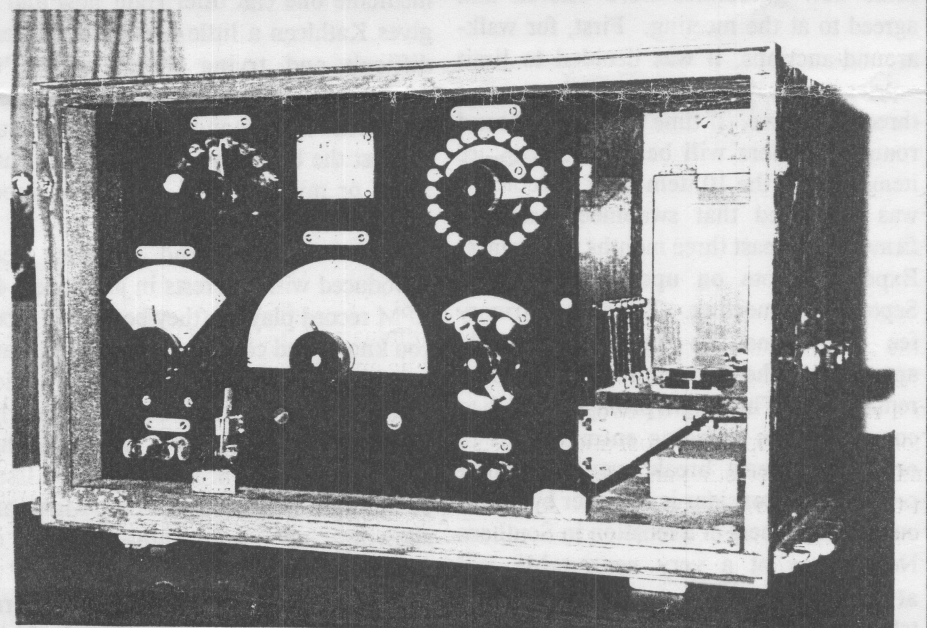
#### *(Meeting Notes...continued)*

contend with the loss of his neighbor's barn which offered storage for a recent estate acquisition (a 28' tractor trailer solved that problem in due course). "Crate" type furniture and shelving seemed in line with what John had selected as a theme, and a local RV junkyard provided a source for many of the furnishings, including a couch where one could relax and be carried back to the world of early wireless.

John has chosen "Amateur Radio before WWII" as his theme. He has nostalgic memories about his dad's adventures with wireless...especially one instance where his dad had worked two weeks to obtain a single tube and immediately burned it up with wrong battery connections. John also has a deep respect for the "old timers" who accomplished so much with a minimum of resources, especially during the depression years. I can just see them winking from afar as if to say "Great job John...you should be very proud!"



John Dilks proudly displays one of his Mobile Museum exhibits



You couldn't tell from its exterior, but the vintage of this Japanese receiver displayed by Ray Chase is WW II



## THOSE AMAZING AERIAL ELIMINATORS

By Marv Beeferman

Most radio buyers of the early '30s understood the basic requirements for effective radio reception...that a radio set had two terminals; one, the antenna post to be connected to a suitable antenna and the other, the ground post, to be connected to a good electrical ground (usually a radiator or water pipe). They also understood that if the antenna post was connected to ground and the ground post left free, volume would not be as great but, on stronger stations, reception would be satisfactory. However, what the less technically sophisticated did not understand was that, for an AC radio, the power line supplying the set with electricity also acted as an antenna. (They also didn't understand the dangers of grounding DC and AC-DC sets in this manner, or learned through blown fuses and burned-out antenna coils. Some set manufacturers did add a warning tag advising against grounding the antenna post.)

At the same time, certain enterprising manufacturers with sufficient powers of observation to grasp this simple principle and with an appreciation of the public's gullibility, started flooding the market with a simple little device with the attractive name of an "aerial eliminator." For as little as ten cents, the consumer could buy a neat little gadget which could be attached to a radio in a minute or two and avoid those perilous trips to the roof and the costs and hazards of erecting an antenna system in the back yard. What a deal! And for those who felt that something was not quite right if ten cents could accomplish so much, there were more impressive and "adjustable" models available priced up to \$4.50. Unfortunately, unsuspecting buyers

did not realize that any one of them would work just as well as connecting the antenna post to a radiator.

People bought these useless devices by the thousands, and plenty of prosperous businessmen became even more prosperous by selling them. An afternoon spent window-shopping on New York's Radio Row could turn up at least twenty different types, with models ranging from the *Midget* at nineteen cents to the *De Luxe* at eighty-nine cents. They were also easily obtained through department store mail and phone orders. In many cases, it was hard to resist the glowing guarantees

with closed ends. From one end protruded short red and green wires, and from the other a short brown wire. The red and brown wires were joined together inside the cylinder to form a single, continuous wire running through the cylinder but with different colored ends. On later models, the ends of the brown wires were connected by a small grid condenser consisting of a piece of mica fiber wrapped in lead foil and paper; the end of the green wire was connected to a bit of wood.

Another model, the *New Super No Aerial*, an "adjustable" model, anticipated and refuted potential skepticism (at least to its own satisfaction), with the glowing statements: "This

instrument is not just another radio gadget. It is carefully designed and engineered for the purpose intended (whatever that was, but certainly not improved reception..Ed), the result of much experiment and investigation."

In its February, 1935 issue, *Consumers' Research Bulletin* (forerunner of today's *Consumer Reports*) reported the results of its testing of the *New Super No Aerial*:

"Tests on this 'instrument' showed that the volume obtained from the loudspeaker with the eliminator connected and the adjustable sliders set for maximum volume exactly equalled that obtained with the antenna post directly grounded. Adjustment of the sliders, which represented so much research and engineering, served only to decrease the volume."

In general, *Consumers' Research* found that the performance of a radio connected to any of the eliminators it tested was markedly inferior to the radio's performance when connected to a good outside antenna, and that, on the average, worse reception was obtained with the eliminators than with the antenna post directly grounded and no antenna in use. When a number of eliminators were examined, it was found that they worked simply by virtue of the fact that they grounded the antenna post, either directly



Forget About Your Aerial with . . .

### RADIO CONTROL

Just plug this amazing 3-purpose device into your light socket! It does away with yards and yards of outside aerial wire and poles! It eliminates crackling and popping noises caused by electrical apparatus! It separates interfering stations with a special built in wave trap.

Sold on Money-Back Guarantees.

Mail and Phone Orders ONLY  
Promptly Filled  
Radios—Sixth Floor

## GIMBELS

33rd & B'way PENN 6-5100

printed on the eliminator's carton such as "Greater Distance," "Greater Volume," "Eliminates Lightning Hazard," "Perfect Tone," "Perfect Selectivity," "Less Static," "Eliminates All Outside Wires," "Reduces Static and Noise."

One eliminator, the *Mar-Vol* (a play on the word "marvel") was similar in size and appearance to a baking powder can, had three wires emerging from the top but was essentially filled with sand. It proclaimed "To be used instead of the old-style outside antenna."

Models produced by Nu-Tone Laboratories of Chicago Illinois were originally constructed of a hollow cylinder

or through a small condenser, inductance or resistance. It was also found that the terminal that the user was instructed to connect to the ground post of the radio was in most cases connected to nothing. Adjustable features turned out to be quite valueless, merely serving to decrease the volume of the signal.

It took some time, but eventually outrageous claims were forced to be tempered. On February 17, 1939, the Federal Trade Commission issued a complaint against Electrical Laboratories Company, Inc. of New York which challenged the capability of its Walco Aerial Eliminator and its Dynamic Antenna to improve selectivity and tone, remove electrical noise, give volume and distance equal to outdoor antennas and with better selectivity, and prevent any dangers resulting from lightning, storms and short circuits.

In another case, Nu-Tone laboratories, maker of various aerial eliminators and line noise eliminators ("Nu-Tone," "Perfectone," "Clear-Tone" and "Marvel"), was forced by the Federal Trade Commission (Docket No. 4645) on April 24, 1942, to cease and desist from:

1. Representing that said device designated "aerial eliminator" will improve the tonal quality or selectivity of radio receiving sets to which it is attached, render such sets capable of receiving broadcasts from stations more distant than would otherwise be the case, perform the function of a radio aerial, or reduce noises due to static or other causes except at the expense of the incoming program;

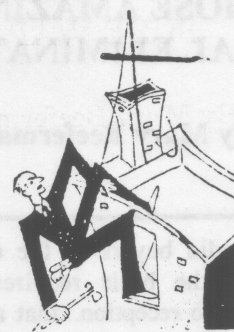
2. Representing that said device designated "line noise eliminator" when attached to the power line of a radio receiving set will reduce line noises or electrical interference, or improve the tonal quality of the instrument. ("Line noise eliminators" usually consisted of nothing more than a closed cardboard cylinder containing a small condenser, usually made from lead foil and paper. The cylinder was fitted with receptacles for connection between the radio and wall outlet. More on these in a future issue.)

Some of the more popular aerial eliminators of the mid 30's, their prices

and manufacturers included the following brands:

- Nu-Tone (Nu-Tone Laboratories, Chicago; distributed by F. W. Woolworth Co.) 10cents
- Compo (Compo Mfg. Co., Chicago; distributed by S. S. Kresge Co.) 10 cents
- Mar-Vol New Aerial (Mar-Vol New Aerial Mfg. Co., New York City) \$1.25
- Super No Aerial (Super Mfg. Co., New York City) \$1.25
- Lyons (Lyons Sales Co., Philadelphia) \$2.50
- Antenex Indoor Aerial No. 94 (M. M. Fleron and Son, Inc., Trenton, N.J.) \$1.00
- Insultenna (Insuline Corp. of America, New York City) \$2.50
- New Super No Aerial (Super Mfg. Co.) \$1.00
- Banks Indoor Antenna (Banks Indoor Antenna Co., Higginsville, Mo.) \$4.50
- Antenna-No (Inland Mfg. Co., Chicago) \$3.50
- Muter Aerial Booster, Line Filter and Eliminator (The Muter Co., Chicago; distributed by F. W. Woolworth Co.) 20 cents
- New Radio Control (Radio Control Engineering Co., New York City) \$2.00
- Fleron Lamp Socket Aerial No. 28 (M. M. Fleron and Son, Inc., Trento, N.J.)

In the case of the last unit, the Fleron Lamp Socket Aerial, Consumers' Research found that this unit worked on a slightly different principle from most. A socket containing a capacitor coupled the antenna post of the radio directly to the power line, the ground post being connected as usual. Of course, tests showed that the device showed no advantage over direct grounding of the antenna post. However, the sample tested had faulty insulation and, when connected blew a fuse. Since fuse protection was not all that common at the time, consumers were often rewarded with a damaged radio or a dangerous shock.



*Do you  
suffer from*

## Aerial Ills?

Muscular pains and strains and sprains... from that roof installation? Aches resulting from that quite-acrobatic attempt to repair? Or the agony of hearing the roaring, crackling radio-tone a faulty outdoor aerial so often causes? Then invest one (1) dollar in the

## Hamiltenna Aerial Eliminator



It attaches . . . quite simply . . . to the back of your radio, and eliminates all need for an outdoor aerial. Eliminates aerial noises, unsightly wires, and the several discomforts outlined above. It's equal to 75 feet of outside wire! (Made by the Insuline Corporation.)



## THE 1935 METAL TUBE WARS

By Marv Beeferman

As a radio restorer, did you ever wonder why there is a definitive absence of metal tubes in Philco receivers after the tube's introduction by GE in 1935? The answer is simply that Philco was so angered by this development that they began a huge advertising campaign attacking the metal tube's merits and entered into a long-standing feud with RCA, refusing to use them in any of their future sets. With additional combatants joining the heated fray (including McMurdo Silver, refusing to use metal tubes in his Masterpiece receivers), battle lines were solidly drawn. Were the attacks technically justified or were the resulting "tube wars" just a matter of "oneupmanship", sour grapes or the usual opposition to what many considered just a new gimmick to sell more radios and convince the public that their old receiver was now obsolete. It certainly seems that the technical advantage of metal tubes associated with broadcast receivers seemed questionable. Unfortunately, it took a World War to prove their true worth, a development that GE could hardly anticipate.

Advances in consumer electronics have come fast and furious in the last ten years. But we seem to have complacently accepted the fact that the computer, television, cell phone, CD player or video game system that was bought just recently may be doomed to obsolescence in just a few short years. However, in 1935, before society had not yet evolved its "throw away" mentality with an overwhelming desire by the majority of its members to participate in every new advance that might come down the road, the introduction of new technologies was often viewed with skepticism. Some objections did have technical merit, some had purely a commercial objective, and others were based solely on whim. But in general, there seemed to be no hesitation to blatantly play on the public's skepticism to advance one's case, and

taking on a giant like GE was not much of a deterrent.

One type of outlook was most strikingly illustrated by a notation in the *Consumers' Research Bulletin* (CRB) for November 1935 titled *Metal Tubes - "Radio's Newest Miracle"*:

"At their present stage of development they (metal tubes) serve only as new talking points for the salesman. "The Biggest Advance in Modern Radio Construction" says a *General Electric* advertisement. The thoughtful consumer will realize that an advance simply in construction certainly does not necessarily signify any accompanying benefit to the buyer...Indeed, the only advance affecting the buyer than can be discovered with metal tube radios is the one in price, an advance to the tune of about ten dollars for sets equipped with six or more "all-metal" tubes. The metal-tube receivers will not perform better, tube for tube, than the equivalent glass-tube receivers. As usual, development cost and initially higher manufacturing cost are being levied upon the long-suffering, gullible consumer, who not only pays higher initial prices, but also loses through the more frequent premature and unexpected failures that are characteristic of any new product."

Many readers took up the CRB banner, but sometimes not for the best of reasons. In one letter, by a Mr. Gerald W. Clemence of Washington, D. C. (October 26, 1936):

"Besides the disadvantages of metal radio tubes which have been pointed out by yourselves and others there is another which was called to my attention the other day when I serviced a General Electric table model employing RCA metal tubes. All had been attacked by rust. Of course it is only a question of time until the rust will penetrate through the shell of the tube, rendering it useless. It appears that this defect alone more than balances the principle advantages claimed, viz., better shielding and smaller interelectrode capacities, especially as these advantages are entirely insignificant in everyday reception of local stations."

The technical advantages of metal

tubes for use in broadcast receivers has been open to quite a bit of debate and information regarding this area can be found in numerous other sources. We'll look at some of these details in the second installment. In passing, however, what might be considered a summary of their overall impact was pointed out by John W. Stokes in his *70 Years of Radio Tubes and Valves*. He states that the most significant development in the history of metal tubes, the introduction of "single-ended" types which offered improved performance and eliminated top cap connections, had no direct relationship to the merits of the metal tube itself. However, this did set the stage for the abandonment of double-ended construction in all types of radio receiving tubes. But what is of most interest to this present discussion is the reason for their introduction and the resulting feud between RCA and Philco which ensued.

It has been suggested that the underlying reason for the production of metal tubes in the U.S. was the desire by GE, who had not been manufacturing receivers for the last five years, to re-enter the business. A major impetus to this decision was recent consent decrees dissolving the old RCA patent agreements. What better way to incorporate a unique sales feature into their new line of receivers? But although GE had the laboratory and engineering facilities to develop the metal tube, they did not have extensive production expertise or manufacturing facilities. As a result, it was arranged with RCA to have the new metal tubes produced in GE's former Harrison Lamp Works (which had since become RCA's tube factory).

GE's media blitz introducing the metal tube in 1935 was huge, with full page ads appearing in all major newspapers and trade and commercial radio publications of that time. Some of the advertising superlatives were quite interesting, some substantiated, others questionable. But by-and-large, there is no doubt that they were pointedly directed at the consumer. "Be modern - get a radio set with Metal Tubes" exhorted the New York Herald Tribune of November 19, 1935, listing no less than 48 receiver manufacturers who were "working full speed to supply the overwhelming demand for radios with

metal tubes." Included in the list were Atwater Kent, Air-King, Crosley, Detrola, Emerson, Fada, Hallicrafters, Midwest, Mission Bell, Pilot, Remler, Stewart Warner and Westinghouse. "Metal Tube Radios are modern," said GE, "not merely because Metal Tubes represent the greatest advance in Radio Tube design in 28 years, but because they enable a receiver to produce results that are far superior."

GE used the typical, simplistic arguments. Being "Sealed in Steel," they compared the tube to a fine watch and noted that things made of steel could be accurate within ten-thousandth of an inch. Thus, with the higher the precision with which a tube is made, the greater its efficiency, the more uniform the tube is and "the better the radio set can be made." GE claimed that metal tubes were quieter, more sensitive and better toned (whatever that meant). In a direct slap at Philco, advertising announced with much bravado that "Progress cannot be stopped."

Philco's campaign belittling metal tubes was no less extensive. In a full-page ad in The New York Times for April 8, 1935, Philco made "An Announcement of Vital Interest to Every Radio Owner...and to the Radio Trade." Claiming that the conclusions were a result of years of research, study, and experience in building 5,500,00 radio instruments, Philco countered that:

- a) Metal tubes in England were a dismal failure and were now defunct, stating that the "English catastrophe must not be repeated here."
- b) The tube was still in an experimental stage (although conceding that it might develop possibilities in the future).
- c) With more than forty types of high efficiency glass tubes available, metal offers no worthwhile improvement over glass in radio performance.
- d) With bulb size reduced and an equal amount of heat to dissipate, the smaller metal tube must operate at a higher surface temperature than its larger glass counterpart. Thus, Philco claimed, the high temperature was not only detrimental to tube life, but changed the characteristics of nearby coils, resistors, etc. and thus impaired "the delicate balance of all the parts of a radio, which is absolutely necessary for fine performance."

e) Production difficulties restricted the manufacture of certain highly desirable multiple function types presently available in glass. The initial metal tubes would be limited to a few, single function types. Thus, Philco concluded, to achieve a given performance, more metal tubes than glass would be required resulting in greater space requirements.

f) Metal tubes would increase prices, including the cost of additional current consumption without adding to performance.

g) The inability to see inside a metal tube was a real disadvantage. Glass transparency often allowed the user or technician to determine when a tube wasn't functioning and was also a great help in factory inspections.

h) Loss of vacuum was a serious problem because metal tubes required twice as many and more intricate vacuum seals.

i) Glass tubes provided a "higher power output of pure tone."

j) Glass tubes were just as rugged as metal, attested to the fact that they are universally shipped installed in their sockets and withstand transportation by rail, truck, steamship, and loading and unloading. They were also in daily use in automobiles and trucks over all kinds of roads.

k) Experience points to glass as a better choice for short-wave reception based on glass as being an inherently good dielectric and insulator.

McMurdo Silver tended to agree, prompting him never to use a metal tube in any of his sets. A scathing review of what were considered the "serious disadvantages" of metal tubes in The Silver Times for May 1935 (most likely the voice of Silver himself), parroted many of Philco's "objections." Much of it was similarly based on a "history of failure and trouble in England and Europe where they have been used and discarded during the past two years." Other than the single compensating advantage of slightly smaller size, the review cited:

- a) Greater heating due to a smaller heat radiating surface than equivalent glass tubes.
- b) The difficulty of eliminating all residue gas during the exhausting and treating process.

c) Difficulty in obtaining an air tight seal based on the use of spot welding and a multiplicity of lead wire seals.

d) Serious noise troubles resulting from the use of individual glass bead seals between lead wires and the envelope. Silver speculated that dirt, freed during the gas removal process, would deposit on the small glass insulators and provide a short leakage path to the common metal envelope.

Silver went on to conclude:

"Weighing the excellence and low cost of existing glass tubes against the uncertainty and absolute lack of improvement, or probably of even equal quality, of forthcoming metal tubes, convinces us that we have no right to inflict uncertain experimental tubes having a bad background on MASTERPIECE users. No other conclusion can logically be reached, for there is no sense in inviting trouble without even the promise of an offsetting benefit.

In our estimation, the metal tubes are a 'sales gag' this year."

Even by December of 1937, with many design improvements addressing his "concerns," McMurdo Silver was still not convinced. In a letter to Radio-Craft, he noted:

"It is difficult to accurately surmise the real reason for the introduction of metal tubes, but this would seemingly fall into the general category of gadgets for new sales appeal for which the radio industry is not unknown. The minor technical merits involved certainly don't offset the, as yet, unfinished trouble period attendant upon the introduction of any radically new device. They were certainly the subject of much sales "ballyhoo."

Whose talking points were most convincing and withstood the technical realities of actual operation and future developments? Who won the war? For these answers, see October's installment.

(Note: References will be included in the second installment.)



# NEW DEVICES SPUR BUSINESS

All-Metal Tubes and Novel Gadgets Among Innovations Included  
In 1935-36 Streamlined All-Wave Radios

## TRADE IN YOUR OBSOLETE RADIO at DAVEGA

From a leading New York newspaper of Sunday, August 18th

25% of RADIOS OBSOLETE

The obsolescence of more than 25 per cent of the receiving sets in use today—a parallel to the situation in the motor industry at the opening of the "model year"—now drawing to a close—is given by manufacturers as the outstanding basis for the belief that a record year for sales of units is about to be established.

Out of the "House of Magic" comes the new

### GENERAL

### ELECTRIC

General Electric leads the way with a new line of radios built around radio's newest miracle, the metal tube. The new metal tubes and a host of sensational features make the tone quality, the power and the distance-getting ability of these round-the-world radios something to marvel at. Come in . . . see them . . . hear them perform at Davega.

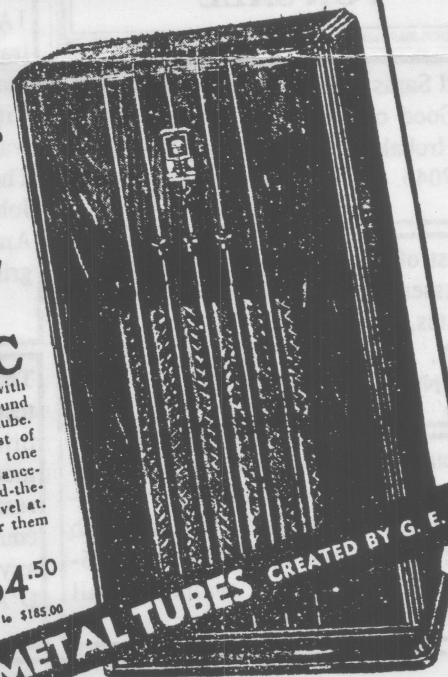
Model A-35

34.50

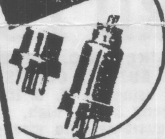
Model A-36

64.50

Other General Electric Radios \$34.50 to \$185.00



WITH THE NEW METAL TUBES CREATED BY G. E.



Exclusive FEATURES  
• Stabilized Dynamic  
Speaker  
• Permaliner  
• Sentry Box  
• Beautiful Cabinetry  
and many other features

Costs as Little as  
**15¢ A DAY**  
A year to pay

## Metal-Tube Radio Will Be Shown Tomorrow; New Device Reported to Be Indestructible

A radio receiver using all-metal vacuum tubes of a new design will be demonstrated for the first time tomorrow afternoon at 3 o'clock in the House of Magic room of the General Electric Building, 570 Lexington Avenue.

The new instrument is reported to feature indestructible all-metal

years. The popular tube of this type is octagonal. In England the all-metal units can be placed in the sockets of some of the standard glass tubes.

The metal cartridge is generally smaller than a glass detector or amplifier and resembles a bullet more than it does an electric lamp.

## CONNECTIONS

Free exposure for buyers and sellers! Unless requested otherwise, each ad will run for two months in both the *Jersey Broadcaster* and the *Delaware Valley Oscillator*. All buying and selling transactions are the responsibility of the parties involved.

## FOR SALE

Howard Sams PhotoFact volumes 1-2-3-4-5-6. Good condition. Call after 5 PM. Steve Hrobak, 62 River Road, Montville, N.J., 07045. (973)-334-7024.

Next list of *highly collectible* tubes now being assembled. Send SASE for list of duplicates, to be mailed in May. Jerry Vanicek, PO Box 4743, Chicago, IL 60680. No phone calls, please. (3/98)

Check out NJARC's capacitor program for those most commonly needed replacements. Contact John Ruccolo at any club meeting or call him at home (609)-426-4568 to find out what's available. All proceeds go to the club.

The ever-handly reference *Tube Lore* gives 186 pages of insightful scoop on about every North American tube there is. Reviewed by Eric Barbour in *Vacuum Tube Valley* as "an instant classic." Available from Ludwell Sibley, 102 McDonough Road, Gold Hill, OR 9725-9626 for \$19.95 postpaid in the U. S. and Canada, \$24.95 by air overseas. Clubs get a discount on multiple copies. (3/98)

Tektronix 556 dual-beam oscilloscope with roll-around cart and 53C, 53/54B, 1A4 (4-channel amp) and 1A1 (dual-trace) type plug-ins. Working and with manuals, \$75. Also selling a pair of Ritron (Carmel, IN) 2-channel portable walkie-talkies, Model RT-150, for \$25. They both work and take 9-volt batteries. John Okolowicz, 624 Cedar Hill Rd., Ambler, PA 19002, (215)-542-1597, grillecloth@compuserve.com. (3/98)

The NJARC tube program offers clean, tested, boxed tubes at very reasonable prices with availability at any club meeting (no dealers, please...not for resale). Proceeds go to the club. Of course, donations of radio-type tubes in any condition are welcome. See Gary D'Amico at the next meeting.

Communications and military radios, test equipment and some radar items. Send long SASE for large list. No sales until you have received my list; looking for some trades. Ray Chase, 1350 Marlborough Ave., Plainfield, N.J. 07060. (908)-757-9741. (3/98)

## WANTED

Buying European Radios! Grundig, Telefunken, Saba, Normende, Blaupunkt, French Radios, Polish Goplana, etc. Must be in mint or close to mint condition and in working order. No junkers, please! Richard Brill, P.O. Box 5367, Old Bridge, N.J. 08857 (732)-607-0299 Fax: (908)-679-8524) rgbent@aol.com

Any *Wireless Age* magazine, 1922-1925, and any *Radio in the Home* magazine (published in Philadelphia). John Okolowicz, 624 Cedar Hill Rd., Ambler, PA 19002, (215)-542-1597, grille cloth@compuserve.com. (8/98)

Edison Model 10 (or equivalent) dictaphone cylinders. Tony Trope, 33 Jackson Court, Fordes, NJ, 08863 (3/98)

# \$1

## DISCARD YOUR OLD AERIAL

Complete. Does away with Aerial entirely—Just place an F&H Capacity Aerial Eliminator (size 1½ in. x 4 in.) within your set. Simple instructions furnished with unit. Easily connected by anyone to aerial and ground of set. Your radio will then operate and tune in the same manner as if it were connected to an aerial. Operates on both short and long waves.



It is Most Likely Corroded and Has Poor or Loose Noisy Connections NO MORE BUZZES, CLICKS and shorts from summer rains and winter snow and sleet when using an F. & H. Capacity Aerial Eliminator. Equals an aerial 75 ft. long, strung 50 ft. high, yet occupies only 1½ inch by 4 inch space behind your radio—guaranteed to give you nationwide reception or your money back.

### BETTER TONE AND DISTANCE GUARANTEED

Sensitivity, selectivity, tone and volume improved. No lightning danger or unsightly lead-in and aerial wires. Makes your set complete in itself. Forget aerial wires and troubles—move your set anywhere.

### NOT NEW—VALUE ALREADY PROVED

On the market five years, 100,000 satisfied customers in U.S. and foreign countries. In use from the Arctic Region of Norway to the Tropics of Africa. Chosen by Government for use on Naval Hospital bedside radios. Each factory tested on actual long distance reception. Can not harm set—Easily connected to any radio, including radios having no ground or radios for doublet aerial.

**5 DAYS TRIAL** Mail coupon at once. Pay postman \$1.00 plus a few pennies postage on delivery. If not entirely satisfied, return within five days and your dollar will be refunded without question.

### —JUST MAIL THIS COUPON—

F. & H. Radio Laboratories, Dept. 3, Fargo, No. Dak. Send F. & H. Capacity Aerial. Will pay postman \$1 plus few cents postage. If not pleased will return within 5 days for \$1.00 refund. Check here ☐ if sending \$1 with order—thus saving postage cost—same refund guarantee. Check here ☐ if interested in dealer's proposition.

NAME .....

ADDRESS .....

CITY .....

STATE .....

### WHAT USERS SAY

San Antonio, Tex. It might interest you to know that with the Capacity Aerial Eliminator I get European stations easily and in the winter get Australia, Russia, Honolulu and many Jap Short Wave Stations. I get all Pacific Coast Stations on the broadcast band. Signed: J. K. Somervell.

Davenport, Ia. Received your Radio Aerial Eliminator and it sure works fine. Also works well on Short Wave band. Wish I had found it long ago. Signed: F. B. Boader.