Happy New Year and welcome to the 22nd edition of the NJARC Broadcaster. Yup...that's twenty-two years of nearly continuous issues from the same editor and I hope to offer my services for many more years to come. But it's up to you, the membership, to contribute relevant and interesting content to ensure a worthwhile product in the future. The Broadcaster is a club newsletter and shouldn't be "dictated" by one individual. More on this later.

Our December Holiday Party was a true success and the West Lake Golf & Country Club in Jackson couldn't have been a better location. I don't think I could describe it any better than a recent posting by members Marsha and Jerry Simkin:

"Beyond a shadow of a doubt, this year's holiday party was one of the best ones we have ever had. From the beautiful venue to the delicious menu, everything was first class and very reasonable for all we got. Imagine - cloth tablecloths and napkins, real dishes, glasses and silverware, wonderful service and no cleanup! Many thanks to members Bill & Lynn Zukowski for arranging for the perfect setting and to Marv, Richard, Dave and everyone else involved for all their hard work. We appreciate their efforts in coordinating these events and always look forward to them. For those of you who were unable to attend - you really missed an enjoyable evening."

Let's hope that the word gets out and more members will be able to join us next year. For now, we've captured some candid shots on the pages that follow. If you want to view the action of the Mystery Grab Bag game, member Bob Bennett suggests that you "just curl up by the fireplace, grab a nice warm drink, and enjoy the festivities from the game" by watching his Radiowild video on YouTube. The link is: https://www.youtube.com/Watch?v=Yq-BJSNES24.

What could it be? Member Dave Sica unwraps his Mystery Grab Bag gift.

The next NJARC meeting will take place on Friday, January 8th at 7:30 PM at InfoAge. Directions may be found at the club's website (http://njarc.org). This month's program will include our annual DX-pedition (in preparation for January's BCB DX Contest) and a members-only auction (no "junk" please!). We'll also be collecting dues for 2016.

Payment via PayPal is also available at the club's website but it will cost the club a fee. If you're receiving your Broadcaster via email and you're not sure about your status, contact Marsha at (609) 660-8160 or mhsimkin@comcast.net. While you're at it, you might want to discuss a lifetime membership. In any case, please renew early and avoid the cutoff date of March 31st.

We're kicking off the 2016 radio collecting year with a DX-pedition and a members-only auction. The "members-only" theme implies that you have paid your 2016 dues or will pay them at the January meeting. All proceeds go directly to the auction item owner and you're re-
THE JERSEY BROADCASTER 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. Dues are $25 per year and meetings are held the second Friday of each month at InfoAge or Princeton University. The Editor or NJARC is not liable for any other use of the contents of this publication.

**PRESIDENT:**
Richard Lee  
(914)-589-3751

**VICE PRESIDENT:**
Sal Brisindi  
(732)-308-1748

**SECRETARY/NEWSLETTER EDITOR:**
Marv Beeferman  
(609)-693-9430

**TREASURER:**
Harry Klancer  
(732)-238-1083

**SERGEANT-AT-ARMS (WEST):**
Darren Hoffman  
(732)-928-0594

**SERGEANT-AT-ARMS (EAST):**
Rotating

**TRUSTEES:**
Ray Chase (908)-757-9741  
Phil Vourtsis (732)-446-2427  
Bill Zukowski (njarc@optonline.net)

**TECHNICAL COORDINATOR:**
Al Klase  
(908)-892-5465

**TUBE PROGRAM CHAIRMAN:**
Al Klase  
tubes@njarc.org

**SCHEMATIC PROGRAM:**
Aaron Hunter  
(609)-267-3065

**CAPACITOR PROGRAM:**
Matt Reynolds  
(567)-204-3850

**RESISTOR PROGRAM:**
(To be announced.)

**WEB COORDINATOR:**
Dave Sica  
(732)-382-0618  
http://www.njarc.org

**MEMBERSHIP SECRETARY:**
Marsha Simkin  
33 Lakeland Drive  
Barnegat, N.J. 08005  
(609)-660-8160

Member Jerry Ingordo reports that he's scanned volumes 1 through 8 of the Gernsback Official Radio Manual and has posted them on ebaman.com. Jerry says to keep in mind that the scans are only as good as the originals but most are readable. You must create a login to download the manuals but it consists of only a screen name and password. Go to: http://ebaman.com/index.php/remository/…onic-docs/

Finally, if you recently purchased an LCR-T3 "graphical multi-function tester" that has been the talk of the Reflector and want to show off your mounting configuration, or just demonstrate it, please bring it to the January meeting. I'm sure there are a few members who have not heard of it and would appreciate seeing this electronic marvel.

**Upcoming Events**

Feb. 12th:  Monthly meeting at Princeton; Ron Hutchinson presentation on the Vitaphone Co.  
Feb. 20th:  Winter Repair Clinic at InfoAge.  
March 11th:  Monthly meeting at Princeton; Show & Tell and Hints & Kinks.  
March 19th: Spring swapmeet at Parsippany PAL  
April 8th:  Monthly meeting at InfoAge; Bill Zukowski's microphone collection.  
May 7th:  Spring Repair Clinic at InfoAge  
May 13th-14th: Kutztown  
May 20th: Monthly meeting at InfoAge; Radio Scavenger Hunt  
June 10th: Monthly meeting at Princeton; capacitor nomenclature, CRT rebuilding, radio power supplies.  
July 8th: Monthly meeting at Princeton; agenda TBA.  
July 23rd: Summer tailgate swapmeet at InfoAge  
Sept. 16-17: Kutztown
As a prelude to our 2016 Broadcast Band (BCB) DX Contest, Technical Coordinator Al Klase will host our popular "DX-pedition" at InfoAge on January 8th as part of our monthly meeting. The basic concept of the DX-pedition is to gather together a working collection of radios representing the various eras of receiver design in an environment that will allow participating NJARC members an opportunity to operate each set. Hopefully, inspiration will be provided for greater participation in our BCB DX contest to be held between January 15th and January 24th. (For details of the contest, see page 8.)

We're going to take advantage of the great facilities and hopefully quiet listening environment available to us at InfoAge. The primary theme will be broadcast band DX and battery-operated sets, but antenna facilities will also support short-wave and long-wave operation as well.

We'll attempt to maintain log books for each receiver so that both stations heard and user comments may be recorded. These might be published, along with photos, on the NJARC website and in the Broadcaster for future reference. We also might try to shoot some video of each set in operation and post it on our website.

If you plan to attend the January meeting, please try to come with sets in good working order that you don't mind having other club members operate. If you could bring a length of coax with a BNC connector on one end that can be connected to your radio, it would be helpful. We'll try to supply additional cables and adaptors, but your help would be appreciated.

We'll try to coordinate the different types of radios that show up so we don't end up with mostly All-American-Fives. Please contact Al Klase at (908)-892-5465 or ark@ar88.net to note the type of radio you plan to bring. It would be nice to have representative receivers in the following categories:

1. Crystal sets
2. Battery sets: Regens, TRF-regens, TRF's & Superhets
3. 1930's and 40's AC sets: TRF's and Superhets
4. Other entertainment sets
6. Transistor radios.

Various antennas will be provided and you're welcome to bring your own tuned loops for the broadcast band. We might consider playing into the wee hours if enough interest exists.

Technical Coordinator Al Klase explains some of the finer points of BCB DX'ing to an NJARC member at the 2015 DX-pedition.

With regard to our upcoming BCB DX Contest, Al suggests that you might want to consider categories 1, 2 and 3 to increase your chances of winning since not many members submit entries for these types of receivers. Also, try to keep a camera at the ready and send a photo of you and your rig to mbeeferman@verizon.net. Include the specifications of your entry, antenna, etc. and a few words about your listening experience.

Contest materials may be found at www.njarc.ar88.net/contest.html. Here you will find a suggested log sheet, a compilation of 50KW stations operating nights on "clear" channels, a listing of great-circle distances to cities with bigtime AM stations from Freehold, a dial calibration list of NYC daytime local stations and a list of DX target stations.

Former NJARC president Phil Vourtsis with his 2015 BCB DX Contest entry.

The 2016 NJARC DX-PEDITION

The NJARC of the future

By

Marv Beeferman

After twenty-one years of being your Jersey Broadcaster editor and about to close in on the 25th anniversary of the club, I thought it might be constructive to consider my personal observations about what the future holds. What also prompted my thoughts were some recent postings by the New England Antique Radio Club (NEARC) and the Mid-Atlantic Antique Radio Club (MAARC).

A recent inventory of MAARC membership found that member numbers had declined a bit and that many members were not just interested in antique radios but also in hi-fi audio, ham gear, tubes and/or tube testers, music amplifiers, military gear, car audio and test equipment. As a result, MAARC has taken on an initiative to more closely identify the club's focus with these varied, yet related interests.

As part of MAARC's rebranding, a club table was set up at the Capital Audiofest. Some vintage audio gear (Morantz, Leads and Brooks amps and pre-amps) and a TV-7 tube tester were placed on the table. Folks went nuts! Some 20 to 30 attendees became seriously interested in seeing more detail about how MAARC might be something they need to join.

Bottom line is that, although the interest in vintage, tube-based electronics may be changing, it is still alive and well. Fortunately, although it's our namesake, the NJARC has always considered itself to be not just an "antique radio club". Considering our tech-talks, show & Tells and museum exhibits, our activities cover a diverse range of vintage electronic interests. What seems to me to be the next step in maintaining membership at a level that will support the club in the future is to expose this diversity to the public.

Flea markets are a good start. The Michigan Antique Radio Club (MARC) has rebranded its shows as "Vintage Electronics Expositions." The club felt that this is a more accurate description of what their show offers as well as an easy marketing name to attract "newbies." The show still mainly features antique radios but also includes vintage audio, television, computer and gaming and related devices for sale. The hope is that collectors of all types of items will be attracted.

As the MARC media director noted: "If we can get them in the door, they are..."
often drawn into our vintage electronics hobby that few in the general public knows exists. Plus, we know how to fix stuff...so let's pass our knowledge on to the younger generation!"

The NJARC tailgate swapmeet last summer was a good start in this direction when the Ocean-Monmouth Amateur Radio Club (OMARC) was asked to participate and we have agreed to participate in their swapmeets. However, perhaps further steps need to be taken. Should the club be setting up more tables at ham-fests, computer fests, audio swapmeets, etc.? Should we consider changing the name of our swapmeet to a "Vintage Electronics Expo" to attract more diversity and invite other vintage electronic collectors to sell? What are your thoughts and would you be willing to volunteer to man a table at other events to help ensure the viability of the club in the future?

A second consideration for the club's future regards our monthly newsletter, The Jersey Broadcaster. The New England Antique Radio Club (NEARC) has a membership of close to 400 and considerably more financial resources. As a result, if you receive their monthly newsletter, Radio News, via the internet, dues are $6 annually. If you receive the newsletter by snail mail, dues are $15 annually. At $15 however, with publishing costs and postage, the club just breaks even with nothing left over for other club activities.

For the NJARC, total cost of mailing the Broadcaster to 56 members is $972. That's $17.36 per person and it only leaves $7.64 from your $25 dues for all other club activities! Consider this...No officer or volunteer of the NJARC receives any form of salary for the time they put into making the NJARC the club that it is; it is strictly Pro Bono. All funds the NJARC receives from dues, swapmeets, or any other sources is reinvested into making the club a better one and in spreading the word about its activities. If you are receiving the Broadcaster by mail, don't you think it's time to step up to the plate and switch to internet delivery? You can print it on your own printer. It's great in color, either on-screen or printed. And finally, you're putting an additional $17.36 into the club's treasury.

Should the club consider charging members an additional amount for dues if they receive their newsletter by mail? What do you think? However, the club is aware that some of our members do not use computers at all and only want the Broadcaster by mail. No problem...I will continue to offer the printed version for the foreseeable future. Enjoy!

A second consideration for the newsletter regards submitted articles. Last year, the president of the NEARC challenged his members as follows: If of the 398 members, a minimum of 40 articles to the NEARC newsletter was not submitted by 12/31/2015, he would not run for any office in 2017-2018. In addition, potential writers would receive a year's free dues if they do submit an article. As of 11/1/2015, 23 NEARC members had contributed.

Don't worry...I'm not considering quitting my job as editor (not in the near future anyway). And many thanks goes out to all those members who have contributed articles in the past. But I think we can do much better. The NEARC president couldn't have put it any better:

"Several of the members stopped at our Fall Brookline show to explain how busy they are. Good. Where I come from, if you want something done, ask a busy man. It's a wonderful thing when you think about it, that G-d gave each of us the exact same 86,400 seconds every day. You and I may have a dollar or two more or less than each other, but I'll guarantee we have exactly the same amount of time each day. We each decide ourselves what we will do with our day."

"If every one of the 400 NEARC members spent one hour to write an article for YOUR RADIO NEWS, collectively you would invest approximately the same amount of time I invested as President of NEARC in 2014 and 2015. My personal belief is that no member has a good enough excuse not to try to put an article together before the end of the year."

"I believe every one of you has a favorite radio, test technique, interesting radio person or electronic story to tell the group."

So what do you say? By having articles "at the ready," it takes a lot of stress off my publication date without having to come right down to the wire every month thinking of articles to include in the newsletter. Don't worry about being perfect, I'm a pretty fair editor. I would personally appreciate it if you could take an hour or two each year out of your busy schedule to support YOUR Jersey Broadcaster.

What to write? Consider the following:

- Show some of your collection.
- How did you get involved in antique radio?
- Show your repair bench. Describe a few of your repair techniques and "kinks."

Finally, let's talk about what I consider the jewel of the club, the Radio Technology Museum at InfoAge. Because of the leadership and hard work of such volunteers as Ray Chase, Harry Klancer, Al Klase and a few others, our museum continues to be one of the few remaining archives of New Jersey's rich electronic heritage. Two of its major problems is lack of volunteers and lack of space for all the material that remains in storage. Fortunately, the lack of space issue may have some resolution. At an InfoAge "President's Forum" on October 21st conducted by Chairman Mike Ruane, it was noted that, subject to obtaining increased financing, the NJARC museum should be able to expand to the 9036 area of the "H" building (where we presently have storage) by 2017. Lack of volunteers is a much harder subject to tackle, and is similar to the article contribution subject previously addressed. We can't continue to burden the same people to continue to devote hours and hours of their time and efforts and expect the museum to maintain the high standards it enjoys. New blood, new ideas and new energy are the lifeblood of any organization that anticipates maintaining its vitality and relevance far into the future.

As far as the present museum itself, the only recommendation I see is a more relevant link to the InfoAge mission of using science and history to empower and inspire students. We love our tube-based antiques, but kids today live in a totally different world. Some robotic/cell phone exhibits and hands-on demonstrators linking present day technology to the past may be in order.

Well, I guess I've ranted enough. I'm sure you have many additional ideas that will move our club on a successful track far into the future. But it's up to you "younger" guys to carry the ball in that direction long after many of us are gone. Let's hope you're up to the task.

Your NJARC Jersey Broadcaster editor,

Marv Beeferman
mbeeferman@verizon.net
TROUBLESHOOTING INTERMITTENTS

This article is reproduced from Radio Age for December 2014 (Volume 39, No. 12), the journal of the Mid-Atlantic Antique Radio Club. Note that the article omits silver-mica capacitor problems that sometimes act as intermittents. The service shop edition that the article was based on was probably written prior to the time when this problem began to surface...Ed

Now and then, a customer who brings a radio to a service shop will say, "This should be an easy problem to fix because the radio plays perfectly most of the time." Another customer might say, "This must be a serious problem, because the radio does not light up at all." Most of us who work on radios would prefer the second case to the first. Intermittent problems can make life miserable for those of us who repair radios. The Lonestar Waveform (the newsletter of the Texas Antique Radio Club) often reprints the "Radio Service Shop" column from Radio and Television News magazines. A recent reprint in that newsletter contained useful information about finding intermittent faults. Here are some hints:

Keep track of how much time elapses from when the radio is turned on until the intermittent problem occurs. That may provide a clue as to what is causing the problem. Most intermittent problems are caused by the expansion that takes place when components heat up. Tubes heat up first, then resistors, and later, coils and capacitors. When a radio stops playing soon after it is turned on, then it begins to play again after it cools, a tube could be the culprit. If the problem develops only after the radio has been playing for quite some time, say a half hour, it is more likely to be a defective coil or a capacitor.

A common situation is a radio that exhibits noise and abrupt volume changes when first turned on, but after it heats up, becomes stable. Often this problem is caused by those metal-encased, tapped power resistors. When the radio is cold, the taps make poor contact, but when the resistor heats and expands, the body of the resistor makes tight contact with the metal band of the tap.

John Frye, the author of the column, claims that an experienced service technician can often tell in what circuit a capacitor has opened by listening to the change in sound quality when the drop in volume occurs. A coupling capacitor that opens will often cause a severe loss of low frequencies because the high frequencies will still be passed by the small capacity remaining from leads. A plate, cathode or AVC bypass capacitor that opens will often cause a characteristic hissing - a near oscillation - when the volume drops. A bad coupling capacitor in the oscillator will often cause detuning of the signal before the radio stops playing.

Coils that carry DC current, e.g., primaries of IF transformers or audio transformers, tend to open and can cause noise. Frye says that coils that open often produce a high-pitched squeaking sound in addition to a rustling sound.

Defective filter caps in AC-DC sets can cause a scratching sound even though there may not be the usual hum that arises from a failing electrolytic cap. Bridge the suspected capacitor with a good one to see whether the noise stops. Microphonic rectifier tubes in AC-DC sets (e.g., 35Z5, 35Z3, 35Y4) can cause noise due to vibration in the tube caused by the sound waves from the speaker. Try replacing the tube.

Cathodes of AC-DC set tubes that develop partial or complete shorts to the filaments are sometimes encountered, and cause hum.

Suspect a leaky coupling capacitor that is lowering the bias on an audio tube when the radio plays fine at first, but develops distortion after it has been playing for a while. Capacitor leakage can increase as the temperature of the capacitor increases. Of course a tube with grid emission can lead to similar symptoms.

Since heat causes many intermittent problems, there are cases where a radio has an intermittent problem when in its cabinet, but when the chassis is on the workbench where there is better ventilation, the problem does not show up. In such cases, try putting an infrared heat lamp on the chassis to raise its temperature.

When you start to consider an article about a relatively rare radio, things look simple at first. Describe its physical appearance, construction, unique features and circuitry and provide the background of its manufacturer. But after a little research, my choice of the "Splendid De Luxe" Model "B" radio receiver, which I obtained from the Richard Hurff estate, may not have proved to be such a great idea with regard to just who manufactured it. Luckily, I got a good start from Dave Crocker's article in the July 1997 issue of Antique Radio Classified titled "The Splendid Receiver - Variations on a Theme" so let's start with the easy part.

The radio's wooden enclosure measures 8 1/2 high, 10 3/4 wide and 6-3/4 deep (see Figure 1). It has a very high cover lid in order to clear the exposed tube and unique dial lever. The extra space could also accommodate a set of headphones and perhaps an extra tube. The radio is constructed of two Bakelite panels separated by a wooden strip but connected by two flat metal strips. The bottom metal strip connects a tapped coil under the left-hand panel to the grid of the tube socket on the right-hand panel. The top strip connects a variable tuning condenser under the left panel to a fixed condenser under the right panel. In addition to the removable panel strips connecting the two sections, two wires cross under the wooden panel separator. Unfortunately, these were permanently soldered and had to be cut to allow photographing the bottom of each panel.

The receiver uses a simple regenerative circuit for operation. The odd-ball dial lever prevents hand capacity from detuning the unit and doubles as a Vernier for fine tuning. The left-hand panel (Figure 2) tunes and the right-hand panel (Figure 3) does the detecting. The regenerative detector uses a fixed tickler. The tuning section consists of a variable tuning condenser and a tapped double coil. The fixed tickler coil is mounted concentrically inside the larger tuning coil.

The detector section houses a Bradleystat to control regeneration, a type 01-A tube socket and a fixed condenser. The installed tube (D-LUX BRAND) is somewhat unique with its short stature and deep blue color. It has a test tag from the Radio & Electric Shop of Cincinnati,
Ohio with a test date of Nov., 1925. Unfortunately, it is stuck in its socket and has separated from its base so a little restoration is in order.

The absence of a grid-leak resistor is evident. Perhaps a graphite pencil line drawn on the fixed capacitor served as a high resistance grid leak. A schematic of the radio's circuit is shown in Figure 4.

Now comes the hard part. The tag on my "Splendid De Luxe" identifies the manufacturer as the W. F. Main Radiophone Co. of Cedar Rapids Iowa - Chicago Ill. The circular tuning dial is embossed with "SPLENDID RADIO CO. CHICAGO."

Little is known of the Splendid Radio Co. of Chicago. It appears to have been a small Midwest radio concern that sold a number of different radios under its brand name and was building tube sets and crystal sets in 1922. The crystal set is seldom seen but shares distinct traits with the "Splendid De Luxe" such as the terminals, variable capacitor, Audiola fixed capacitor and its large, nickel-plated dial scale. Interestingly, this crystal radio is also almost identical to the 1922 Audiola crystal set manufactured by the Audiola Radio Co., also of Chicago. (See Maurice L. Sievers Crystal Clear, Volume I.)

Little is also known of the W. F. Main Radiophone Co. of Cedar Rapids, Iowa. It began selling radios in the early 1920's under the name "Splendid." The Kitzen company of Wisconsin and the Tri-City company of Davenport Iowa manufactured some of their radios that were sold under the "Splendid" trade name using the Kitzen and Tri-City Armstrong regenerative licenses. Two of these were the Standard-Splendid Grand and Splendid Deluxe Model A.

Continuing with this train of research, Dave Crocker, in his article previously referenced, describes a radio virtually identical to my "Splendid De Luxe" called a "Splendid Sr. - Model III" manufactured by the W. F. Main Radiophone Co. of Cedar Rapids, Iowa. The only difference is that the dial plate has a half-moon shape instead of being completely round resulting in the "Splendid Radio Co. - Chicago" being cut off. Another virtually identical set Dave has found is called a "Masterphone" manufactured in Iowa City, Iowa by the Masterphone Co. You can find this radio in David and Betty Johnson's Guide to Old Radios (2nd Edition) on page 52 but it is credited to the Boston Radio Manufacturing Co. in Massachusetts.

Unless you're not confused yet, a "Splendid Jr." receiver has surfaced manufactured by W. F. Main of Cedar Rapids. This set is again almost identical to the 1922 Audiola crystal set manufactured by the Audiola Radio Co., also of Chicago. (See Maurice L. Sievers Crystal Clear, Volume I.)

Finally, John Terrey's (former Antique Radio Classified publisher) collection reveals still another version. It carries the similar Masterphone name of Iowa City but major changes have been made by 1923. Instead of two control panels, this radio has only one large Bakelite one. The small dial knob and aluminum plate has been replaced with a standard, larger molded dial. Also, the configuration of the coils has been changed to a "pancake" construction and the right-hand rheostat knob has no metal dial plate. Overall, it's kind of a "plain Jane" receiver and probably the company's last since, by this time, the names "Masterphone" and "Splendid" have disappeared from radio directory lists.

What this article emphasizes is the difficulty in pinning down the exact manufacturing source of a radio built in the early 1920's. Besides the common use of the same parts and similar designs in radios offered by different manufacturers and the rebranding of nameplates to suit different distributors and locations, one underlying factor holds true...many companies, although legal Armstrong regenerative circuit licensees, sold their products through channels of distribution (jobbers and dealers) not named in their original Armstrong license agreement. They also sub-licensed the patent to other companies. In order to hide this infringement, we see the convoluted links of the "Splendid" Radio Company to various designs, manufacturers and locations.

In the 1920's and 1930's, some radio listeners would compete with each other for the reception of the most distant stations using the same receivers that that we now restore and cherish. We can recapture some of the excitement that the early DX’ers experienced in our own contest.

**Official Contest Rules**

**THE OBJECT:** To use vintage radios receivers to receive broadcast-band signals from the greatest possible distance. Performance will be judged by the total mileage for your ten best loggings during a 24-hour session. You will be competing against competitors using similar receivers.

**ELIGIBILITY:** The contest is open only to members in good standing of the New Jersey Antique Radio Club.

**CONTEST PERIOD:** The contest period will be from 12:00 Noon, local time at the receiving location, Friday, January 15, 2016 through 12:00 Noon, Sunday, January 24, 2016.

**SESSIONS:** Contestants may submit logs for any two, 24-consecutive-hour sessions (noon to noon) during the contest period. You may use only one receiver during a session. That means you may not "bird dog" the simple radio with a more complex radio. You may submit logs for two different receivers. They need not be in the same category.

**FREQUENCIES:** The Broadcast Band, as defined for the contest, will be from 530 to 1600 kilocycles. No stations on the new extended band, 1610 to 1710 kilocycles, will be counted since many early radios did not cover those frequencies.

**RECEIVER CATEGORIES:**
- A - Crystal radios
- B - Primitive tube or transistor receivers (homebrew also) -1 to 2 tubes or transistors, plus power supply.
- C - 1920's battery sets (homebrew also) -batteries or modern power supply are OK.
- D - Other tube radios sold for home entertainment.
- E - Amateur, commercial, and military tube-type communications receivers.
- F – Any radio of your choosing.
- G – “Light-Weight” - Any radio weighing less than one pound (454 grams).

**SPECIAL AWARDS** will be given for the best performances by first-time contestants.

**ANNUAL AWARDS** will be given for the best performances by first-time contestants.

**LOGS:** Submit a log for each of your contest sessions (maximum of two). Each log header should include contestant’s name, address, e-mail address if applicable, phone number, category, and description of receiver and antenna. Please include your listening address if it is different from your mailing address.

Make a log entry for each station you claim to have heard. Stations must be positively identified. (This is being done on the honor system, and is a somewhat variable concept. If you hear Boston weather on what you know is 1030KC, then go ahead and log WBZ. However, just because you heard a signal on 1160KHz doesn’t mean you heard KSL in Salt Lake City.) The contest committee reserves the right to disallow what it feels are outrageous claims. Each entry should include time, frequency, call letters, location, and optional comments. Although we’re only judging your ten most distant loggings, submit as complete a log as possible. The committee may make special awards for most stations, most interesting log, etc. as it sees fit.

A log sheet has been provided for convenience. You may reproduce it or generate a similar one of your own. Logs must be postmarked not later than midnight Monday, February 1, 2016.

Logs may be submitted as email attachments.

**SCORING:** Distances to stations will be calculated by the committee, and will be based on great circle distances from Freehold, New Jersey for listening posts within a 100-mile radius of Freehold. We will calculate mileage for other entries based on actual listening location. In all cases, please indicate your ten best loggings to make our job easier.

**Special Rule #1:** A contestant may claim only one of the Cuban time stations, Radio Reloj, regardless of how many are actually heard. All will be scored as 1279 miles (Havana).

Submit logs to: Tom Provost, 19 Ivanhoe Dr., Robbinsville, NJ 08691, tprovost@pppl.gov

Questions: Al Klase - 908-892-5465 - ark@ar88.net, Tom Provost - 609-243-2508

A photo of you and your rig and its description and comments on your listening experience will be appreciated. Please send to Mary Beeferman at mbbeeferman@verizon.net.