

# The Jersey Broadcaster

NEWSLETTER OF THE NEW JERSEY ANTIQUE RADIO CLUB

April 2007

Volume 13 Issue 4



Reported by Marv Beeferman

## THE ON-LINE BROADCASTER

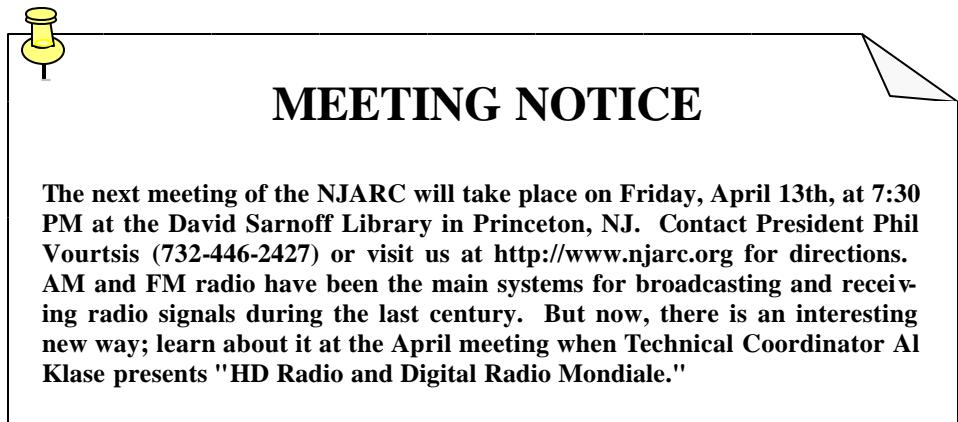
The New Jersey Broadcaster is now on line. To date, 80 of your fellow NJARC members have subscribed, saving the club some \$1,400 per year. Interested? Send your e-mail address to:  
mbeeferman@cs.com  
Be sure to include your full name!

At the April meeting, Technical Coordinator Al Klase presented the winners of our BCB DX contest and Homebrew contest. Thanks to all who participated. A summary of results and some photos of the homebrew entries can be found in this month's *Broadcaster*.

The last Sunday in March brought out the NJARC "Radio Rescue" squad to a deceased radio collector's home in Wanaque, New Jersey. The collector was John Rugel, plant engineer for Teledyne Powers Alloys, in Clifton, New Jersey. His family, wife Heidi, son-in-laws Jeff Miller and Pete McPhee, with their wives Beth and Jen, moved a mountain of old radio items from the attic, basement and second floor to the living room, near the front door. The ladies catalogued the items and then our team transported them to four waiting mini-vans.

Following lunch at the art deco Skyline Diner, the collection headed south to our museum at InfoAge for cataloging. The NJARC wishes to thank the Rugel and Miller families for getting in touch with us through our website so this collection can be cared for and appreciated by future generations. (Reported by Richard Lee)

Member Ray Chase was wondering if there any interest in a club group visit to



the Fort Monmouth Communications Museum.

"Many of you may have visited the museum in the past and it has not changed much in the ensuing years. It is a small museum that can be toured in an hour or less but it still has some very interesting artifacts that go back to Armstrong's work. (The museum has a much larger storage area which is presently off limits.)



NJARC volunteer Richard Knapp gets ready to attack the many items being readied for the "Miller" auction. See page 7 for more details.

Unfortunately, security makes entrance to the fort a somewhat daunting affair; a lot of personal ID information must be supplied days or weeks in advance of a visit and forms must still be filled out at the gate upon arrival. Also, visits are only allowed during regular working hours—Monday to Friday."

If there is interest in arranging such a visit, Ray has volunteered to make arrangements with the curator. Ray can be contacted at 908-757-9741 (enrpn@erols.com).

Technical Coordinator Al Klase has announced a firm date for the InfoAge Crystal Radio Seminar - June 23rd. This event will give you the opportunity to share the magic of crystal-set building.

The club will supply a kit of parts and technical assistance to construct the NJARC "Pretty Good Xtal Set" which Al has designed. Participants will wind their own tuning coil and assemble approximately ten components into a working receiver. Children 10 and older, accompanied and assisted by an adult, are welcome.

General admission is free, but there is a \$15 participation fee for each kit. The number of kits are limited, so contact Al at 908-782-4829 (al@ar88.net) to reserve a kit. Registration opens at 9:30 AM, orientation starts at 10:00 and the seminar will run until 4:00 PM. Bring a bag lunch or chip in for a pizza.

In addition, working antique and contemporary crystal sets will be displayed and a repair/evaluation area will be available.

**NOTICE!**  
**THE MAY MEETING &**  
**AUCTION WILL BE HELD**  
**ON THE 4th AT INFOAGE.**

**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 \$20 per year and meetings are held the second Friday of each month.

The Editor or NJARC is not liable for any other use of the contents of this publication.

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## A COUPLE OF RADIO STORIES

By Ray Chase

### How Simple Can You Make A Radio?

I recently picked up a very nice Air King five-tube small tombstone. On the front was a bezel that said "Air Queen" so, before firing it up, I headed for my Riders to check the schematic. I found a "Queen" model but the tube line-up did not match mine at all. There was no paper label in the case or tube layout diagram so I figured I'd pull the tubes to verify what they were.

Upon examination, I was intrigued to find a five tube transformerless set with "big-pin" tubes. I also found that the line cord had been replaced by a conventional two-wire cord which begged the question how the series string was powered? To my surprise, one of the tubes was a 340, completely silvered like a 201. I assumed that it was basically a type 40 labeled 340 since Cunningham customarily labeled their tubes 301, 345, etc. In addition, the wafer socket was marked 34; more mystery! But a type 40 tube in a series string was totally out of place.

The next step was a random search of all the Riders that had Air King radios. It did not take long to find it in Vol. VI as a model 50 AC/DC set. The 340 turned out to be a ballast tube and the radio is a TRF with a 6D6 RF amp, 6C6 grid leak Det/Amp and a 43 Audio. A 25Z5 rectifier completes the tube line-up.

The radio plays well and is quite sensitive, but not very selective. There is no AVC, so tuning requires both hands. The tuning cap is direct connected to the knob so you only get 180 degrees of swing to cover the band. There is what appears to be a local-distance switch on the rear of the chassis (not shown on the Riders schematic); it apparently cuts out the RF stage. The speaker is only 4.5" in diameter and with grid leak detection, there's no fidelity here. Also, one side of the line is connected directly to the chassis, so beware! At least it will not have any image recep-

tion problems.

Why the 34 marking on the tube socket? Well, Air King was located in Brooklyn and in going through Riders, I noted that Air King had some strange tube line-ups and circuit designs. (As a Brooklyn native, I hope Ray wasn't implying a direct relationship between strange tube lineups and the home of the Brooklyn Dodgers...Ed.) This was obviously a very cheap radio and Air King seemed to use whatever leftover surplus parts were available to cobble up radios. Hence, some wafer sockets marked 34 were found and, what the heck, that's close enough to 340.

I guess this is a study in "how cheap can you make a radio"; it would be interesting to know what this one sold for. The proliferation of oddball radios using big-pin tubes just about the time that RCA had a huge marketing push on octal tubes is another story for another time.

### Under the Lid History

At a recent Estes auction I acquired a nice 1927 Victoreen battery superhet that came from the collection of G.J. Windau from Fostoria, Ohio. The tubes were missing and I think this one takes 199's. It is very clean and looks like it will fire right up, but I haven't tried it yet.

Inside was a large manila tag on which he had listed the date of acquisition, (Dec. 1983), a repair history and stations that he logged along with the dial settings. I counted 55 stations from Boston to Colorado and all points in-between. Amazing!!

Also included were some notes on optimum operating voltages and the fact that both audio transformers were replaced, each at different dates; the previous owner really used this set. Inside another even nicer battery superhet that I was not successful in bidding on, I noted that the same previous owner had left his bid card from an auction in Ohio where he acquired it in 1980 for \$15.00. On the bid card he also listed that he bought a Jackson Oscillator for \$1.00 and an Atwater Kent 40 for \$1.00. Ah for the good old days!

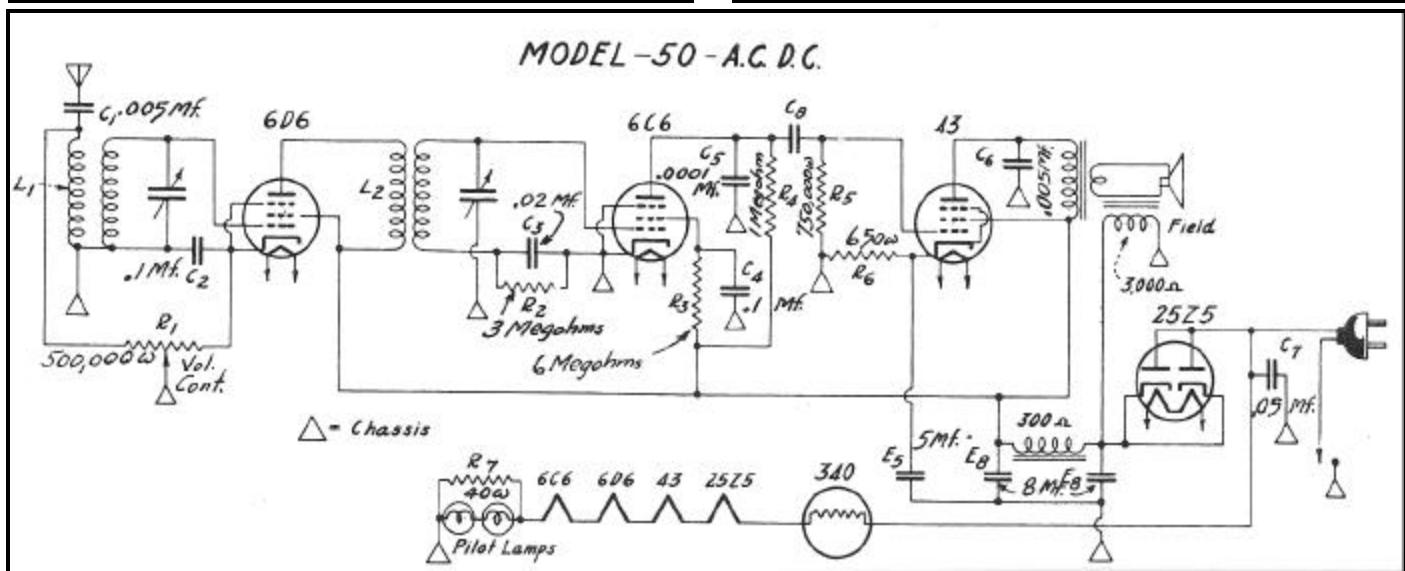
It's especially nice when you get some history with a radio when you buy it. I probably will not have the patience to log anywhere near the number of stations that the previous owner obtained.



Air Queen 50-A.C.D.C.



Rear View—the 340 ballast tube is to the left



## A DAY OF RADIO ON LONG ISLAND

By Richard Lee

Last month (Saturday, March 3rd), I had the pleasure of attending Long Island Radio Day at the Tilles Center Atrium on LIU's CW Post Campus in Brookville. The soon to be annual event was sponsored by the Long Island Wireless Historical Society, WCWP/88.1 FM, the Rocky Point Historical Society, the Sayville Historical Radio Society and the Peconic Amateur Radio Club.

Following opening ceremonies, there was a presentation by Neil Heft, President of the Radio Central Amateur Radio Club on the history of Ham radio on Long Island. This was followed by our very own Alex Magoun, Executive Director of the David Sarnoff Library, who spoke about David Samoff and the history of RCA.

On exhibit were numerous information booths on early Long Island radio transmission. The Rocky Point Historical Society had built a 4-foot replica of the 1921 tower erected at the RCA Radio Central Transmission Station. This organization helps maintain the original 1902 ship-to-shore Marconi wireless station. The story goes that, in more amicable times, Major Armstrong bought the building and had it moved from the original Babylon, N.Y. location to RCA's Rocky Point Station.

Another booth displayed information regarding Nikola Tesla's transmission work and his 1901 station in Shoreham, Long Island. There were also exhibits of vintage radios and radios for sale. NJARC member Tom McCawley offered various restored 30s, 40s and 50s receivers.

I had an interesting conversation with Phyllis Grebe, daughter-in-law of Alfred Grebe, the well-known Queens, N.Y. radio manufacturer. She discussed how Alfred Grebe established the Grebe radio factory at the site of the family's original

home in the Richmond Hill section of Queens in 1919. I told her that I had visited the site, which is now the Jamaica Hospital Medical Center. There is a plaque at the center's entrance commemorating Alfred H. Grebe..

Mrs. Grebe went on to explain how the company's radio station WAG ("A"lfred H. "G"rebe) went on to become the famous New York station WABC in 1928. Ironically, the station was sold to the Columbia Broadcasting Co. and its call letters were changed to WCBS.

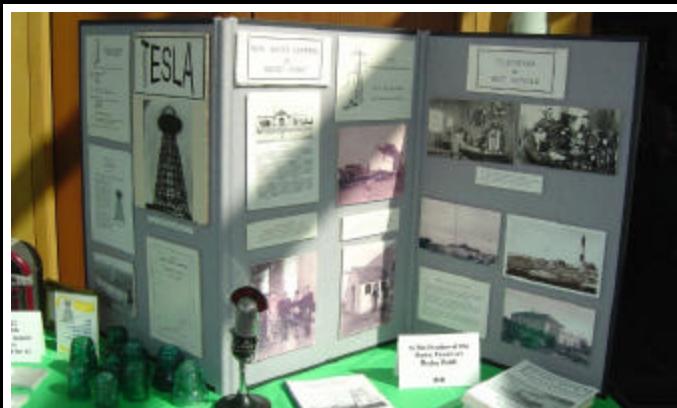
The Long Island Wireless Historical Society was established in 1995 in order to preserve the Sayville Wireless site, also known as the original Telefunken transmission site. Their mission now is to collect, research, and document the history of Long Island wireless telegraphy. The group publishes a quarterly newsletter called "Distant Sparks." The society can be reached at: LIWHS, 43 Sayville Blvd., Sayville NY, 11782 ([www.liwhs.org](http://www.liwhs.org)).



Replica of RCA's 1921 Radio Central tower.



Phyllis Grebe, daughter-in-law of Alfred Grebe.



One of the many excellent exhibits.



An early amateur wireless transmitter.

## RECENT RADIO PRICES

*From the February 2007 issue of "Radio Age" (newsletter of the Mid-Atlantic Antique Radio Club) comes these observations on the direction of radio prices. What's your opinion?...Ed*

Antique radio price trends show some surprises. Some radios have increased in price dramatically while others have fallen. Atwater Kent metal box radios are selling now for about the same price as

they did 25 years ago. Common sets like RCA Radiola 18's and ordinary nondescript Bakelite sets are selling for less now than they did 20 years ago. But some set prices have gone through the roof. A Zenith Stratosphere sold at auction last year for \$65,000 (or \$72,000 if you add on the 5 percent buyer's commission and sales tax).

A Sparton Nocturne mirror glass radio apparently went for about the same price within the past few years. A Nocturne with replaced glass, repainted cabinet, and the wrong chassis went for about \$30,000. Early and rare wireless gear from companies such as Wireless Specialty Apparatus and NESCO also com-

mand high prices.

A general rule of thumb is that as a collecting hobby matures, the very rare and desirable items tend to increase in value while the very common items stay constant or decrease in value. It seems likely that all antique radio prices will drop in the next 20 years. Most antique radio collectors are senior citizens, and relatively few young people (20 to 40 year olds) are joining our hobby. Many of the country's finest antique radio collections belong to people in their 70s and 80s. That suggests that in the next two decades, as a large number of gray-haired collectors die or go into nursing homes and their collections come on the market, the flood of sets will cause prices to drop.

Investing in antique radios for investment purposes (or at least investing in common radios) rather than in the stock market or real estate is probably not a good financial decision. If you buy old radios, you had better do it because you love them.

Another observation is that prices on eBay Auction tend to be much higher than the same items offered at radio club auctions and flea markets. So, if you are looking for bargains or radios that will have a good chance of maintaining their value, these are good places to start.

## 2007 Broadcast Band DX Contest Results

\* = Category Winner MDS = Most Distant Station

### CRYSTAL RADIOS

\***Gerry Dowgin**: City Mouse Special crystal set, 130' long wire antenna, 2,349 points  
MDS: 870 WWL, New Orleans, 1,128 miles

### PRIMITIVE RADIOS—1 or 2 TUBES

\***Al Klase**: IP-501 Navy set, 65' flat top antenna, 8,625 points  
MDS: 530 Radio Vision Cristiana Turks and Caicos Is., 1,309 miles

### 1920s BATTERY SETS

\***Al Klase**: Grebe Synchrophase MU-1, 65' flat top antenna, 11,075 points  
MDS: 515 St. Kitts and Nevis Is., 1726 miles

Gerry Dowgin: Atwater Kent Model 10 breadboard, 130' long wire, 7,577 points  
MDS: 750 RCR Caracas, Ve., 2,097 miles

### HOME ENTERTAINMENT RADIOS

\***Tom Provost**: 1936 Montgomery Ward Airline 62-318 movie dial table radio, HB loop antenna, 9,115 points  
MDS: 530 Radio Vision Cristiana, Turks and Caicos Is., 1,309 miles

### AMATEUR, COMMERCIAL & COMMUNICATION RECEIVERS

\***Gary D'Amico**: RCA DZ-2 military receiver, longwire and loop antennas, 8,493 points  
MDS: 950 Radio Reloj, Cuba, 1,270 miles

Paul Dooling: Echophone EC-1, 1945, 5/8 wave VHF antenna, 6,488 points  
MDS: 900 XEU Mexico City, 2,055 miles

### TRANSISTOR RADIOS INTRODUCED BEFORE 1970

No entries

## HOME BREW RADIO CONTEST RESULTS

The NJARC homebrew radio contest entries for 2007 were short on quantity but long on quality. As a result, contest organizer Al Klase declared all entries as winners. Let's hope that the pictures that follow offer an inspiration to next year's entrants.

Tom Provost submitted a two-tube all-wave portable with the following features:

- A quite sensitive circuit if set up and operated correctly
- Low-drain, battery-powered tubes
- Two-speed dial drive plus fine tuning for SSB on 40 and 80 meter ham bands
- Variable detector B+ voltage used in combination with a "Regen" control to optimize regeneration for each band
- 500 H detector load and 3V4 pentode provide ample volume

- Adjustable antenna coupling to avoid overload and dead spots (radio seems to like minimum setting for all bands)
- No AC hum
- Once tuned in (using fine tuning control in combination with regen control for SSB) SSB remains surprisingly stable and clear

Tom says that the radio is a suitable test-bed circuit for additional development. Further refinements that Tom is considering are a) Using resistor-capacitor coupling to take B+ off the phones b) experimentation with grid leak resistor and capacitor values c) changing the main tuning capacitor to alter band coverage d) winding bandspread coils, and e) loosen

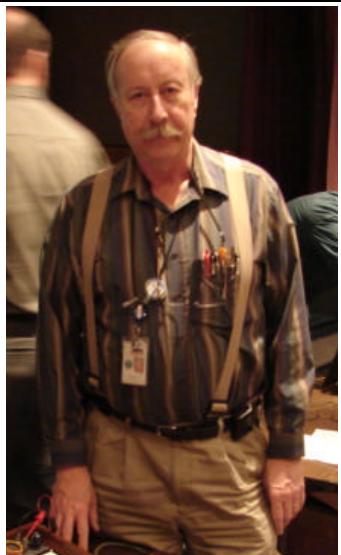
antenna coupling even more.

Walter Heskes submitted a "4-25L6" (all tubes are 25L6's) multiband regenerative receiver which covers the 80 meter HF and AM broadcast bands. This receiver has the following features:

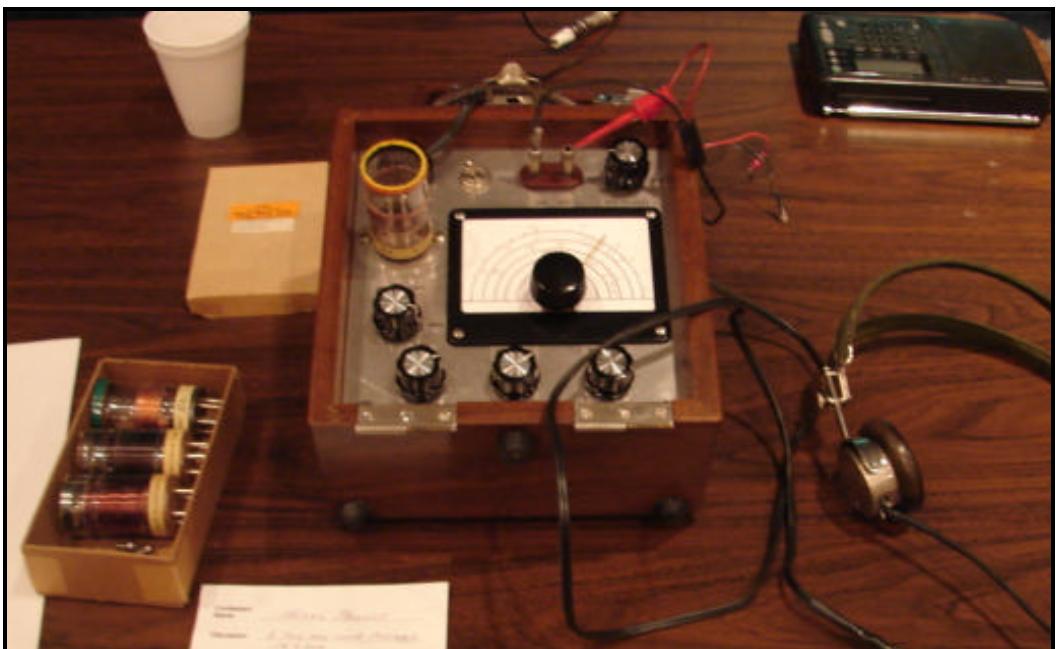
- Capacitance-tuned regenerative circuit
- Regeneration spread fine tuning
- RF bandspread fine tuning
- Multi-stepped, adjustable capacitance in both RF and Regen tuning circuits
- RF gain control
- Standby/receive switching
- Built-in 5" x 7" PM speaker
- Front panel jack for high-impedance phones

- Front panel rotary switch for selecting coil inductances
- Unique circuit using four 25L6 beam power amplifier tubes
- 120 VAC operation with half-wave rectification

The third entry was submitted by Owen Gerboth. Owen's entry was based on a circuit that he found in the August 1925 issue of *Radio Broadcast*. The circuit was originally published in *QST* (March and June 1925) as a receiver for learning code; depending on the number of turns selected for its honeycomb coil, it could receive from 600 to 15,000 meters. Owen used a toroid coil with about 120 turns to get his rig into the broadcast band.

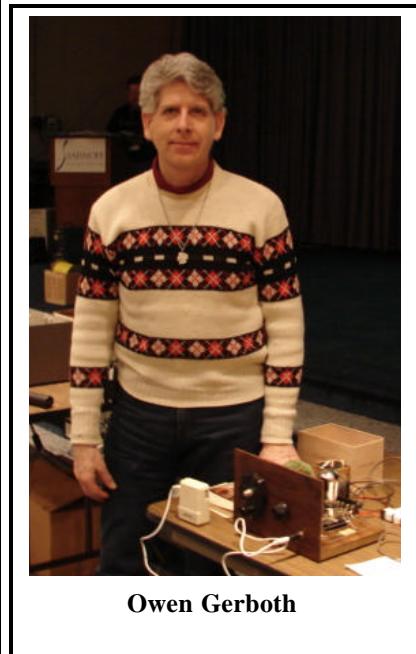
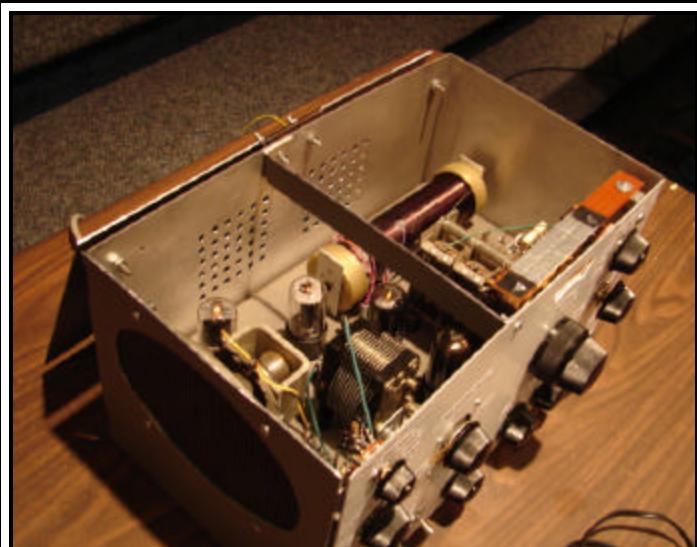


**Tom Provost**



**Walt Heskes**





Owen Gerboth



## MILLER AUCTION BEING ORGANIZED

On March 25th, the "Miller" radio collection was moved to InfoAge and is being cataloged for a future auction. The auction date and photos of some of the major items will be published next month. Thanks to volunteers Richard Knapp, Steve Goulart, Gary D'Amico, Phil Vourtsis, Richard Lee and Dave Sica for moving the collection from Passaic.

Some really nice pieces will attract your attention, including a Magnavox speaker, a McMurdo Silver "15-17", six RCA "red" books, an early Sky Buddy, a Thermodyne TF6, parts and tubes and lots more.



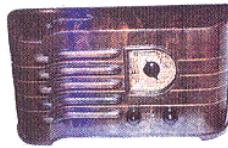


## New Jersey Antique Radio Club's — SPRING SWAP MEET —



Parsippany PAL Building  
Smith Field

Route 46 & 33 Baldwin Road  
Parsippany, New Jersey 07054



**Saturday, April 14th, 2007**