

# The Jersey Broadcaster

NEWSLETTER OF THE NEW JERSEY ANTIQUE RADIO CLUB

December 2010

Volume 16 Issue 12





MEETING/ ACTIVITY NOTES

Reported by Mary Beeferman

#### **The ON-LINE Broadcaster**

The New Jersey Broadcaster is now online. To date, close to 100 of your fellow NJARC members have subscribed, saving the club nearly \$2000 a year and a significant amount of work. Interested? To subscribe, send your e-mail address to mbeeferman@verizon.net. Be sure to include your full name.

The highlight of the November meeting was a well-received presentation by member Pete Olins on Atwater Kent breadboard restoration. Pete held our hand every step of the way with a slide presentation of the major concepts including board stripping, coil winding, resolving rotor tracking problems, brass cleaning, binding post and dial and knob restoration and painting. Dave Sica has promised to post copies of the slides on our website.



Webmaster Dave Sica discusses a fine point of breadboard restoration with Pete.



# **NOTICE (NO MEETING)**

## HOLIDAY PARTY AT INFOAGE! SATURDAY, DEC. 11

Hope you made reservations for our Holiday Party. The fun begins at the NJARC museum at 5:00 PM with a non-alcoholic cocktail hour and continues with a delicious Italian buffet in the Marconi Hotel dining room at 6:15. If you changed your mind at the last minute, we might have some openings left; e-mail me at mbeeferman@cs.com and we'll see if we can fit you in. Dress is casual and please remember your "Mystery Grab Bag" gift. Please note - there is no Friday meeting this month!



A close-up of Pete's attention to detail.

A last minute mini-auction with some unexpected items brought a nice end to the evening. Your editor was happy to take home a rotary spark gap motor from the Edgcomb-Pyle Wireless Mfg. Co. (East Liberty, PA.) and an old practice key and buzzer for reasonable bids. A nice Stromberg-Carlson radio sold for \$20.





This month's *Broadcaster* includes the rules for the NJARC 2011 Broadcast Band DX contest which will run from January 21 to the 30th. For log sheets, a station list and distances, go to http://www.njarc.ar88.net/contest.html. You'll also find some DX videos and plans for simple loop antennas for more sensitive crystal sets and one tube radios to avoid stringing up an outside antenna.

In preparation for the DX contest, Technical Coordinator Al Klase will run a repeat of the very popular "DXpedition" from 2009 on January 14. This event will take place in lieu of the January meeting. Again, full details are included in this month's issue.

Finally, we've included an article by Ray Chase covering NJARC and InfoAge participation at the Clifton High School Science Fair. There is much more to this article than meets the eye. It is representative of the significant donation of time, effort and work that some of our members contribute to advertise the club and InfoAge and the results that show the fruits of their labors. Hats off to Ray, Harry, Dave, Evan, Richard, Fred, Al, Mel and Matt for this great effort, especially when they had to concurrently support the Halloween Mad Scientist Lab 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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# NOT YOUR TYPICAL SCIENCE FAIR

### By Ray Chase



At a prior meeting, I had mentioned that a science fair was being held in Clifton, NJ. On the surface, it was not that noteworthy; these things have been held for many years, with a huge increase in popularity following Sputnik. But this one was a little different. Here is the story and how we participated in it.

We all know that our country is being challenged in science and technology and that we are in danger of losing our world preeminence in this area. In fact, the main vision of InfoAge is to inspire our young people to pursue careers in the sciences so that we do not lose our lead in critical fields.

The Federal Government is concerned and planned a two day science fair in Washington, D.C. for October 23 and 24. Well, a man by the mme of Michael Paitchell from Clifton decided that New Jersey should have its own science fair. He is kind of like a northern NJ Fred Carl (Director of InfoAge) and also is Vice President of the Clifton school board, so he has some pull in the community. He set out to create a Science and Engineering Festival based at the Clifton High School and also at a secondary location at the Caldwell Airport in Fairfield. Clifton High School is a huge place (5 or 6 thousand students) and is close to several major highways.

Mike proceeded to raise about \$50,000 from corporate sponsors to pull it off. He had visited InfoAge and talked to Fred and was amazed at what we have done there. He signed up to InfoAge and promised us help after he completed the Science and Engineering Festival. Info-

Age was invited to be a participant in this event where we would be a part of many displays from notable corporations, education institutions and other museums. There would be displays of robots, a racing car, flying models and plenty of hands-on items to generate interest in youngsters. Shuttle buses would be provided to Caldwell Airport where attendees could experience close contact with many aspects of commercial aviation. Public attendance would be free and best of all, there was no charge for display space.

This was a challenge that Fred did not want to pass up since it would give Info-Age excellent publicity in the densely populated areas of Northern NJ and expose use to potentially thousands of new visitors. So Fred turned to the group best suited to pulling off something like this, namely the NJARC. Unfortunately this came right in the middle of our Haunted Hike Halloween affair at InfoAge, one that already had to be drastically revised due to the last minute determination that it could not be held indoors. None the less, Harry Klancer agreed to make a major contribution along with Al Klase and myself while we and others kept on with our Mad Science Lab for Halloween at Info-

Recently, we uncovered a donated, collapsible display backdrop that we could use as a centerpiece to mount posters about InfoAge. We asked for and got a display space that was 30 feet wide and 10 feet deep with five, 8-foot tables. Evan Koblentz of the MARCH (Mid-Atlantic Retro Computer Hobbyists) computer group also agreed to go in with us and set up a table with two vintage desk top computers; one was rigged to allow viewers to play video games.

As a center piece for the display, we used the five computer history dioramas made by club member Mel Nusbaum and housed in recycled CRT monitor cabinets. (If you have not seen these displays, you really ought to find an opportunity to check them out; they are awesome).



Harry Klancer worked up an impressive display of the development of the mobile phone/cell phone. Pete Olin loaned a restored working Atwater Kent 1923 breadboard style radio along with power supply, horn speaker and local transmitter so we could play appropriate programs through it. Al Klase supplied a "Pretty Good" crystal set and the telegraph display was borrowed from the museum along with a "bug" and tone generator. Highlighted alongside Mel's display were the two earth satellites brought from our NJARC museum.

Harry loaded some of the stuff in his wagon on the preceding Wednesday and on Friday morning we rented a cargo van and loaded the rest of the bigger items at InfoAge. We met up with Harry at noon in Clifton to put our booth together.

The accommodations were great and most everything worked out fine. Mike Paitchell deserves a huge amount of credit for organizing this event and pulling it off. On Saturday, Harry and I arrived nearly two hours before the 10:00 AM opening to fine trim our presentation.

Our advanced planning paid off, as many other displayers were scurrying at the last minute to get set up. Notably, the Liberty Science Center showed up 20 minutes before the opening time and had a less than spectacular presentation. The Trenton museum had one individual with three tables of paper handouts on their various functions. This was not very interesting to young people.

This high school has two large gyms, one on ground level and one at the second floor level. We were on the second floor level while the first floor was mostly robotics and model airplane displays. The InfoAge display was one of the best on the second level in terms of size and interesting content. Harry and I manned the display initially and then were joined by Matt Reynolds. Later, Mel Nuesbaum came by and then Fred Carl helped man the booth for a couple of hours as well.

Evan set up his equipment on Saturday morning and manned his display along with Jeff Brace, another MARCH member. MARCH showed an IMSAI 8080 homebrew kit desk top computer circa 1975 and a circa 1982 Commodore 64 rigged to run the game "Guitar Hero" that could be played by visitors. He also had posters of the first Army Mobile Digital computer and loaned us an IBM Simon, the first "Smart" phone for our display.



Harry and I had some butterflies in our stomach as we planned and set this up; we thought, what if nobody shows up? Well, at 10:00 AM Saturday, our fears were dispelled; we were mobbed. All day long crowds flowed through and they liked what they saw in our booth. We were against a wall and from the other side of the room our illuminated dioramas and the flood-lit poster display along with the two satellites drew people to us. They liked to play with the Atwater Kent radio, the Morse code display ("Texting in the Victorian Age") and pore over the cell phone history display. Harry had an ordinary TV remote control and an older digital camera to demonstrate that the



camera can pick up the infrared beam of the remote. Simple, but fascinating to many. We had brought a goodly supply of InfoAge and NJARC brochures and they were flying off the table.

Sunday hours were the same, 10 AM to 5 PM, and the first hour was a little slow but then the pace picked up to pretty much the Saturday level of traffic. Again Harry, Matt and I initially manned the







booth but in the afternoon Dave Sica and Richard Lee came to help as Harry had to leave before the end of the day. This was welcomed assistance in helping to disassemble and pack up the display.

On Monday, most of the displays were unloaded back at InfoAge and fortunately there was no loss or significant damage to anything.

This was a memorable event and gave us a huge amount of publicity in the Northern suburbs of New Jersey. Later, Mike stated that the attendance over the two days was 12,000 visitors. Of course, that includes those who came to the airport location as well. It was enjoyable to most of us who participated and caused us to think about other programs that would help promote the InfoAge vision. This was quite a bit of work, especially falling in the middle of the Camp Evans Halloween program. A special thanks to those who stepped up to keep the InfoAge Halloween program operating while a few of us detoured to Clifton.

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## The 2011 NJARC BCB DX Contest - Jan 21-30

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 members 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 receiving location, Friday, January 21 2010 through 12:00 Noon, Sunday, January 30, 2010.

**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 receivers (homebrew also) -1 to 2 tubes plus power supply
- C 1920's Battery sets (homebrew also) -batteries or modern power supply is OK
- D Other tube radios sold for home entertainment.
- E Amateur, commercial, and military tube-type communications receivers.
- F Transistor radios introduced before 1970.
- G "Light-Weight": Any radio we ighing less than one pound (454 grams).

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

**ANTENNAS:** Anything you like.

**LOGS:** Submit a log for each of your contest sessions (maximum of two). Each log header should include contestant's name, address, phone number, category, and description of receiver and antenna. Please include you listening address if it is different from you 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 1160 KHz 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 February 7, 2011.
- Logs may be submitted as e-mail 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 may 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 al@ar88.net Tom Provost - 609-243-2508

# NJARC 2010 DXpedition

In support of our Broadcast Band DX contest, Technical Coordinator Al Klase has agreed to a repeat of his extremely popular "DXpedition" which took place in 2009.

**<u>Date:</u>** January 14, 2011 (in lieu of the monthly meeting)

**Location:** InfoAge Meeting Room (9032-A)

#### What is it?

The basic concept is to gather together a working collection of radios representing the various era's of receiver design in an environment that will allow each of us an opportunity to operate the sets. Hopefully, inspiration will be provided for greater participation in the BCB DX contest held the following week.

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

Well maintain two log books for each receiver, one for stations heard and a second for user comments. These might be published, with pictures, to the NJARC website for further reference. We can also shoot some video of each set in operation and post them on our website.

#### **Bring Your Radio**

Come with sets in good working condition that you don't mind having other club members operate. If you can bring a length of coax that can be connected to your radio, with a BNC connector on the far end, it would be helpful. We'll try to have a lot of cables and adaptors, but we'll need your help.

We'll try to coordinate the different types of radios that show up so we don't end up with 13 All-American Fives. It would nice to have representative receivers from the following categories:

- Crystal sets
- Battery sets: Regen, TRF-Regen, TRF, Superhet
- 1930's & 40's AC Sets: TRF, Superhet
- Other entertainment sets
- Communication Receivers: TRF-Autodyne, Single-conversion, Multipleconversion
- Transistor radios

#### **Antennas**

The primary antenna will be a Skywaves Wideband Antenna System feeding a multi-set coupler with 32 isolated outputs. There will also be tuned loops for the broadcast band, and a random wire or two for crystal sets.

#### **How Long?**

We can play on into the wee hours if people are interested.

Government has encountered, it has been disclosed following raids along the New Jersey coast which resulted in the arrest of 32 men and the seizure of large quantities of liquor."

"Operating in the band used largely by amateurs, it is possible the station might longer have escaped detection had it not been that it 'worked' over long periods, sometimes as much as 15 to 18 hours at a time. Search of license records failed to show any station with the call which was being used, nor were its messages understandable, being in code."

"In an effort to run down the 'pirate' radio station, Forest Redfern, formerly an engineer in the Signal Corps and now a radio engineer in the New York office of the radio division of the of the Department of Commerce, was given the assignment of determining where it was and deciphering its code. The first was easily accomplished. Although the second problem was more difficult, Redfern soon had solved the fairly simple cipher used by the station and was able to turn over translations of its messages to the prohibition department."

"The radio station was included in the raids and it was found that not only was the station unlicensed but the operator also had failed to acquaint the Department of Commerce with his proficiency at the key before going to work. Inasmuch as the law provides penalties running as high as \$5,000 fine and five years' imprisonment for owners of unlicensed stations and for unlicensed operators, the man found at the key when the raid was made is in about as serious a predicament as those taken with the liquor in their possession."

"Arrest of the operator did not result in the immediate closing down of the station, for Redfern took the key over and, using the rum-runners' own code, sent out messages which resulted in one of the liquor boat's proceeding to a point where a Coast Guard vessel was waiting to seize it."

# SHADES OF BOARDWALK EMPIRE

The following is directly quoted from an article in a December issue (year unknown) of "Wireless Age." It was provided by member Richard Lee and held in my files for some time until the HBO series "Boardwalk Empire" prompted its relevancy...Ed

"An unlicensed radio station, operating on a short wave length, contributed largely to the undoing of one of the most extensive liquor-running 'rings' which the



