Happy New Year! The NJARC 2010 Holiday Party was another huge success, attracting close to 80 members and their guests. The Marconi Hotel, with a background of illuminated seasonal villages, proved to be a very comfortable setting for the evening's activities.

The social hour, hosted by Al and Peggy Klase and set up in the museum, was a real treat highlighted by many tempting delights - who would have thought that the club had so many paté fans? It also gave some members and their spouses and guests their first view of the progress we’ve made.

As usual, Sal Brisindi, Phil Vourtsis and president Richard Lee did another bang-up job in arranging a delicious buffet, cake and all the accompanying trimmings. Rick Weingarten, Owen Gerboth, Jerry Dowgin and yours truly provided the table settings and Darren Hoffman provided background music. Following dinner, Dave Sica gave us a backward glance into those hilarious "show-and-tell" sessions at the club's old meeting place in the Grace Lutheran Church in Freehold.

Our Mystery Grab Bag once again proved to be loads of fun. Some really nice gifts showed up this month, but the "sniping quotient" seemed to be a little subdued. It seemed that many took the spirit of the season a little more seriously this year. However, a beautifully painted gray and yellow Philco changed hands quite a few times. Some of the photos in this month's Broadcaster follow the succession of temporary ownership.

We had a host of volunteers for cleanup, and thanks to all who stepped up to the plate to make this year's party one that went very smoothly and tension free. It was a great evening and a wonderful finale to another year of radio collecting, especially when shared with our NJARC family.

**CALL FOR DUES**

We'll be getting the ball rolling early this year for collecting 2011 dues. Dues keep the club's generous activities at the high level you've come to expect. Your Executive Board has voted again to hold the line at $20, but this may not be guaranteed for the future. If you look back at 2010, you can't argue that the price is unreasonable:

- Twelve issues of the NJARC Broadcaster.
- A great web site maintained by Dave Sica and Matt Reynolds (with some exciting upgrades scheduled for 2011.)
- Webcast meetings sponsored by Dave Sica.
- Great technical presentations and activities sponsored by Al Klase.
- Capacitors and tubes at bargain prices.
- A radio museum to be proud of and constantly improving through the efforts of Ray Chase, Harry Klancer, Al Klase, Steve Goulart, Phil Vourtsis, John Tyminiski, Dave Snellman, Steve Rosenfeld and many other club volunteers.
- Estate auctions, members-only auctions, "PAL" swapmeets and our yearly InfoAge tailgate.
- Repair clinics.
- Homebrew and DX contests.
- Holiday Party

For those receiving their Broadcaster by mail, renewal is easy; the code to the right of your name tells the story. Those with designators of "1/12" (or higher), "H" (honorary) and "L" (lifetime) need not do anything. All those with a "1/11" expiration date may renew for a $20 payment or $25 to continue or begin a family ("F") membership. You also might want to consider a lifetime membership for $200.

If you are receiving the Broadcaster by e-mail (a much preferred method), you will be notified of your dues status by the same method.

**DO NOT send renewal checks to Marv Beeferman:** they will be returned to our membership secretary and cost the club extra postage. Dues will be collected at our monthly meetings or you may send a check, made out to "NJARC," to our membership secretary at the following address:

Marsha Simkin
33 Lakeland Drive
Barnegat, NJ 08005

If we do not receive your renewal by March 31st, you will be dropped from the club's roles; this policy will be strictly enforced!
FORT HANCOCK: LOOK TO INFOAGE FOR ADVICE

At the end of November 2010, it was reported that Federal park officials evicted Sandy Hook Partners from three buildings at Fort Hancock, contending that the group defaulted on the lease agreement for the buildings. Sandy Hook Partners began with a letter of intent in 2001 with the National Park Service to serve as a commercial developer for site restoration and financial self-reliance. It would involve a mix of commercial, educational and office uses for the buildings at Fort Hancock.

As a result, with no federal dollars available at present to rehabilitate the park, it appears that the deterioration of the site will continue while numerous "solutions" and accusations float above the fray. Rep. Frank Pallone, a longtime critic of the planned commercial project, wants to pursue rehabilitation on a building-by-building basis. The park service has been accused of mismanagement, squandering of assets and "demolition by neglect." It has also been suggested to level the buildings and convert the land to recreational use like a marina and camp ground.

Fort Hancock is a former United States Army fort on Sandy Hook. This coastal artillery base played an important part in the defense of New York Harbor and a role in the history of New Jersey. Between 1874 and 1919, the fort was operated in conjunction with the Army's Sandy Hook Proving Ground. In 1893, the nation's first disappearing gun battery, Battery Potter, was installed. 1894 saw the completion of the first operational concrete batteries, each mounted with four 12-inch mortars and interconnected by tunnels and ammo rooms. It was also important for the defense of the vital New York Harbor throughout World War II, preventing the entrance of German submarines. In the late 1950s, Nike anti-aircraft missiles were based there.

Fort Hancock was decommissioned in 1974. Over the years, many of the gun emplacements and structures have fallen into disrepair.

In contrast, as noted in an editorial in the Dec. 17th, 2010 Asbury Park Press, by Lawrence R. Tormey (InfoAge Trustee Emeritus), the hard work and dedication of many volunteers put Camp Evans on a different track. Although success is not 100% guaranteed and the future holds many problems yet to be resolved, InfoAge provides a prime example of what might be obtained when people with diverse ideas come together in a cooperative spirit. It’s worth quoting:

"While the development fiasco at Fort Hancock drags on with no satisfactory finalization in sight, I continue to be amazed that the development success at Wall Township’s Camp Evans, led by the InfoAge Learning Center, is rarely ever mentioned in the Press."

"Like Fort Hancock, Camp Evans, the former top secret research and development sub-post of Fort Monmouth, is the site of a number of historic buildings. Through the unstinting efforts of its founder, Fred Carl, and an army of volunteers, the magnificent Marconi Hotel, for example, has become a showpiece of Camp Evans. The huge "H Buildings," the manufacturing site of the war-winning electronic devices produced at Camp Evans, are being re-roofed and restored."

"An original federal government suggestion was to demolish all of the buildings at Camp Evans in the 1995 Base Realignment And Closure hearing. That didn’t happen. With the aid of local and county authorities and Rep. Chris Smith, through the "sweat equity" of the myriad of InfoAge volunteers, and with the financial help of many modest but dedicated donors, Camp Evans is now a jewel in the crown of Monmouth County’s many attractions."

"It is most unfortunate that those involved with Fort Hancock have not looked to Wall Township and InfoAge for advice and inspiration in their (thus far) failed endeavors."
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 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 weighing 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
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.

**Date:** 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, Multiple-conversion
- 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.

---

### 45 RPM OPEN HOUSE

*By Marv Beeferman*

At the end of each year, NJARC member and former president Phil Vourtsis traditionally opens his house to 45 RPM record enthusiasts. After numerous invitations over at least the last 10 years, I was finally able to attend one of these get-togethers. Although most of Phil's collection has moved South to a warmer climate, enough was left to form the basis of some nostalgic discussions about those little records with the big holes.

The thing that fascinated me the most was the extensive knowledge that some of our members have about the songs of the baby boomer generation. Most of us were probably casual listeners, but dates, artists, lyrics and a host of other trivia didn't get past some these guys...a couple are walking discographies of the early rock and roll era.

And yes, between the pizza and snacks, we did talk a little about radios.
CAPACITOR QUIZ

Here's a good way to start out the New Year by testing your fundamental capacitor concepts. It was found in the August 1961 of Popular Electronics. For those of you who find it a little too simplistic, perhaps it will prompt the solicitation of some member article contributions that were promised for 2010.

Answers:

1 True. The voltage to which a capacitor is charged depends on the density of the electrons on one of its plates. A given number of electrons on a small plate will result in a higher charge density and therefore a higher voltage than the same number of electrons on a larger plate.

2 False. When a tuning capacitor is wide open, there is a minimum of plate area in use and the effective capacitance is therefore at a minimum. The smaller the capacitance in parallel with a given inductance, the higher will be the resonant frequency of the circuit.

3 True. Capacitance varies inversely - but not linearly - with the distance between plates. Putting capacitors with different-sized plates in series not only increases the separation between the outermost plates but also reduces the effective plate area to that of the smallest one.

4 False. The plates of a capacitor are separated by a dielectric material which, being an insulator, prevents the capacitor from passing either a.c. or d.c. current. But the movement of electrons on and off the plates is an effective a.c. current to the lamp, and the lamp lights accordingly.

5 False. A capacitor can be charged to any voltage that does not exceed the breakdown voltage of the dielectric material between its plates. The type of dielectric and its thickness determine the working voltage of the capacitor.

6 True. As the capacitance of a trimmer is small in comparison with that of the main tuning capacitor, during most of the latter's tunable range the trimmer will add little to the total capacitance in use. But at the high end of the band, where the main tuning capacitance is at a minimum, the trimmer contributes a larger percentage of the capacity in use.

7 False. Tightening the adjusting screw presses the mica dielectric and metal plates closer together. The thickness of the air dielectric which is also present is thus reduced and the capacitance is thereby increased.

8 True. Even when the voltage present is little more than zero, a large current flows as the capacitor is being charged. At any later time, the voltage built up on the capacitor limits the circuit current to successively smaller values.

9 True. A padder decreases the effective capacitance across the inductance and thus helps in the alignment of an oscillator at the low end of the band. Since it is relatively large, the padder will have increasingly less influence as the capacitance of the main tuning capacitor is decreased.

10 False. As the frequency of the source voltage is increased, there is less time for the electrons to flow on and off the plates. The voltage to which the capacitor can charge therefore decreases.