MEETING NOTICE

The next NJARC meeting will take place on Friday, March 10th at 7:30 PM at Princeton's Bowen Hall (70 Prospect Ave.). Directions may be found at the club's website (http://njarc.org). This month's program includes a talk by member Charles Blanding titled "The History of New York FM Radio." We'll also continue to collect 2017 dues prior to the March 30th cutoff date.

FINAL CALL FOR DUES
(Membership Cutoff Date - March 31)

For members receiving the Broadcast-er by mail, check the code next to your name on your mailing label. Honorary (H) and Lifetime (L) members are exempt from paying dues. For the rest (Code 1/17), dues will be collected at monthly meetings and club activities or you may send a check made out to the "NJARC" to our membership secretary:

Marsha Simkin
33 Lakeland Drive
Barnegat, NJ 08005

Payment via PayPal is also available at the club’s website but it will cost the club a fee. If you’re receiving your Broadcast-er via email and you’re not sure about your membership status, it will be provided to you when you pay or you can contact Marsha at: mhsimkin@comcast.net (609-660-8160)

While you're at it, you might want to consider a lifetime membership. In any case, please renew early and avoid the membership cutoff date of March 31st!

Upcoming Events

February 18th - Winter repair clinic at InfoAge
March 18th - Parsippany swapmeet
April 14th - Monthly meeting at InfoAge; topic TBA
May 6th - Spring Repair Clinic at InfoAge
May 19th - Monthly meeting at InfoAge;
Radio Scavenger Hunt
June 9th - Monthly meeting at Princeton;
Show & Tell, Hints and Kinks
July 14 - Monthly meeting at Princeton;
topic TBA
July 22nd - Summer Tailgate at InfoAge

I was not able to attend the February meeting but thanks to the efforts of member Dave Sica, I followed most of it online. For those of you who find it difficult to attend NJARC meetings and who are not aware of this great resource, you should try it. On the evening of the meeting, just go to the club's website (http://njarc.org) and click on the live webcast link.

Thanks to Prof. Mike Littman for his presentation that gave us an overview of New Jersey's contribution to world science and technology. Dr. Littman introduced the term "radical innovations" and went on to divide them into major categories such as ideas, inventions, industries and manufacturing. For example, ideas were represented by such NJ luminaries (whose contributions Dr. Littman termed "new science") as Joseph Henry (first practical electric motor and practical electrical telegraph), John von Neumann (stored program digital computer) and Albert Einstein (theory of relativity).

Dr. Littman added a nice touch to his presentation by demonstrating the creation of an Edison wax cylinder recording. He covered a stiff paper cylinder with brown wax and, using a sharp needle mounted on the diaphragm of an early phonograph, recorded "Mary had a little lamb." On a second machine, using a blunt needle (so the grooves of the recording would be preserved), he played back the nursery rhyme.

Over 50 years ago, the first weather satellite, TIROS, was controlled through the tracking station at InfoAge's Camp Evans. Since that time, technology has improved dramatically, and the newest generation of satellites are giving breathtaking new insights on the weather. On Sunday, February 26th at 2:00 PM, the presentation "From TIROS to GOES: Weather Forecasting with Satellites" will be held at the InfoAge Space Exploration Center (ISEC) at the Project Diana site. The lecture will include a discussion of the evolution of the technologies, forecast modeling and the limits to what meteorologists can do. A donation of $10.00 is suggested.

InfoAge will also hold a Veterans and Armed Forces Appreciation Day on Saturday, May 20th from 12:00 (Noon) to 8:00 PM with beer, food, wine and live bands. The day will feature access to all exhibits including military vehicles, vintage WWII military equipment, shipwreck artifacts, a miniature train show, models of Historic WWII battles and, of course, vintage radios. A 5K Race is also scheduled. A $5.00 (children $2.50) donation is requested and active and retired military with ID's enter free.

Our condolences go out to Steve Goscinsky on loss of his wife Lisa of 40 years. Steve noted: "Like many of our wives, she kept reminding me that I had too many radios and when I would sell something at a hamfest or swapmeet, I would refrain from telling her that I sold 5 pieces and bought 6! Not all of the club members know me well because I am still working (at 65). She always accompanied me to the Christmas parties which we enjoyed immensely."

A reminder that our winter repair clinic at InfoAge is on February 18th and reservations are being accepted for our Spring swapmeet in Parsippany on March 18th.
AMRAD’S LAST GASP
By Marv Beeferman

My choice for the NJARC 2017 BCB DX Contest was, for the most part, totally arbitrary. I decided on an early 20’s battery set but that was as far as it went. An Amrad Neutrodyne that I purchased at a recent NJARC swapmeet in Parsippany looked promising, so, as not to be disappointed from the outset, I checked the audios and found them to be good. Except for the tubes, there's not much left to go wrong with radios in this category so I put it "on line." I found the power switch to be a little intermittent at first but once that problem was settled, the radio seemed to be functioning properly. I used 90 volts for the "B" supply and 45 volts for the detector; there were no provisions for a "C" supply.

I don't know if it was poor "ether" conditions or poor design, but this five-tube radio did not perform as well as I expected when compared to one and two-tube regenerative sets that I have entered in the past. I tried at least three different nights over the contest period but the big mileage Mexicans and Cubans remained elusive. However, in one way, by investigating a little about the history of this radio, I was rewarded in a different way.

The American Radio and Research Corporation (AMRAD) has an interesting history beginning with J. P. Morgan but it's a little too convoluted to go into here. However, in one way, by investigating a little about the history of this radio, I was rewarded in a different way.

The company went into receivership in April 1925 and this was effectively the end of the line for the original founders. The rest of the story begins with an interesting event leading to the use of Hazeltine's Neutrodyne receiver immediately (although it did not). What is considered "an amazingly incompetent decision," Amrad didn't offer their Neutrodyne receiver immediately (although it was already in production as early as February, 1923) and delayed its introduction until the Christmas season of 1924. Apparently, this decision cost Amrad thousands of potential sales and the company lost a tremendous amount of money and respect.

Amrad’s introduction of its "Neutrodyne" (it had no specific model number) seemed to be "too little, too late." The company went into receivership in April 1925 and this was effectively the end of the line for the original founders. The Amrad "Neutrodyne" was the last model produced before the company went bankrupt. But, there was still a little life left in the old company. As Alan Douglas...
points out:

"By 1925, the Neutrodyne trademark had become a bit shopworn, but still signified to the public a reliable, easy-to-use radio. Armstrong regenerative sets, on the other hand, were definitely outmoded and were under attack from many quarters for their oscillating/interfering tendencies. Powel Crosley had made a great success of regenerative models, but he needed something new, and he wanted a Neutrodyne license."

Powel Crosley purchased the remains of Amrad for $39,000 and not only got his Neutrodyne license but a complete Amrad factory as well as Mershon condenser licenses. Soon, Crosley and former Amrad workers were producing new "Amrad" Neutrodynes, both battery and "AC" models, which had a distinctive "Crosley" look. Such models included the S-522, AC-5, AC-9, S-733 and the "Royal" series. Future plans were to keep the Amrad line as a higher-priced, quality radio while Crosley produced the cheaper models. As Douglas notes, if it hadn't been for the stock-market crash and Depression, Amrad probably would have survived via Crosley ownership. But, the factory closed its doors in 1930 and the factory equipment and many personnel went to Cincinnati.

The Amrad's "Neutrodyne" in my collection is somewhat different than the standard early Neutrodynes of the era. It consists of one RF amplifier, a detector and three stages of audio amplification using 01A tubes. The receiver is also very compact resulting in one of the smallest 1924 Neutrodyne radio receivers.

My example also has a factory Bradleyohm-E variable resistor in the detector "A" supply circuit in addition to the filament rheostat. This was added to perhaps obtain more accurate control of the detector filament voltage, but the control is not shown in 1924 Amrad advertising or photos of other examples. Serial number 1429 is stamped into the front Bakelite panel so this appears to be an early model.

The radio also came with an original inspection tag with a "test" and "inspection" date of February 5th, 1923. This implies that Amrad had working Neutrodynes in production early in 1923 but, for some strange reason, the company waited until Christmas 1924 to advertise them for sale and resulting in the company's ultimate demise. Thus, my Amrad "Neutrodyne" is somewhat unique in representing the last radio produced by the original company before it was purchased by Crosley.
Member Bruce Ingraham recently completed the construction of a new display for our very popular “Hands On” room. It is called the “Farmers Riddle” and it is a take-off on an age-old puzzle of a traveler who must cross a river while carrying three items that are antagonistic to each other. The boat that is to be used can only carry the traveler and one item at a time.

The four double-pole double-throw knife switches represent the farmer and three items. The goal is to get the three items to the other side safely by operating the switches in the proper sequence and direction within the puzzle’s given constraints. If you make a wrong move, a raucous buzzer sounds to indicate that you made a wrong move. It is a fundamental display of logic. We hope that children of all ages will find it amusing as well as educational.

Bruce constructed the display out of junk box parts (some of my own) along with excellent wood working talents. We are fortunate to have such creative and resourceful volunteers in our group.

On February 3rd, member Harry Klancer and I gave an abbreviated version of our traveling radio show to a lunch meeting of about 40 retired businessmen in Fair Haven (Red Bank) NJ. The group is called the Root Beer and Checkers Club and yes, we drank root beer. Quite a few of the members were ex-Bell Labs employees. The presentation was well-received and one member indicated that he had an artifact that he would donate to the museum. In fact, the group had plans to visit InfoAge and the RTM on the following Wednesday.

About a dozen club members showed up as planned and Harry gave them a detailed tour of the museum. On member, Jules Bours, brought the artifact he had mentioned the previous week. It turned out to be a magnificent presentation case holding samples of three sections of the early Atlantic telegraph cable, probably dating back to Victorian times. The fine wood case has a hinged lid with beveled glass.

The three samples, each about six inches long, represented the "Shore" end cable, the "Intermediate" cable and the "Deep Sea" cable. Closer to shore, the cable needed heavier armor to protect against such dangers as anchors. Cross sections of each type of cable was also included in the display.

The brass label reads as follows:

**SUBMARINE CABLES**
**MANUFACTURED & LAID FOR THE CENTRAL & SOUTH AMERICAN TELEGRAPH COMPANY**
**BY THE**
India Rubber Gutta Percha & Telegraph Works Co. Limited
**SILVERTOWN LONDON**

Our donor, Jules Bours, is an insurance agent and real estate broker and he told us that he had the display on his office desk for many years. How he obtained it is a sad tale we are all familiar with. He had sold a house for a client and on the day of closing, the client was cleaning things out and was about to throw the item in the trash. Apparently, many years ago, a family member had acquired it in London and passed it down through several generations as a "family heirloom." Unfortunately, its significance was lost as each generation passed until the final owner decided he had no interest in it.

Thus, Mr. Bours rescued this fine artifact and it now sits in the early telegraph and wireless section of the museum. Marconi was inspired to create long distance wireless to provide competition to expensive and vulnerable undersea cables.

Many thanks to Mr. Bours!
far as I know, there is no formal equivalent genre of "found sound," but as we all know from home-recorded acetate discs and old spools of wire recordings, it exists. Here's my brush with "found sound."

The story began (as many stories seem to do) in a bar, about two years ago. But it actually had its genesis way before that, in 1967, in a church in Sayreville, New Jersey. I was in seventh grade at the local Catholic school. I learned to play the guitar, not very well, but well enough to strum out the three or four chords required to play music at the then-newly-popular folk mass. A couple of years later, by the time I was in high school, I was still a lousy guitar player but I had risen administratively to the rank of folk group co-potentate, or whatever it was called. My infinitely more qualified co-leader was a fellow student who played guitar much, much better than I did. I never knew, nor did she ever mention, that music ran in her blood.

Skip ahead now to the bar. We had, somewhat flippantly, organized a "grade school reunion." I arrived fairly late (on my way home after an NJARC meeting, no less!) but the party was still going strong. It was fun catching up with several old friends that I hadn't seen, literally, in over forty years.

At one point, my former folk group friend pulls me aside and says she has something to show me, knowing from all my Facebook posts about radios, records and music, that I'd find interesting. The bar was one of those local joints that had been there forever, and liked to post things of local interest on their walls. She showed me photographs they had of her mother as part of a singing group that performed on USO tours back in the '40s. They performed, I learned, as "The Moore Sisters" (possibly because "The Ethier Sisters didn't' have quite the right ring to it?) All the time we were growing up, I never knew this about her mom. She pretty much kept quiet about it, at least as far as I was ever aware. Anyway, it was a fascinating story and I WAS impressed.

Now, fast-forward about another year and a half to last November. I'm down in my wretched hell-hole of a basement, surrounded by dangerous-looking stacks of dusty radios and TVs, and floor-to-ceiling towers of records threatening to bury me thoroughly enough that it'd require a rescue dog to find me. It’s in this cheery environment that I occasionally pass a pleasant hour or two sifting through stacks of 78s, attempting to separate the occasional grain of wheat from the all-too-abundant chaff. Imagine, if you will, my surprise when after innumerable copies of what appear to be various incarnations of nineteen-forties versions of Milly Vanilli and Rebecca Black, and my fourth (or was it the fifth?) album of "South Pacific." I see a label with "The Moore Sisters" printed on it. I grabbed it, ran upstairs, checked it out, and sure enough it seemed to be them. I contacted Yvonne Ethier Coyle's daughter, Yvonne Coyle Kronowski, and told her about it. We verified that it was in fact her mom on the record and I offered to put it up on YouTube so they could hear it. She informed me that her mom loves music "of her generation" (and still plays the guitar!) and, incredibly, has never owned any of her own records, so this would be a really nice surprise.

Days after, I noticed a post on Facebook that her mom's 90th birthday was coming up in December and they were planning a nice party for her. I related this story to my wife at dinner one night and she burst out with “You’ve got to give her the record!” I countered with “But no one can play 78s any more. (Not normal people, anyway!)” To which she replied “Then give her one of your damn record players to go with it!”

A fabulous idea. The only catch was, I knew that despite the towers of treasures in the basement, I didn’t have a working or restorable 78 player handy. But... I have a super-power: I belong to the best antique radio club in the world. So I put out a clarion call to our members and within days I had several offers of 78 players. Tom Cawley did the handoff of a really nice looking and working, small Philco 78-only phonograph to me in the parking lot outside our Holiday Party. It probably looked like we were doing some sort of drug deal!

So, mere days before the birthday deadline, my wife and I drove to Sayreville and delivered the record and the player to the daughter. She promised to let me know how things went, and she did. She posts a lot on Facebook, and wrote that when her mother opened the package, she thought at first it was a picture of a record. When she finally realized that it was a record of one of her performances, she said “Oh, but I have no way to play it” - at which point they showed her the record player. A Facebook post from her daughter was rewarding: “Thank you and your friends that made this possible! She said she is going to play it again and again this afternoon. You really made her day!”

Responses to the Facebook post were equally rewarding:

What a great birthday present!! This is great... Best regards to your mom on her birthday That's awesome! I didn't know she didn't own her own records. I always remember Aunt Yvonne singing at family barbecues and get-togethers Oh what a wonderful idea! I'm sure your mom enjoyed it!

Well, it made my day too. I actually got two really great "vintage-related" Christmas presents this year, and being able to do this was one of them. (Maybe I’ll tell you about the other in an upcoming issue.) It’s really nice to see this stuff out there and being used. And what better way to be used than in the hands of a 90-year old former World War II girl-group star, helping her relive a bit of her glory days!

Amongst "floor-to-ceiling" towers of records' Dave was able to locate a Moore Sisters original.
"Tom Cawley did the handoff of a really nice looking and working, small Philco 78-only phonograph to me in the parking lot outside our Holiday Party." Yes, Mrs. Coyle did have a way to play her record.

A "MINI-ACADEMY" AT INFOAGE

By Marv Beeferman

On the evening of February 8th, NJARC personnel participated in an IEEE Engineering Mini-Academy. The project was captained by our Technical Coordinator Al Klase, who had devoted a significant amount of time and expertise into the project. The Mini-Academy was designed to stress two aspects of the engineering design process - building and testing a prototype.

Some 80 local high school students were divided into two groups. The first group was guided in the assembly of a simple FM transmitter using a single transistor that emphasized the concept of "bread-boarding." Following assembly, the students got to attach their mobile device to the transmitter and listen to the transmitter on nearby digital FM radios provided by the membership. (I was quite impressed that one of the groups I was working with chose to broadcast Frank Sinatra.) In addition, Al had set up a spectrum analyzer so the students could visually compare the intensity and frequency of each of the transmitters.

The second group was taken to another location where they were given a short lecture on radio transmission and then allowed to use AM radios supplied by the NJARC membership to "DX" some distant stations. After each group accomplished their task, locations were switched.

The students were supplied with all the materials they needed and very detailed assembly instructions were provided. Unfortunately, two of the groups that I worked with were somewhat advanced and decided to use the schematic. Yes, a little knowledge could be a dangerous thing and numerous assembly mistakes were the result. However, a third group that followed Al's great instructions to the letter got their transmitter running immediately. Also, since some of the parts are rather small and difficult to mount on the breadboard, the boys seemed to enlist the long nails of the girls when assembly became difficult.

Member Ray Chase was assigned to the Radio Technology Museum (RTM) and museum tours were offered if parents wanted to come early or wait for their kids. About 8 to 10 parents visited early or stayed through the event and Ray said "it was good to meet parents who are involved in and support their children's education. We may have obtained a teenage docent candidate in the deal."

Thanks to the following individuals who helped make the evening a great success (hope I didn't leave anybody out): Marv Beeferman, Ray Chase, Al Klase, Steve Rosenfeld, Jules Bellisio, Vince Lobosco, Harry Klancer, Stacey Shipman, Tom Sedergran, Dave Snellman, Bruce Williams and Len Newman.

Jules Bellisio goes over some fundamentals prior to the FM transmitter assembly.
2017 NJARC DX Contest Results

**Category A - Crystal Radios**

No entries

**Category B - Primitive tube receivers- 1 or 2 tube**

No entries

**Category C - 1920's Battery sets**

**Winner**
Marv Beeferman, 6,262 pts. 1926 Amrad Neutrodyne 5 tubes, 30ft. L antenna MDS 750 kHz WSB Atlanta, Ga. 717 miles

**Category D - Other Tube radios sold for home entertainment**

**Winner**
Phil Vortsis, 7,494 pts. Zenith 10S567 using built-in rotor Wave Magnet loop ant. *MDS 740 kHz KTRH Houston, Tx. 1150 miles (from Myrtle Beach, SC)

Matt Reynolds, 7,226 pts. Philco 38-4 using HDTV antenna w/50 ft. coax MDS 570 kHz Radio Reloj Santa Clara, Cu, 1,279 miles

Gerry Dowgin, 6,941 pts. RCA Model 128 using 40 ft. L antenna 20 ft. high MDS 1170 kHz KFAQ Tulsa, Ok. 1209 miles

Frank Feczko, 5,214 pts. Hallicrafters S-72 (1951) using built-in loop MDS 1540 kHz KXEL Waterloo, Ia. 950 miles

Richard Lee, 3,435 pts. General Electric Model 422 (1951) using internal loop MDS 1120 kHz KMOX St. Louis, Mo. 860 miles

**Category E - Amateur, commercial and military tube type radios**

**Winner**
Al Klase, 10,162 pts. Hammarlund HQ 120 (1938) using Skywaves shielded loop MDS 1200 WOIA San Antonio, Tx. 1558 miles

**Category F - Any radio of your choosing**

**Winner**

Joseph Serafin, 9,498 pts. Radio Shack DX 390 using Terk tunable loop MDS 570 kHz Radio Reloj Santa Clara, Cu 1279 miles

Edward Suhaka, 6,014 pts. Sears Silvertone Model 3002 (1954) using random length antenna in attic MDS 1540 kHz KXEL Waterloo, Ia. 950 miles


**Category G - Light weight- any radio weighing less than 1 pound.**

**Winner**
David Snellman, 12,740 pts. Sony SRF-M37W using Terk loop MDS 750 kHz YVKS Caracas, Ve. 2,106 miles

Compiled by Tom Provost  
* MDS=Most Distant Station
New Jersey Antique Radio Club's

Spring Swap Meet

Parsippany PAL Building
33 Baldwin Road
Parsippany, NJ 07054
Just off Route 46,
Adjacent to Smith Field

Saturday March 18th, 2017

Refreshments Available

(70) 8 Foot Tables
$25.00 for members
$30.00 for non-members
Reserve Additional Tables $20.00
At the Door $25.00

Open to the Public
8am to 12 noon
Vendor setup at 7:15 AM
$5.00 Entrance Fee
Club Donation

Vendors Make Your Reservations Now!

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