MEETING NOTICE

The next NJARC meeting will take place on Friday, May 14th, at 7:30 P.M. The meeting will be conducted "on-line" via the video conferencing app Zoom. Information may be found at the club's website (http://www.njarc.org) with a link being sent out on the NJARC Communicator prior to the meeting. This month will feature a presentation by club member Dan Rogers on learning about and using a CNC machine to replicate radio grill fronts.

MEETING/ACTIVITY NOTIONS

Reported by
Mary Beeferman

The ON-LINE Broadcaster

The Jersey Broadcaster is now on-line. Over 200 of your fellow NJARC members have already subscribed, saving the club a significant amount of money and your editor extra work. Interested? Send your e-mail address to mbeeferman@verizon.net. Be sure to include your full name.

It was great to hear from Ron Negra and his wife Valerie who discussed the book Waves of Hope at the April meeting. The book was reviewed in the February Broadcaster and deals with Ron's mother's role in communicating with the families of interned American POW's during WWII. The meeting may be viewed by clicking on the following YouTube address:

https://www.youtube.com/watch?v=woaTKwg-jU4

Ron's mom lives right down the road from me and now that I am fully vaccinated, I plan to take up the offer to pay her a visit and wish her a belated "Happy Mother's Day."

We finally dropped all non-paying dues members from our database and as of this date, our total membership sits at a respectable 213. Thanks to our membership secretary Marsha Simkin for her work in keeping all in order. If you have a friend who was a former member who can't understand why he no longer has access to the NJARC Communicator or is no longer receiving the Broadcaster, you might want to remind him why.

I hope many of you had a great time at this month's Kutztown radio swapmeet. A few members noted that they missed my attendance, but I actually did show up with member Steve Rosenfeld and only was able to stay for a few hours. My major effort was devoted to picking up some auction wins that were delivered by Cledis Estes. Normally, I take a bunch of photos and post them to the Broadcaster but my time was limited and space was at a premium this month. However, I'm sure the meet will get a lot of discussion at the May meeting (especially lack of masks!). As usual, you can view a 15-minute video courtesy of member Bob Bennett by clicking on the following YouTube address:

https://www.youtube.com/watch?v=Onkqn6tcSSc

Now that most of us seem to have been vaccinated, it appears that the club will hold its Spring Repair Clinic on May 22nd at InfoAge. More information will be provided via the Communicator.

It's nice to get compliments regarding the club from both new and old members. The following was posted on April 14th on the Communicator:

"I'm a new member of the group from north Jersey (Caldwell) and wanted to say hello. Up to this point, I've mainly repaired and built a few simple tube guitar amplifiers as well as some solid state and tube recording studio equipment. I wanted to try something a little different and learn more. Naturally, radios would be the next step and here I am. Judging from the few group messages I've read, I seem to have found the right place!"

In response, longtime member Nevell Greenough summed it up pretty well:

"I, too, really enjoy this club because there's a lot of highly talented members in the group eager to share. There's a great answer out there for most any issue that may arise. So please jump in and enjoy!"

Congratulations to member Dave Sica who passed his amateur radio examination. His call sign is W2AWD. We're looking forward to hearing him "on the radio!"

In case you missed it, thanks to member Ed Suhaka for posting the following bit of radio humor on the Communicator. It comes from the "Argyle Sweater" by Scott Hilburn for April 10th:

Upcoming Events

May 22nd - Spring Repair Clinic at InfoAge
June 11th - Monthly meeting via Zoom; show & tell, hints & kinks
June 26th/27th - ARRL Field Day; station W2RTM on grounds of InfoAge
July 18th - Sussex Hamfest (tentative); check SCARCNJ.org for updates
July 9th - Monthly meeting via Zoom; Alan Wolke presentation (tentative)
WCBS: A RADIO ISLAND IN THE STREAM

By Charles "Buc" Fitch

The following article first appeared in the April 22nd issue of "Radio World" and is subtitled "How a powerhouse AM station ended up with a distinctive tower on a little rock outcrop." It is published below with the kind permission of Charles Fitch and "Radio World." Mr. Fitch, P.E., is a longtime contributor whose articles about engineering and radio history are a popular recurring feature in "Radio World."...Ed

Columbia Island today, on the market for $13 million. (Photo: Sotheby’s International Realty/Patti Anderson/VHT Studios)

This is the story of a station whose transmitter for two decades sat on an island - arguably the most famous such “island station,” WCBS 880. The non-directional 50,000 watt powerhouse station, now owned by Audacy (the former Entercom), has been doing the demanding 24/7 format of news, sports and information for more than 50 years. At times it has been the nation’s most listened to station. How did its transmitter end up on an island?

The saga of this flagship of the Columbia Broadcasting System started with the cigar business of Samuel Paley in the early 1920s. He owned a distribution company at a time when one of America’s growing male vices was a good cigar - or multiple cigars - a day. He dealt mainly with imports and focused on building brand recognition and brand loyalty to succeed in this emerging business. Radio was “trending” at the time, the “new big thing.” Ad placement was the bailiwick of Sam’s son William Paley; they started using radio - ads and mentions - to get cigars into as many mouths as possible.

The power and the cost-effectiveness of radio piqued the younger Paley’s interest. Shortly thereafter the CBS epic began when he took over management of a nascent network of 16 stations, the Columbia Phonographic Broadcasting System.

In short order the Paley family and partners bought the operation. With 51 percent ownership, he ran and now controlled the network.

The file on WCBS starts with a different set of call letters. In 1924 the Atlantic Broadcasting Company applied for a New York station and got the apropos call of WABC. As with many stations of this period, WABC meandered around the dial until in 1932 it wound up on 860 kHz with 50 kW non-directional and a transmitter in Wayne, N.J.

The population of metropolitan New York was expanding along roads and transportation lanes into Brooklyn, via the famous bridge, and New Jersey, via the Holland Tunnel. Those demographic trends and travel corridors influenced the choice of new transmitter sites. Managers of other early stations serving New York City such as WOR and WEAF did likewise.

Central Location

In 1936, CBS purchased the signal, adding to its station portfolio and distribution network. In 1940 it sought to move the transmitter from New Jersey to what was then called Little Pea Island, located in lower Long Island Sound and northeast of Manhattan.

CBS bought the island and installed an aux transmitter for testing. The results demonstrated that the seawater conductivity would ensure formidable coverage in New York and New Jersey, and bonus extensive penetration into populous sections of Connecticut. With the 1941 North American Regional Broadcasting Agreement, the station moved from 860 to 880 kHz shortly before the final move.

Little Pea Island - later renamed Columbia Island - is a modest tidal rock of about one acre in size. It became home to an extraordinary engineering installation featuring a 410-foot self-supporting top-loaded tower. In 1941 two underwater cables brought power from New Rochelle to the site, and operations began.

News accounts said CBS spent approximately $500,000 (the equivalent of about $9 million now) to construct the tower, transmitter with backup and the building, including emergency housing for 10 workers.

Daily boat runs brought a change of operating crew, food, potable water and other creature comforts from the “mainland.” Weather and waves were not always cooperative. The bedrooms, kitchen and other quarters were put to use by stranded crews when circumstances isolated the site.

In 1946 the company received approval to change the station call letters from WABC to WCBS. Up until the late 1950s transmitters were operated on site by engineers who were on duty whenever the station was on air.

The station had a tremendous signal penetration and was the very definition of a “clear-channel, Class A station” that reached well into the heartland of America. Further, the saltwater location provided possibly an even bigger reach throughout the Atlantic, making it the voice of New York City to many far away at sea in war and the following peace. Like other similar important big stations including WTIC and WCCO, WCBS during World War II had a guard detail to protect the facility from sabotage or disruption.

One story, legendary but probably true, is that in thick fog, the crew once found its way to the island by following the induction field created by the currents flowing in the underwater power cable.

Moving On

Columbia Island provided a superb signal for CBS, but this rock was an expensive site to operate under any definition. With the emergence of TV and the drop-off in network radio revenues, CBS explored locations nearby that were easier and more convenient to reach. Eventually the corporate engineers settled on High Island just off the Bronx shore as a more practical site with a desirable land connection via a sandbar bridge.

After some delay and birthing pains, WCBS moved to that site in early 1962, where it remains today. WNBC, 660, was duplexed into the tower shortly thereafter when crooner Perry Como decided he wanted the nearby site that NBC was developing for his New York City home! WNBC is now sister station WFAN 660. (It was this site that was knocked off the air by the fatal crash of a private airplane in 1967 on the day before WCBS launched its all-news format.)

Meanwhile, according to news accounts, Columbia Island was purchased by a show-business couple who aired a breakfast conversation show from their home there; then it went through multiple hands including the College of New Rochelle. Actor Al Sutton eventually acquired it and built a “green” home on the site; you can find online stories about its construction, which is interesting in itself. At this writing, Zillow listed it for sale at $13 million. You can even take a video tour online.

But regrettably the 20-foot-square, 410-foot-high tower is long gone - regrettable, because for any resident the radio reception using that stick would have been extraordinary.

Broadcasting has often found some advantage or necessity to locate transmitter sites on islands. These islands vary from the isolated home of KUHB on frigid St. Paul Island in the Bering Sea to the defunct directional AM of WRIZ built on an island of pilings in Biscayne Bay in Florida.

If interested, we’ll visit some other islands in the stream in future columns. Please let us know your favorite or most engaging island station.

Email: radioworld@futurenet.com.
CELEBRATES MARCONI DAY

By Nevell Greenough

On April 23, 2021 a group of radio amateurs gathered at the Radio Technology Museum to celebrate International Marconi Day for the second time in our history. This 24 hour ham radio event is sponsored by the Cornish Radio Amateur Club in Britain. The Museum is a premier location being at the former Marconi New Jersey receiving site erected in 1914. More about the event and our location can be found at http://gx4crc.com and http://www.rtm.ar88.net

Ham Radio W2RTM was put on the air from 8PM Friday, April 23 to 8PM, Saturday, April 24. Al Klase built a spectacular radio setup consisting of a Dentron kilowatt amplifier, a matching Dentron tuner and a Yaesu transceiver, all driving a 100-foot dipole above the Museum. It made a big impression on the bands, consistently getting strong signal reports up and down the east coast and out into the Midwest.

We made 438 contacts in the U.S. including a few international ones. Most were made on the 40-meter (7MHz) band with SSB phone. Radio propagation was so-so. Many times we were digging signals out of the noise while we were being heard with S9-plus signal strength. We had the pleasure of contacting Alan Wolke, W2AEW who is a famous YouTube personality and NJARC guest lecturer.

Many thanks to:

• Al Klase N3FRQ for designing and setting up a fantastic station including a 100' dipole, a real ionosphere-burner.
• "Murphy" for breaking our antenna, antenna tuner, monitor scope and more that needed repairs.
• Rob Forte K2RGM for documenting how to tune up and operate the station (Where the @$# is the power switch??).
• John Ruccolo KC2UAK for snagging our 2 farthest contacts - Spain and Germany.
• Ted Copp, N2KPS, for knocking it out of the park by making more than 2/3rds of the contacts, training the rest of us on contest operating and setting up Web spotting.
• Gus Shirley, WX2M, for bringing midnight goodies and Richard Lee for pizza. Harry Klancer and the rest of the docents for putting up with the noise and interference to all the radios and TVs in the Museum.
• The Vintage Computer gang who held a fleamarket nearby adding to the excitement.
• Bob Maddox, Jim Doran, Matt Reynolds and everyone else who visited and helped out.
• Al Klase who is getting snowed with QSL card requests.

All had a good time despite being at the bottom of the sunspot cycle. Happy Birthday, Marconi!
3. Member Gus Shirley, WX2M, sends out a tip of the ole NJARC cap to all those who got things up and running at the RTM. "Our first Marconi event in 2019 was a great way to learn what goes on behind the scenes, how a station is set up and put on air. This year the setup was head and shoulders above 2019."

4. Member Joe Devonshore ran a VE Session and station to contact W2RTM in Maine during the event. There was talk of "spotting," whatever the hell that is. Who can offer a definition for next month?

5. Ted Copp, N2KPS, noted the following:

"The real heroes are my logging team. Without them we would never have served so many operators seeking the Marconi Day contact. Well done and as a result we will be fondly remembered by all those who worked our station. Next year we will be a "first stop" for many and if we can have a few more operators, I believe we can serve even more next year.

It is also great PR for the museum as we have established that it is the home to not only a genuine Marconi site, but within it is a real deal radio station with good ears and a lot of punch. Many thanks to Al and Nev and the whole team who brought the vision to fruition."

6. Thanks also went out to Al and Nev and the team from member John Ruccolo who said "You've made a believer in QRO out of me!"

7. Telling contacts to "Google W2RTM" was quite successful. Al Klase tallied a total of 98 page views, 81 unique visits and 11 returning visits to the website during the two days.

8. A video may be found at the following address:

http://www.ar88.net/videos/IMD-1.mp4

RCA's plant in Harrison, New Jersey was the company's primary producer of receiving tubes for consumer, industrial, and defense electronics until the plant closed in 1976. I thought it might be interesting to find out about Mr. Myers' position at the plant and perhaps the reason for the "award."

My first stop was the Hagley Library since part of the David Sarnoff Library collection consists of Harrison records between 1924 and 1987. I did not have high expectations since the records were described as follows: "The records consist primarily of the papers of engineers Ralph R. Fichtl (1918-2014) and Otto H. Schade, Sr. (1903-1981) on television and receiving tube development." Understandingly, my search turned out to be a dead end.

I then turned to the club's resident RCA expert Dr. Alex Magoun to help locate any information about Mr. Myer. Here's his response:

"Despite many pleas on my part to the northern NJ RCA lunch club that included Harrison people, no one ever came forward with a stack of RCA Family employee magazines for the Harrison plant. That would surely explain what they were celebrating - his impending marriage is more likely than something on the job.

There were a lot of people at Harrison, mostly female line workers, and perhaps Myers was especially liked as manager of a group. A May 22, 1961 issue of "Broadcasting" reports that he was switched "from special projects market planning manager to same assignment for kinescopes." Those kinds of titles I think of as given to someone near retirement. That would suggest he was born around 1900 and in his 40s when honored with the radio.

Perhaps he had finished planning for the Nuvisor and was shifted to what became the Silverama CRT? Nothing comes up for those, and related patents under that name belong to an engineer in Ohio who worked for Crosley, Farnsworth, and Avco.

Sorry I can't find anything better, but one thing is better than none."

So, thanks to Alex, we now know a little more about W.H. Myers. His radio was auctioned by a company in Brooklyn so this might hold a key to the rest of the story. Perhaps a deep dive into obituaries from my borough of birth might turn up a little more in the future.

As stated in this month's Meeting Notice, member Dan Rogers will present a talk on CNC (Computer Numeric Control) milling machines. As a preview, here's what Dan said in December 2020 about his efforts to reproduce an AK 165 grill:

"I recently restored an Atwater Kent 165 and in the process had to redo the grill which was damaged. To do it, I got myself a small CNC milling machine. Using my original grill, I was able to redraw the pattern in Autocad, extute it in fusion 360 and then finally send it to the CNC. The whole process took about two weeks, but in the end it worked out very well. The radio is now complete and I have a spare grill, so if anyone is in need of one for this model, I will happily send it to you, free."

Naturally, Dan was deluged with comments from our members (which resulted in his upcoming talk where he will share his experience), and one of them involved an Edison player:

"Well, I looked up the Edison player. It might be oversized for the machine I
have. I purchased the Sansmart 3018 which translates to an effective machining area of 300 mm x 180 mm. After doing my grill, I purchased some extrusions/bars to extend the capacity from 300 to 400. Still, the Edison looks much bigger.

My ideal on getting this CNC was simply to see what are the basics of getting into manufacturing replacement pieces. I knew it was limited in size but for the level of investment I felt it was a good learning experience and would guide me plenty if I wanted to go further. The machine itself is only one part and drawing things up in 3D is probably the biggest.”

Below is an example of Dan's handiwork:

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**THE STRANGE STORY OF DC'S LOST AM RADIO STATION**

By Rob Stumpf

The following article was first published in "The Drive" for March 4, 2021. It is published here with permission...Ed

It was first pointed out on Twitter by Matt Blaze, security researcher and chair of computer science and law at Georgetown University. In certain parts of D.C., you could tune-in to 1650 kHz and be greeted by a looped recording. The message, which read off the call sign WQQQ613 and warned listeners to avoid the 14th Street bridges, had been repeating since at least Jan. 21, 2013 - the day of former U.S. President Barack Obama’s second inauguration. But that was more than eight years ago. Why in the world would this message still be broadcasting? And why could it only be picked up in certain parts of the city?

To answer that question, I reached out to several individuals who work for the District of Columbia, including the technical contact registered with the FCC. Within an hour of sending off an email, my phone rang and Bill Curry, the chief of communications security at Homeland Security Emergency Management in Washington D.C., was on the other end. Bill was immediately interested in the rogue signal. He didn't seem rushed or bothered by the fact that the message was being broadcasted, but was instead curious that it managed to stay alive for so long without anyone knowing that it existed or complaining that it was out of date. See, Bill has been a radio enthusiast his entire life, even building homemade Ham radios before he began working with RF professionally, so the thought that some unmanned station was looping a recorded message was intriguing.

While on the phone, Bill's brother flipped on his historic Zenith Trans-Oceanic radio and sure enough, the traffic report began to play. Couple his interest with the security and communications work he does with Fusion Cen-
The following is based on articles in "Inside Radio" for May 3, 2021 ("New Rules Allowing AMs to Go Digital-Only Take Effect") and "Radio World" for April 2021 by Paul McClane ("A Cumulus AM Near NYC Will Go All-Digital").

New rules adopted by the FCC in October giving owners of AM radio stations the option of powering down their analog signals and becoming digital-only have gone into effect. A Digital Notification Form (Form 335-AM) has received approval and appeared in the Federal Register. With those legal requirements checked off, all-digital AM's are now permitted.

As previously reported in the Broadcaster, on October 27th, by a unanimous vote, the FCC approved a proposal allowing broadcasters to power down their analog AM transmitters and serve the public with only a digital signal. One requirement was the establishment of a 30-day waiting period after a station files the mandatory notification paperwork.

Once those details are submitted, a station would not be able to make any changes to its planned technical operation. The 30-day notice would also be used to alert listeners, using on-air and website announcements, with messages that without a digital receiver they would no longer be able to hear the station.

There are also several technical guidelines geared toward preventing digital AM's from interfering with analog stations. They include applying existing analog power limits to the digital broadcasts.

Several stations have already been laying the groundwork for going digital-only. Cumulus Media alerted listeners in April that it will turn off its analog transmitter on WFAS (1230) in White Plains, north of New York City, on May 24th. The move comes with a change of format from sports to conservative talk. The station's slogan will be "Digital AM 1230 HD: New Talk for New York." The station notified listeners that following the switch, it can find the station using an HD receiver, online streaming, a mobile app or via a smart speaker. The company told listeners "Broadcasting in digital will eliminate annoying static and interference, improve the sound quality to equal FM radio and streaming, and extend the range for clear reception."

NIA Broadcasting is preparing to go all-digital on R&B oldies WTMP Tampa (1150). WTMP also simulcasts on a pair of translators - the Egypt Lake, FL-licensed W271DL at 102.1 FM and the St. Petersburg, FL-licensed W248CA at 97.5. It earlier flipped sister WMGG (1470) to all-digital in January. The station's owner said that so far, he has not received any complaints from listeners missing the analog AM signal.

Also planning to go digital-only are Pin Investment's ethnic KXPD Portland, OR (1040) and Vision Media Group’s KFYN Bonham, TX (1420) according to FCC filings. Hubbard's Radio's adult alternative "The Gamut" WWFD, Frederick MD (820) has been operating as a digital-only AM station since July 2018 under experimental authority granted by the FCC.

**STRIPPING A MINERVA**

By Marv Beeferman & John Stoll

Some years back, I picked up two Minerva Tropic Master radios from an estate of one of our members. As typical with these totally metal-cased units, one had been re-painted a much lighter gray than the original and the other was suffering from rust spotting (but not as bad as some other examples I have seen).

The Tropic Master was a WWII "morale" radio that was used for troop entertainment. With eight tubes, it covered both the AM broadcast and shortwave bands from 5.5-18 MHz. The radio was "tropicalized" to withstand extreme heat and humidity.

Most of these sets may have been sold after the war ended. Being an AC-DC set, it was less of a problem for the troops overseas; the set will work on as little as 90 volts. For areas with voltage higher than 120, the troops could simply hook a few light bulbs in series to divide the power to the radio until the dial light was about the right brilliance.

On a Communicator posting, John describes a new use for Simple Green:

"The Minerva was a mess I bought at Princeton at an NJARC meeting if I recall. It had been painted with several gallons of white paint by what was a mop or sanitation broom. I am NOT kidding - it was so thick you could not see the metal joints. The paint was ridiculously thick and slopped everywhere including under the chassis. The knobs and even the dial coverage window was slopped. It was a real mess and I held off a rehab as I was clueless as to how to strip it."

"Still clueless for life in general but figured out how to strip the cabinet. I recalled the directions for Simple Green stated "not to use on painted surfaces." Really? Huh - OK - so I tried it as a stripper. What the heck! I immersed the cabinet totally in Simple Green for several days. I did not use sandpaper, a Dremel, or really nasty chemicals. Used a clear plastic tub, and filled the interior of the empty cabinet using foam blocks and bricks to fill the void so I needed less Simple Green in total. Every 12 hours or so I would stir it around and eventually got the cabinet down to bare metal! It even removed that baked on enamel paint it was manufactured with."

"Here is a view of the cabinet now. Please note the corners and the latch opening are all sharp and clean. The Simple Green really did a number on the paint. I did follow up on a couple of places with a sharp knife and then wiped it down with steel wool and thinners to clean it for "rattle can" painting. I saved I don't know how many hours of scraping, sand cursing..."

"So "think outside the box" as they say. The thinking part will always hurt but it will be worth the effort. Besides, there is always Laphroaig or Finlaggan or other single malts to help me recover."
New Jersey Antique Radio Club's
Summer Tailgate Swap Meet and Ham Fest
Infoage Science History Learning Center and Museum
2201 Marconi Road
Wall, New Jersey 07719
Saturday July 24th, 2021
Refreshments Available
40 spaces available
$25.00 for members
$30.00 for non members
Bring your own tables
Open to the Public
8am to 12 noon
Vendor setup at 7:15 AM
$5.00 Entrance Fee
Club Donation
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