

PCARA Update



Volume 26, Issue 12 Peekskill/Cortlandt Amateur Radio Association Inc. December 2025

On the menu

The November PCARA Membership Meeting was held at Putnam Valley Library on Saturday November 1, 2025, with 13 members taking part. Certificates were presented to Malcolm NM9J and Lou KD2ITZ who were successful at locating the fox hidden by Rob AD2CT in FDR State Park on October 25. Lou KD2ITZ introduced new member Alex AD2DU who has recently moved from Astoria to Somers, NY. Rob AD2CT is planning a PCARA workshop in the New Year to construct Meshtastic devices operating in the 915 MHz ISM band. Cost for the parts should be around \$50.00.

PCARA has been meeting at the Putnam Valley Free Library since February 2022. In view of the Library's support for our meetings and VE Test Sessions, Lou KD2ITZ proposed a donation to the Library — this was approved.

Nominations and elections for three positions on the Board of Directors were held at the November meeting. Those nominated for President (Greg KB2CQE) and Secretary (Lou KD2ITZ) were re-elected unanimously. Mike W2IG did not stand. — Rob AD2CT was nominated and elected to the vacant Director position.

Rob has posted the video recording of Ed N2XDD's October presentation on the PCARA YouTube channel (https://www.youtube.com/@peekskillcortlandtamateurr7670) — it has been viewed 166 times.

There was a move indoors for PCARA Breakfast on Saturday November 15 at Uncle Giuseppe's. Among those attending was audio engineer and prospective ra-



Certificates for locating the hidden Fox transmitter were presented by Greg KB2CQE at the November 1 meeting.



Members moved indoors for PCARA's November 15 breakfast at Uncle Giuseppe's. Joseph (right) demonstrated the radio microphones he uses for video production.

dio amateur Joseph who brought along an impressive array of radio microphone equipment that he employs during video production.

Another move takes place on Sunday December 7 when PCARA will return to Table 9 Restaurant for the annual **Holiday Dinner**, starting at 5:00 p.m. The cost is \$60.00 per head which includes entrée, soft drinks, cake and coffee (adult beverages extra). Menu details can be found in this month's edition of the *Update*. If you will be attending, please inform David KD2EVI (joandavidss88'ar'verizon.net) with your headcount. Watch out for the **new layout** at Annsville Circle, which has been raised in height to avoid flooding and reduced in size. Access to the Table 9 parking lot is now from the Route 9/Albany Post Road side. [See map on page 6, *-Ed.*]

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Please mark your calendar with these upcoming events: in December 2025 and January 2026.

- Sunday December 7, 2025 at 5:00 p.m. Annual
 PCARA Holiday Dinner at Table 9 Restaurant, US
 Route 9 at Annsville Circle.
- Saturday December 20, 2025 at 9:00 a.m.: PCARA Breakfast at Uncle Giuseppe's Marketplace in Yorktown Heights, NY.
- Saturday December 20, 2025 at 11:30 a.m.:
 PCARA VE Test Session, Putnam Valley Library, 30
 Oscawana Lake Rd., Putnam Valley NY. ARRL VEC.
 Candidates must contact Lou KD2ITZ,
 radiocassetta'at'gmail.com.
- Sunday January 4, 2026: PCARA Bring & Buy

Auction at the
Cortlandt Town
Center
Community Room
(CUE Room),
Mohegan Lake,
NY, starting at
3:00 p.m. Check
your basement
and attic for
suitable boat
anchors to bring along.



PCARA Board

President:

Greg Appleyard, KB2CQE; kb2cqe 'at' arrl.net Vice President:

Bob Tarsio, N2CBH; bob 'at' broadcast-devices.com Secretary:

Lou Cassetta, KD2ITZ; radiocassetta 'at' gmail.com Treasurer:

David Fredsall KD2EVI; joanndavidss88 'at' verizon.net Director:

Robert Gill AD2CT

Vice President Emeritus: Joe Calabrese, WA2MCR.

Net night

Peekskill/Cortlandt Amateur Radio Association holds a roundtable net on Tuesday evenings at 8:00 p.m. and a directed 'Old Goats' net on Thursday evenings at 8:00 p.m. Both events take place on the 146.67 MHz W2NYW repeater, offset -0.600, PL 156.7 Hz.

Join the roundtable to find out what members have been doing or join the Old Goats with net control Karl N2KZ for news and neighborly information.

VE Testing

PCARA's most recent VE Test Session was scheduled to follow the November 1 meeting at Putnam Valley Library. Once again, there were *no* candidates, possibly as a result of the U.S. Government shutdown which began on October 1, 2025.

The FCC had said on September 30th that it would suspend most operations, with the FCC CORES system not issuing any new FRNs (FCC Registration Numbers) and the FCC ULS system not processing any amateur radio license applications.

With the end of the U.S. Government shutdown on November 13, ARRL reported on November 18 that ULS and CORES systems were intermittently available again but electronic batch filing was having problems. In addition, FCC systems were experiencing significant performance degradation, with very slow response times. (Reference: https://www.arrl.org/news/arrl-vec-readyto-file-2-500-ham-radio-license-applications-fcc-extends-renewal-filing-deadline)

PCARA's next VE Test Session is scheduled for **Saturday December 20**, 11:30 a.m. at Putnam Valley Library. This follows the 9:00 a.m. PCARA Breakfast at Uncle Giuseppe's Marketplace. Candidates should contact Lou KD2ITZ beforehand using radiocassetta 'ar'gmail.com or they may register online at ExamTools using https://exam.tools/reg/69094f4d22d327feaca4b918.



Get your amateur radio license and discover... Camaraderie – Community Service Emergency Preparedness – Fun Science – Technology

ARRL Volunteer Examiners – Test fee \$15.00 There are no Morse Code requirements Must RSVP – radiocassetta@gmail.com





Original graphic courtesy of Lou KD2ITZ.

Adventures in DXing

A New Vision

A new over-the-air television standard is now being introduced in select areas around America. It is technically called **ATSC 3.0** and being marketed as

NextGen TV; already broadcasting in the New York City area via RF channels 11 and

32. This new technology promises lifelike 4K video resolution, higher fidelity sound, phenomenal video dynamic range, vibrant color rendition and a plethora of ancillary data bringing all sorts of features and information to viewers. NextGen TV also promises dramatically better reception — and — at greater distances than ever before. It is free to view with no subscriptions necessary. Just tune in and enjoy!

To accomplish these magical feats, broadcast television design engineers have worked and refined their concepts for over a decade to create a quite complex marvel. NextGen TV can produce remarkable images and sound as designed but it requires users to invest a reasonable amount of effort and familiarity to be fully enjoyed. Some people comment that NextGen TV adds a video game aspect to your viewing experience. It's that interactive!

A Work in Progress

Right now, there are many essential problems to be solved. To begin, the system *requires* viewers to have

an **antenna** that can receive the NextGen signals. (Some designs also require a wired Internet connection.) No antenna? No NextGen for you! How many people would be willing to re-visit using an antenna? What if your location is out of range of your local



NEXTGENTV 3.

Channel Master Digital Advantage 60 antenna.

NextGen transmissions? Cable and satellite providers currently cannot distribute the new ATSC 3.0 standard. If you want to see NextGen TV you have to watch overthe-air. No exceptions!

From a broadcaster's perspective, the financial model behind adopting NextGen is not encouraging. Using over-the-air RF delivery of television is quickly becoming obsolete and abandoned. Internet connectivity is now widely available and affordable and simple to use. Inexpensive Roku or Fire TV sticks have the ability to provide ultra-high-resolution video and advanced audio using only a common Wi-Fi signal for the final interconnect. It's simple: Roku and Fire TV devices are truly 'plug and play.' NextGen is 'plug and pray.' Can NextGen breathe a new more competitive edge for

over-the-air broadcasting in the year 2025?

If you ask the purveyors of NextGen TV, they have a completely different perspective. Combine excellent robust reception, magnificent picture resolution with enhanced colors and contrast, all sorts of interactive features and menus and immersive sound... and (they hope) you will be running to the store or ordering a brand-new TV, antenna and accessories with expedited delivery. You just can't live without it! Don't believe them? You decide!

To really appreciate NextGen TV, it helps to own a new, very large screen 4K television complete with a built-in ATSC 3.0 receiver. The bigger the screen... the more you will treasure 4K resolution. Right now, there are only a few available manufacturers offering these sets and they are often hard-to-get.

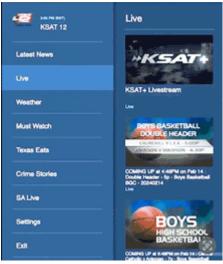
Developmental Challenges

Today's current broadcasters have great anxiety and trepidation about any further technology "improvements." Adopting the NextGen TV and 4K video standard would require station operators and cable providers to make expensive major upgrades to all of their equipment. In simple terms, they would have to "buy new everything" — transmitters, receivers, cameras, recording and playback facilities — essentially completely rebuilding their plants. Your engineering and production staff would require training and experience with this new world, as well.

Behind the scenes, today's ATSC 3.0 NextGen TV would be wise to invest in a team of user-experience designers to further finesse their system to make it more convenient and logical for home viewers. NextGen ergonomics are dense and complex. Many menus and pop-ups are offered giving you a lot to read and decide. It takes the concept of 'video on demand' to a whole new level.

You will instantly notice that there are a lot of

choices to be made. On-screen sidecar menus may offer several different variants of the show you are looking for. Interactive slideons will ask you questions, opinions or even have you playing games. You can create detailed personalized filters to focus in on enjoy new sug-



your interests and Onscreen sidecar menu for 'Live' selection.

gestions. Each and every TV set or ATSC 3.0 converter offers different interpretations of the layouts and offerings you'll see. Screens can start looking very crowded very fast. Use these features judiciously!



NextGen "Live Sports" TV Gamecast. [Credit: ATSC.]



NextGen "Live Sports" content on WXYZ Channel 7, Detroit, MI. [Credit NextGen / WXYZ].

Surfing through the channels also requires thought and expertise. Locking onto an ATSC 3.0 transmission now takes several seconds with each move — instead of instantaneous channel surfing like we are used to with our current ATSC 1.0. Your NextGen TV or external ATSC 3.0 tuner needs time to think about just what move you desire next. Instantaneous navigation is hopefully on the list for future improvements.

One question remains: Do all of these available options combine to deliver unmeasurable pleasure in viewing — or — will you long for the days of 'just put on Channel 2?' Maybe, in time, you will be comfortable with driving a high powered NextGen TV!

Right now, there is very little available true 4K UHD entertainment program content to air. NextGen broadcasts are doing their best by upconverting existing high-definition television to 1080p for NextGen distribution.

Also keep in mind that NextGen TV is still an overthe-air system. What you are able to watch is completely limited to the offerings and resources that can be provided by local network and independent stations **only**. If you are looking for Netflix, Prime Video, ESPN, Hulu, Disney+ and all your other favorites, you are still going to need a second means to receive these services like cable, satellite, Roku, Fire TV and so on. You might be flipping even more between input sources and wondering if you can find your show on HDMI 1 or HDMI 2.

How Many Remotes Can You Own?

One technological problem has never been solved for all electronic media. Humanity needs one unified authoritarian source of finding content and going to it without endless effort. Think about just how much time you can spend finding a Netflix movie you haven't seen yet! If I want to watch Michigan vs. Northwestern football, where can I find it? You may have hundreds of available sources but how can you discover where things are and what you are missing?



ADTH GEN 2 remote.

Today's step one: Google it! Second step: Surf all your channels and see if you can find the game. "We are on DirecTV 206, Dish TV 140, Optimum 36, Spectrum 28..." It may be halftime before you discover you are geo-blocked. There has to be a better way!

New York, New York

It's a helluva town! What will NextGen bring you if you tune in within the New York City metropolitan area? Two NextGen RF TV channel frequencies are up and running in The Big Apple delivering a total of *eleven* program sources. RF Channel 11 carries WABC, The CW, Antenna TV, Rewind TV and Spanish-speaking WXTV. RF Channel 32 carries WCBS, WNBC, WNET, WLIW, WMBQ-CD 'First Nations Experience' and Spanish-speaking WNJU. All stations are airing 1080p-resolution upconverted simulcasts of their current ATSC 1.0

broadcasts (except for WMBQ-CD in 480p) complete with Dolby audio. WNBC is adventurous by airing cuttingedge immersive Dolby Atmos audio, best known in theaters.



In comparison, the older ATSC 1.0 broadcasts in New York City now deliver 131 individual channels according to the NextGen website: https://www.watchnextgentv.com. Again, there is still considerable work to be completed for NextGen TV to provide parity compared to what we are all accustomed to watching today.

Sharp Standard

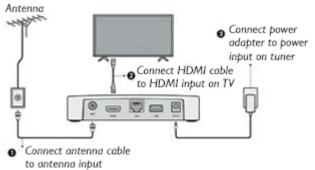
What if you threw a party and nobody came? Will NextGen TV become very popular as the ultimate means of enjoying the finest entertainment ever available? TV audiences already have embraced Internet streaming as their preferred means of content acquisition. You can enjoy 4K ultra-high-definition TV today via popular sites like YouTube's 4K UHD. (Take a look. The picture rendition looks sharper than real life!)

As more and more people move to streaming, over-the-air audiences decline proportionately. Old-fashioned broadcast stations can no longer offer the same numbers of viewers to advertisers as they have for decades in the past. Incoming revenue is evaporating. Even the major networks are cutting back on programming production costs and their overall business operating expenses.

Some dominant stations and station groups in the television broadcast industry may not be able to afford to install NextGen TV. Yet, some governmental proposals are pushing hard for complete switchovers from our current ATSC 1.0 to the new NextGen ATSC 3.0 format by as early as February 2028. Is all of America ready to purchase a new TV? Can enough sets be sold to meet such a speedy deadline? What will actually happen — and at what date — will remain a mystery until the industry decides on a viable conversion plan. Stay tuned!

Tuner Opportunity

Several manufacturers are offering standalone ATSC 3.0 tuner-converters ready to connect with your current flat screen via HDMI. Some versions offer combination ATSC 1.0 and ATSC 3.0 reception capability in one convenient box. A few add a simple DVR option to record and time-shift shows to your liking — but you can only record the ATSC 1.0 version of your show.



Connection of NextGen converter box between TV antenna and television set with HDMI inputs.

ATSC 3.0 DVRs have not yet been seen marketed in America. Buying a tuner-converter may be a much more economical way of test-driving the capabilities of NextGen TV. Televisions that are fully fitted for ATSC 3.0 NextGen currently cost many hundreds if not thousands of dollars.

The Zapperbox is considered the best (and most expensive) converter-tuner. ADTH GEN 2 is an economical favorite. Tablo, GTMedia, Silicondust and Channel Master/Zinwell are other well known brands. Buyer beware: The latest and greatest versions of these units

change often. Check with the company's website to ensure that the unit you would like to purchase is the most current rendition.

Other struggles beleaguer NextGen TV. Some broadcasters insisted on adding DRM (Digital Rights Management) — a digital



ZapperBox ATSC 3.0 over-the-air tuner with DVR, 4K and HDR.

copy guard encryption system — which rendered some early NextGen TVs and outboard converter boxes useless. DRM and many other of the technologies incorporated in the overall NextGen system are independently licensed by their creators, requiring licenses (and additional ongoing expense for both broadcasters and man-

ufacturers for continued use). Some
NextGen tuners have already surmounted this problem with new 2025 versions of their gear (e.g. The ADTH GEN 2 outboard accessory tuner) which can receive both inthe-clear and en-



ADTH GEN 2 NextGen converter.

crypted signals seamlessly.

When manufacturers design equipment for NextGen TV, it is absolutely essential that every device can receive, accept and self-install pushed firmware updates. New technologies need to be constantly refined and fluid for years to come. Without update capability, home consumer equipment will become obsolete and useless almost instantly. Indeed, you purchase the equipment and then become a part of the research and development process to improve your purchases by requesting upgrades. The manufacturers fix or embellish the sets' capabilities by pushing new firmware to your unit. It's a never-ending upgrade!

Good Data

In theory, NextGen TV does not require an Internet connection to send programming to your home, but if you want to enjoy its full viewing experience you will want to hook-up. Your TV or external tuner will need occasional firmware upgrades for optimum performance. Your local stations cannot personalize your delivery without creating a profile of your interests and viewing habits. An Internet connection to your TV or converter-tuner creates the necessary back channel to converse with you electronically and make these interactions possible.



ATSC 3.0 demonstration of local weather for Englewood NJ with expandable radar display. [Credit NBC Universal.]

This brings convenience and expanded programming to you. It is also an intrusion into your privacy. Stations are eager to know all they can about each and every viewer they can reach. The more detailed their database becomes, the more precisely they can deliver advertiser messages to specific audiences. Maybe superior and accurate targeting of consumers can translate into vital new revenue sources for NextGen stations?

NextGen TV can create narrowcasts to very specific groups based on age, gender, ethnicity, and just about any other preference you can imagine. They know who you are and they know what you like and with great accuracy they can tell advertisers who they need to reach. Person A should hear about football games. Person B would be interested in this weekend's clothing sales. Imagine what a powerful marketing tool this might be. Advanced modern technologies can be very intrusive. They are watching you, too!

NextGen TV is yet another harbinger of the future of technology. Is this a strong indication of what we might expect in the future? Should we get used to a world of vast choices and complication? Consider how much has changed since the shut-off of analog TV and

the adoption of all digital ATSC 1.0 HDTV back on June 12, 2009. Rest assured, you can still turn it all off and read a book!

Until next month, happy holidays and good DX! 73 de N2KZ "The Old Goat" dit dit.



Holiday Dinner

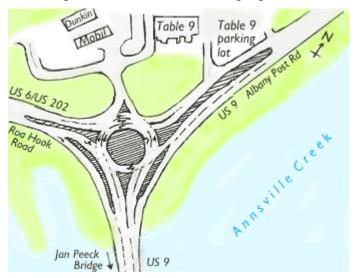
PCARA's 2025 Holiday Dinner is being organized in a different location from last year. The new venue is at "Table 9" restaurant on Annsville Circle in Cortlandt Manor. The event will begin at 5:00 p.m. on Sunday December 7, 2025.

The two-year construction project to raise the height and shrink the size of Annsville Circle is practi-



Table 9 Restaurant, located on Route 9 at Annsville Circle.

cally finished. As a result, the best entry point to the parking lot is now from Albany Post Road/US Route 9. If heading north on Rt 9, watch for signage to Table 9.



The dinner menu is as follows:

Appetizers

Fried Mozzarella Wedges, Santa Fe Egg Rolls

Main Course (choose one)

Cranberry Pecan Salad 10 oz New York Strip Steak Simple Salmon Penne Alla Vodka Parmesan Crusted Chicken

Dessert

Chocolate cake

Soda, Coffee, Tea are included.

Cost will be approximately \$60.00 per head, including service but not including alcoholic drinks. Our Treasurer suggests bringing **cash** to the event. All are welcome and family participation is encouraged. Please inform David KD2EVI (joanndavidss88'at'verizon.net) if you will be attending, along with your headcount.

Field Day Results 2025

Sub-optimal conditions

Results from ARRL Field Day 2025 were published around November 6th by ARRL. *QST* for December

2025 reports that entries and participants increased slightly compared to 2024 while the total number of contacts decreased by 8% to 1.2 million. Participants commented that conditions



on the higher HF bands were less than optimal.

PCARA's Field Day entry took place for the fourth time at George Washington Elementary School in Mohegan Lake. In view of another stormy weather forecast, operation took place beneath the school entrance canopy using wire antennas. There were more participants than in 2024, though CW operators were thin on the ground. Older radios and computers caused a few problems.



Evening operation under the school canopy with David KD2EVI and Elliot KE2GEQ during ARRL Field Day 2025.

There is a full report on PCARA's 2025 Field Day in *PCARA Update*, July 2025 pp 6-10. The results were transmitted to ARRL on July 3. Here is a summary of recent scores along with the 2025 score.

Peekskill/Cortlandt ARA, W2NYW, Class 2A

2002 2003 2004 2005 2007 2008 2009 2011 2012 QSO pts: 718 733 968 853 1019 1109 694 879 968 Power: 2 (<150W)
Partcpts: 15 11 12 10 14 10 10 14 15 Tot scor: 2,096 2,328 2,996 2,798 2,906 3,460 2,746 2,602 2,920

2013 (1A) 2014 2016 2017 2018 2019 2021 2022 QSO pts: 775 722 816 813 731 829 1366 712 100W Power: 2 (<150W) 22 22 29 Participts: 14 24 16 Tot scor: 2040 2460 3018 2734 2886 2764 3662 2234

2025 2023 2024 QSO points: 940 792 1060 100W 100W 100W Power: 27 Participants: 19 21 Total score: 2810 3090 2434

In 2025, 51% of entries were from home stations (Class D or Class E). Club members can still operate in Field Day from home then have their scores aggregated with the main club entry. Charles N2SO operated in Category 1D and added his score of **898** to PCARA's **2434** points. Here is a listing of neighboring clubs, including four with aggregated scores (Entries >1).

Club	Aggregate Score		
Westch Em Comm Ass	n 7918	1	
Hudson Valley Contests	ers 4284	5	
Orange Co. (NY) ARC	4014	3	
QSY Society	3984	1	
Yonkers ARC	3443	1	
Peekskill Cortlandt ARA	A 3332	2	
Putnam Em. Amateur R	L 3104	2	

Congratulations to WECA on their high score from a single entry, taking over top spot from Yonkers ARC.

Here are the **non-aggregated** results for top-scoring stations in the **Eastern New York** (ENY) Section of the ARRL Hudson Division.

#	Call	Score	Cat.	QSOs	Club
1	N2SF	7918	4A	1855	Westchester EmComm Assn
2	K2AE	7608	6A	1619	Bbroughton Memorial FD Gp
3	W2C	4795	6F	897	Warren County (NY) RC
4	N2LBR	4172	2D	1004	N2LBR Contest Team
5	K2QS	3984	3A	784	QSY Soc./MBARC
6	K2CT	3922	4A	811	Albany ARA
7	W2YRC	3443	4A	593	Yonkers ARC
8	N2LL	2948	5A	569	Overlook Mtn ARC
9	K2DLL	2680	3A	470	Saratoga Co,. ARA
10	K2PUT	2664	3A	391	Putnam Emerg ARL
11	W2HO	2592	5A	350	Orange County (NY) ARC
12	KX1Q	2592	2B2	520	(Boston Urban Radio Gp)
13	W2NYW	2434	2A	599	Peekskill / Cortlandt ARA
14	NA2NY	2014	1D	491	-

Analysis of ARRI's '.csv' file using Excel reveals the following positions for PCARA in the various categories and sections.

In ARRL Field Day 2025 PCARA was...

- First out of two entries in Category 2A, ENY section.
- 13th out of 43 in all of ENY section.
- 5th out of 10 in category 2A, Hudson Division.
- 33rd out of 122 in the entire Hudson Division.
- 97th out of 297 in Category 2A nationwide.
- 708th out of 4374 total entries listed.

The only other club entry in Category 2A, ENY section was from East Greenbush ARA; they scored 1184 points.

- NM9J

One KW book review

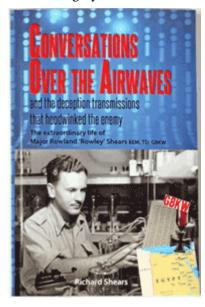
Conversations Over the Airwaves

and the deception transmissions that hoodwinked the enemy
The extraordinary life of Major Rowland 'Rowley' Shears BEM, TD,
G8KW, by Richard Shears, G8IWT

KW memories

As a UK radio amateur licensed in the mid-1960s, I have fond memories of **K.W. Electronics Ltd.** At a friend's home (G3LWK) and at the G6UW university station I operated KW2000A HF SSB transceivers. I owned a KW/Geloso Converter for the HF bands and I still have a KW 107 Antenna Tuning System.

I was not aware of the wartime exploits of K.W. Electronics' founder, Rowley Shears G8KW until I saw an advert in a recent issue of RSGB's Radio Communication. The author is Rowley's eldest son Richard G8IWT (and now G8KW). Richard's book is based on personal notes by his father for an autobiography that was never completed. Price from RSGB is £12.99.



Publication

My copy of the 2025 book came from Barnes and Noble. It is published by "The Choir Press", a self-publishing service located in Gloucester, England and marked with the imprint of "Lightning Source LLC" a USA Print on Demand service belonging to Ingram Content Group.

Early life

Rowland G. Shears was born in 1919 in New Barnet, a north London suburb. He was known as **Rowley** to distinguish his first name from engineer father Roland Shears, who introduced young Rowley to radio. Rowley built short wave kits and enjoyed worldwide reception. He joined the Radio Society of Great Britain and Southgate Radio Club then passed the General Post Office (GPO) 12 wpm Morse Code Test and was granted an "Artificial Aerial Licence" with call sign 2BXL in 1935.

The "Artificial Aerial Licence" was a pre-1939 UK license allowing construction and testing of transmitters — but they could only be connected to a "practically non-radiating aerial", i.e. a dummy load. Artificial



Locations around London mentioned in "Conversations Over the Airways".

Aerial callsigns were issued in the series 2AAA – 2HXX, then later reissued from 1946 as full licenses with the G2-prefix. (I ran into several G2xxx radio amateurs at Ainsdale Radio Club including G2CUZ and G2DQX. There were stories about the "artificial aerial", perhaps a small light bulb, connected to the transmitter with long leads to improve the range!)

After one year of artificial aerial testing, Rowley Shears submitted a report to the Postmaster General and in 1937 at age 17 was issued with a "Radiating" callsign in the G8 series – he chose **G8KW**.

In the years before WWII Rowley Shears worked at Pye subsidiary Invicta Radio in Holloway, testing early TV sets, where he began construction of a rack-mounted HF transmitter. He enlisted in the Territorial Army Royal Corps of Signals and received weekend training.

World War II begins

Just before WWII broke out in September 1939, 19-year old Rowley was told to report to the Royal Corps of Signals in Southgate. Following several moves, he was made a radio instructor and promoted from Signalman to Lance Corporal. After a short stay at Aintree racecourse (near the 1970s home of Microwave Modules) he sailed from Liverpool via Capetown, Colombo, and Bombay to Suez Port, Egypt at the southern end of the Suez Canal. A train journey took Rowley to Maadi, near Cairo. There he gave Morse lessons to servicemen and set up a radio net to contact nearby military sites.

Cairo communications

In October 1940, now aged 21, Rowley was posted to Abbassia Barracks, on the outskirts of Cairo, where he met Corporal Ken Ellis G5KW. The location contained a high-power transmitting station with high-speed telegraphy (RTTY) links to the UK, Melbourne and Washington. Rowley and team were asked to im-

prove the range of mobile "Heavy Wireless Unit" trucks so they could be reached beyond Tobruk, 450 miles away. Their "Wireless Set No. 3" transmitter/receivers were modified to operate up to 9.8 MHz.



Map shows Middle East and Mediterranean locations during World War II.

While testing communications receivers, Rowley discovered signals from German tank commanders in the otherwise empty 30-40 MHz tuning range of a

Hammarlund Super Pro receiver. A crossbearing suggested the Panzers' location was 1,500 miles away on the Poland-Russian front. The tanks were us-



Hammarlund SP200 receiver covered 0.1 to 40 MHz in five frequency bands.

ing low VHF frequencies, thought to be good for lineof-sight communications only.

The book tells how Rowley was then contacted by officers of Security Intelligence Middle East (SIME), the local arm of MI5, who were chasing spies in Cairo. They described a captured German agent "Alex" who had been infiltrated into Egypt on a German U-Boat. Rowley was asked to impersonate "Alex" over the air. The agent had been told to purchase a communications



Hallicrafters Sky Champion receiver covered 0.54 - 44 MHz.

receiver and construct his own transmitter. Rowley bought a Hallicrafters Sky Champion in Cairo and constructed a home-brew transmitter with help from an instrument

mechanic. Rowley followed instructions from SIME to encode messages for the Abwehr station (German mili-

tary-intelligence service) at Sofia, Bulgaria. He transmitted in the agent's Morse code style, then decoded the replies from the Abwehr. This was the beginning of the "Cheese Network" which fed misinformation to German military intelligence about Allied war plans and troop movements.

This account is at some variance with Nigel West's book "Double Cross in Cairo" (2015) which states that the German agent in question was known as "Cheese", "Lambert" or "Roberto". He is identified by Nigel West as Italian-born **Renato Levi**, a triple agent who worked for French, Italian and



Renato Levi

German intelligence services as well as the British. He had arrived in Cairo on an RAF Flight in February 1941

Nigel West's book is based on wartime MI5 files declassified in 2011, along with assistance from intelligence experts and Renato Levi's family. A note by Richard Shears in the 'Author's Introduction' to *Conversations Over the Airwaves* states that his own book is based primarily on **Rowley**Shears' notes rather than on

Shears' notes rather than on official sources. It is possible that Rowley deliberately obfuscated details of the German agent in his notes as the information would have been secret at the time. Or Rowley may have been provided with a distorted cover story by SIME to protect the German agent's identity.

Whatever the background, Rowley Shears continued impersonating the German agent's CW from 1941 to 1942, sending large amounts of misleading information to the Abwehr, mixed with sufficient true items to maintain confidence in the overall accuracy. Later in 1942 Rowley received a surprise message from the Abwehr saying that he had been awarded Germany's Iron Cross for this work. Partly as a result of the radio misinformation, enemy estimates of Allied battle plans were in error, contributing to the eventual defeat of Rommel in North Africa.

In addition to his work for the Intelligence Service, Rowley set up a local HF/MF Forces Broadcasting Service for the troops in Egypt, operating on 7220 and 1314 kHz. He made use of an RCA ET-4750 7.5 kW broadcast transmitter and a modified Hallicrafters BC-610 transmitter.

In 1944 Rowley went to Crete to *transmitter*. provide radio support for an undercover mission to capture General Heinrich Kreipe, commander of German forces, Crete. This was followed by a trip to Athens to locate the Abwehr's radio station.



BC-610 AM transmitter.

War ends

At the end of WWII, Rowley returned to the UK and applied for reissue of his amateur license G8KW. In August 1945 he traveled to Germany as acting Captain, Royal Signals for the British Army on the Rhine. He rebuilt the Radio Cologne broadcast station at Langenberg (904 kHz) as part of Nordwestdeutscher Rundfunk. The site also broadcast British Forces Network (BFN) on 1095 kHz. [During visits to my employer's location at Düren, W Germany in the 1980's, I could listen to the British Forces Broadcasting Service on VHF-FM from Langenberg tower, 50 miles away.]

Later, Rowley organized radio systems for the German Police in the British Zone. He also established the amateur radio society for post-war Germany known as **DARC** (Deutscher Amateur Radio Club.)

Back to Britain

Rowley Shears returned to the U.K. in 1950, living in Wilmington Kent and was employed for 5 years by Burndept Limited in nearby Erith, working on UHF equipment for air defense. His eldest son Richard was born during this period.

K.W. Electronics Limited was established by Rowlev in 1956 with his friend from Cairo Ken Ellis G5KW, using the shed and garage of Rowley's Wilmington home. In the early days he sold K.W. "Vanguard" 50 watt AM/CW transmitter kits along with Geloso receive converters and receivers.

K. W. ELECTRONICS LTD. THE K.W. "VANGUARD"



The K.W. "VANGUARD" Kit Transmitter. A modern Tableop 50 wast rig for "phone and C.W. Basic Kit, 30 gns. Complete Kit with valves and Cabinet, 48 gns. Parts available separately. GBKW Mubil-band Aerial with Trapp, 66/15 j-, c/w 100 fr. semi-airspaced co-axial cable. R.W. Low Pass Filters, G3/17/6. High Pass, 18/6. 100 WATT Pi-Coil Assembly, Q1(9)-.

Advert from Short Wave Magazine, February 1958.

In 1960

the business had outgrown Rowley's home and moved to factory premises in Dartford, Kent. There they continued to produce amateur radio HF sets in wired or kit form, mostly beginning with the letter "V" — the Victor 120 W AM/CW transmitter, Valiant 65 W fixed/mobile transmitter, Viceroy SSB and Vespa SSB transmitters. The KW2000 transceiver, roughly based on the Collins KWM-1 and -2, was introduced in 1963 covering 10-160 meters with 90 W PEP input. The upgraded KW2000A from 1964 was capable of 180 W PEP input



KW2000A transceiver from SWM advert, Feb 1967. "180 watt P.E.P. operation on all amateur bands 10-160 metres, complete with A.C. power supply £220 inclusive."

and became a popular U.K. transceiver during the late 1960s.

In the media

An example of a K.W. Vanguard transmitter along with an Eddystone 840A communications receiver makes an appearance at the start of the very first James Bond movie *Dr No* (1962). The British Secret Service station in Kingston, Jamaica is depicted, with radio equipment concealed in a bookcase, as reported in *PCARA Update* July 2012, pp 7-9.

In 1965 K.W. Electronics supplied broadcast equipment for pirate radio station **Radio 390** running 10 kW on 773 kHz from Red Sands Fort at the mouth of the Thames Estuary. The location was used for exterior shots of the *Danger Man/Secret Agent* episode "Not So Jolly Roger" (1966) where Patrick McGoohan can be seen chasing spies around the towers and walkways of the fort.

K.W. Electronics was the leading British manufacturer of amateur radio equipment from the late 1950s, until imported Japanese equipment became popular in the 1970s. Decca Group took over the assets of K.W. Electronics in 1974, with continued manufacture of amateur radio and commercial communications equipment. Decca was then taken over by Racal in 1979-1980 and the amateur radio line was discontinued.

Rowley Shears passed in November 2009, but his equipment is still celebrated every year with a "KW Weekend" organized by Cray Valley Radio Society in early January (Jan 3-4, 2026). Radio clubs and individuals are encouraged to get on the air with their K.W. Electronics gear. See: https://cvrs.uk/kw-weekend-2025/

"Conversations Over the Airways" is a good read, especially if you have an interest in the undercover radio of World War II or in the equipment subsequently manufactured by K.W. Electronics.

- NM9J

TX Factor 32 and 33

One of my memories of amateur radio in the U.K. was the annual Amateur Radio Exhibition held in the fall in the city of Leicester or at nearby Donington Park. My radio club organized an annual coach trip from northwest England to the East Midlands venue which was centrally located for easy access from most of Great Britain.

The latest National Hamfest 2025 took place at the

Newark Showground on September 5-6. It is the subject of two recent episodes of the Tx Factor video program.



TX Factor Episode 32 appeared on October 1, 2025. It features interviews by Bob Macreadie G0FGX with National Hamfest organizer Chris Danby GODWV,

followed by Yaesu UK's Karl Brazier G7AFT regarding the brand new FTX-1 Field 6 watt/10 watt transceiver for HF/ VHF/UHF with Optima clip-on 100W



Yaesu FTX-1 HF/VHF/UHF portable transceiver

amplifier. This is followed by an interview with Steve Thomas M1ACB, General Manager of the Radio Society of Great Britain (RSGB).

TX Factor Episode 33 was released on November 20. Bob Macreadie continues his interviews, starting with RSGB's Maker Champion Tom Wardill 2E0JJI, followed by Emergent Technology Coordinator Stewart Bryant G3YSX, explaining recently relaxed licensing for

repeaters and gateways. The next interview is with Icom UK's Bob Stockley featuring the brand new Icom IC-7300Mk2 transceiver, based on user feedback about the best-selling IC-7300. An interview with Stuart McKinnon G0TBI of the Vintage & Military ARS shows an original B-2 suitcase



Icom IC-7300Mk 2 transceiver now has an HDMI external display connector, SMA RX in/out connectors, CW decoder, USB-C and Ethernet ports.

spy set, while Martin G4HKS describes his happy retirement from UK dealership Martin Lynch & Sons.

These TX Factor episodes are sponsored by the RSGB. You can view them through the TX Factor's web site, http://txfactor.co.uk/ or by paying a visit to YouTube Channel: https://www.youtube.com/@txfactorshows.

skill."

Fortune cookie

Rob AD2CT came across the fortune cookie pictured below. He suggests that its message could be especially appropriate for amateur radio.

> You will find joy in the process of pursuing your hobby, not just in the end result.

When asked whether it came from an actual Chi-

nese fortune cookie, Rob replied "Yes it did! We ordered Chinese food from Chinatown Kitchen in Peek-

Pumpkin Patrol returns for 2025

Every year on Halloween, the Fort Herkimer Amateur Radio Association, W2FHA, and the New York State Police watch the thruway overpasses in Herkimer County, New York. This year was the 49th year of this cooperative effort designed to keep drivers safe. Each overpass is monitored by amateur operators, in their own vehicles, with communications coordination through the club's Disaster Action Response Trailer (DART). The operation spanned 2 nights and involved 24 operators.



The Fort Herkimer Amateur Radio Association Disaster Action Response Trailer. [Pic: Don Peterson, KD2ILO]

[Credit: ARRL Club News. ARRL Club News is published every month (12 times each year). ARRL members may subscribe at no cost or unsubscribe by editing their Member Data Page at http://www.arrl.org/opt-in-out. Archived issues can be found at http://www.arrl.org/club-news.]

- NM9J

Two meter Telrex

Jay NE2Q draws our attention to an advertisement from *73 Magazine* for September 1961. This shows the Telrex 8-element 2 meter Yagi model 2M814.



Telrex Laboratories' owner Michael D. Ercolino W2BDS (1906-1982) had worked in radio since 1921. During World War II, he developed antennas at Fort Monmouth, NJ for military use.

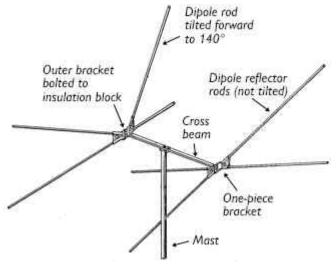
Post-war, the oldest continuously operating commercial television station in the USA, WNBT, moved to Channel 4 (66-72 MHz) in 1946. Michael Ercolino

noted difficulty with fringearea reception, 50 miles from the Empire State Building transmitter site. To improve reception, he devised the "conical double-X" antenna, described in U.S. Patent 2,518,297 (Aug 8, 1950). The 3D cones of a biconical dipole are simplified into a pair of V-shaped



Wideband biconical dipole simplified to 'X' antenna.

elements, then tilted forward. A similar pair of flat V-elements mounted behind acts as the reflector.

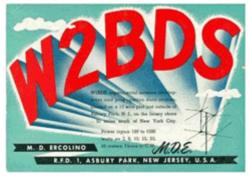


Michael D. Ercolino's "Conical Double-X" TV antenna as described in US Patent 2,518,297, appl. date 12/27/48.

In the patent example, an antenna cut for 60 MHz (VHF low-band) still has a desirable polar diagram over the frequency range 174-215 MHz (VHF high-band).

Michael Ercolino set up the Telrex antenna company in Asbury Park NJ to manufacture Double-X an-

tennas and turned out many, many of them — some can still be seen on rooftops to this day. There was even one on his QSL card.



Telrex branched out into other antenna designs for amateur and commercial purposes. Their amateur range included rugged Yagi antennas for HF and VHF, trap-dipoles, baluns, rotators and towers. Telrex Laboratories was still advertising in QST until 1990 and you can still see a giant Telrex log-periodic antenna on the DX Engineering web site.



Telrex 143042-105 16-element log periodic antenna covers frequency range of 14 - 30 MHz with a 42 foot boom. (If you need to ask the price, you can't afford it.)

Looking back at that Telrex 2M814 VHF Yagi advertised in 73 Magazine, Jay NE2Q reminds us that most amateur operation on 2 meters in 1961 used amplitude modulation (AM). VHF mobile operation was rare. FM repeaters and transistorized handi-talkies were still a few years away.

Jay NE2Q was first licensed in June 1958 in Mohegan Lake. For more on his early days in amateur radio, see: "Member profile: Jay NE2Q" by Jim KD2WSU and Lou KD2ITZ in the May 2023 *PCARA Update*.

Peekskill / Cortlandt Amateur Radio Association

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Newsletter contributions are always very welcome! Archive: http://nm9j.com/pcara/newslett.htm

PCARA Information

PCARA is a Non-Profit Community Service

Organization. PCARA meetings take place every month (apart from July/August break). See http://www.pcara.org for current details.

PCARA Repeaters

W2NYW: 146.67 MHz -0.6, PL 156.7Hz **KB2CQE:** 449.925MHz -5.0, PL 179.9Hz **N2CBH:** 448.725MHz -5.0, PL 107.2Hz

PCARA Calendar

Sun Dec 7: PCARA Holiday Dinner, 5:00 p.m., Table 9 Restaurant, Rt. 9 at Annsville Circle, Cortlandt Manor, NY.

Sat Dec 20: PCARA Breakfast, 9:00 a.m., Uncle Giuseppe's, 380 Downing Dr, Yorktown Heights, NY.

Sat Dec 20: PCARA V.E. Test Session, 11:30 a.m., Putnam Valley Library. ARRL VEC, see below.

Sun Jan 4, 2026: PCARA Bring & Buy Auction, 3:00 p.m. Cortlandt Town Center CUE Room.

Hamfests

Check with organizers before leaving.

Sat Jan 10 2026: Ham Radio University, LIU-POST 720 Northern Boulevard, Brookville, NY. See https://hamradiouniversity.org/

VE Test Sessions

Check with the contact before leaving.

Dec 11: WECA, Westch Cnty Fire Trg Center, 4 Dana Rd Valhalla NY. 7:00 p.m. Contact VE, rcasino48'at'gmail.com. **Dec 20:** PCARA, 11:30 a.m., Putnam Valley Library, 30 Oscawana Lake Rd., Putnam Valley NY. No walk-ins, must contact VE Lou KD2ITZ, radiocassetta'at'gmail.com.



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