



The Rumble

Next Meeting

Wed. January 8, 2025 6:00PM

TBD, plus more

Meeting Location:

Northern AZ Fire Station #31,
2600 Northern Ave

The January 2025 Letter from the Prez—

Another Look-Back at the Past Year

I would like to thank all of our members for a great 2024. I am especially thankful for all of you who have participated in all or many of the various club activities. Doing ‘Ham stuff’ is the life blood of our club and the reason we exist. Sans activities we are little more than a coffee clutch without the coffee.

I would like to thank the Hams who faithfully lead the 2-meter net every Tuesday evening. Thank you Walt, N7ANO, for leading the Hualapai Amateur Radio Club 40-meter net on Tuesday evenings.

Nets promote ‘emergency preparedness,’ an essential part of amateur radio and its reason for existing. Thank you Scott, KK7KBQ, for heading up all of the fox hunts each month.

It has been a gas (😊) to follow the activities of the balloon launches and tracking dudes and then monitor their amazing successes. I don’t know the names of all of those who participate in that part of our hobby, but Thank You.

I would like to thank the Board of Directors for their dedication to the success of our

club, including all of the club’s officers, the immediate past president along with Alan Serl, KM6KPW, and Vicki Zumwalt, N6KLS.

I would like to thank all of the officers of our club including: Scott, KK7KBQ; Mike, K6ECW; Alan, K7LUC; and Rick, K7CNT. Some are inclined to make a big deal about the club president; however, it is the other officers who really do all the detail work and, in their doing, make me look good. I simply run the meetings and make sure the desires of the membership are carried out.

I would like to extend a “Thank You” to the GMRS members who are contributing to the health and growth of our club. Both groups share many common interests as well as technology.

There is one member who sits quietly in the shadows and contributes to the reputation of this club every single month. Without him we would not have our amazing newsletter, The Rumble. Without him a lot of us would know very little about the antenna designs that make radio communication successful. That man is Tom Schiller, N6BT. Thanks Tom.

Finally, there is one last person that I have failed to mention. Thank you for all you have done to make this club a more vibrant

organization. You know who you are and my hat is off to you.

Jerry Zitterkopf, DVM, WS7T, President Hualapai Amateur Radio Club

From Treasurer Alan Webster, K7LUC

Happy New Year- give us your money! Membership Dues are being collected at the January 8th meeting.

Dues are the same as last year \$25 a year or \$35 for family. Cash or Check made out to HARC. If you want to mail it. HARC P.O. Box 6908 Kingman AZ 86402

From Vicki, N6KLS, Board Member

I ended 2024 and started 2025 with a special trip to Cairo, Egypt, as well as Luxor, Alexandria and many other historical spots. No matter where I travel, I take time to find other amateur radio clubs and operators and try to engage with them in their locations.

After a bit of research asking club members, I was given a tip to focus on the SU (Egypt) prefix on DX Summit. Then, I was to look up the calls with their detailed information and contact them using QRZ.com via email. This was encouraging, because I had been on a trip to Egypt in 2017, but was unable to make any contact at that time. This time, I was determined to make increased efforts. It was some work, as there weren't many QRZ entries, but I was successful!

The process paid off. I received a couple replies to contact them via What's App, which I did not have and knew nothing about. Apparently, What's App is used by

Egyptian operators to connect locally. I asked my son in law, who is Egyptian and lives in Egypt, to contact with the Club President using What's App. He was successful and made arrangements for me to meet several club members on the day I arrived. As it turned out, this was the same day they have their meetings! Well, the Stars were aligned.....



My thanks to The Egyptian Radio Amateurs Society for Development (ERASD) for hosting myself and Ahmed Ella when I was in Cairo, Egypt. The President, Mr. Said Kamel, SU1SK, warmly welcomed us to their official meeting place where I presented two (2) copies of Tom's (N6BT) book, Array of Light. They were most appreciative and insisted on making an arrangement for Tom to do a future presentation to their club via ZOOM.

Local conditions were such that I was not able to make radio contacts from Egypt; however, I was presented with two (2) buttons from their club and their hospitality to us could not have been more pleasant.



We shared several hours talking with them about amateur radio in their country and we felt fortunate for the generous amount of time these gentlemen spent with us.

One area of interest to them is Scouts Jamboree on the Air and recruiting more operators. Developing the youth in amateur radio is key to everyone's success. We exchanged information about exciting contacts we have made and before leaving an invitation was extended for them to visit us in the U.S.A.

Of course, my visit would not have been complete as the President of the Young Ladies Radio League had I not inquired about YL's in Egypt? I was told that women in Egypt who are not hams resent their husband's hobby, because they see it as their husband's other wife! The "husband's other

wife" is a recurring theme that I also hear in the U.S.A. -hihi.

Apparently YL's are very rare in Egypt. I was treated in every respect as an amateur radio operator and never felt any difference because I was a YL. I look forward to going back!

Amateur Radio is regulated to a high degree in Egypt by the government. Any radio equipment, antennas or gear of any sort is not allowed through customs to them. They are not allowed to order or accept equipment as gifts, either, as these things would come through customs. As a result, they make most of their own equipment and are proud of the contacts they make, along with very limited antennas. Remember -- Egypt is a third-world country and as such, people live in family apartments and buildings which are not always finished. SU1SK got creative and asked his neighbors to allow him to string antenna wires through their open windows to build the antennas he uses today.



Vicki Zumwalt, N6KLS and Pres. YLRL

From the Past President Rick, K7CNT

Repeater update:

KRMC has approved and is going to pay for the internet connection and it's now in the process of being contracted with WECOM. This has been a long, drawn-out process, but should become a reality. We should be very grateful to KRMC for their participation in this endeavor. This will get the D-Star equipment on the air finally and remember this is for now and the future success of HARC and keeping the club a modern organization.

Last month Tom, N6BT and Alan, KM6KMP spent 4 hours on the roof of the KRMC Hualapai building in the very cold wind working on the antennas. We had climbed up there a few weeks earlier and discovered that one of the HARC 2 mtr antennas looked charred by lightning (besides being broken). Trying to optimize the efficiency of the 2-meter repeater antenna, we installed a new Sigma 2mtr antenna (that had been used on other repeaters) in place of the charred antenna. The mounting location at the time for the new antenna was not optimal, being about 10 inches above the metal shelf that goes all around the small roof. This location turned out to be acceptable in some directions, but definitely not overall. Rick went back and swapped the uncharred vertical in place of the new one on the HARC 2mtr machine, which restored good coverage. So right now, the D-Star 2-meter repeater is connected to the Sigma antenna. We are still waiting for another conduit to be installed in the building to aid in further expansion of the station.

Tom and I went over to Sitgreaves Pass to test several 2mtr antennas on receiving our 2mtr repeater. We used a 5/8 vertical, 1/4 wave vertical, Bravo vertical, Sigma vertical, 3el HyGain full size Yagi (vertically polarized), 4el LPDA (vertically polarized). Overall, the multi-element antennas were slightly below the single element vertical antennas, which implies the obvious → the patterns (not necessarily the gain) from the antennas are the key, depending on one's location. Sitgreaves Pass is high, but not a line-of-sight shot to KRMC. We will continue to make measurements and apply the best antenna(s) for our location.

We are also hoping to install a 2-meter simplex and HF radio in the facility which will be used for emergency communications and manned by NHBR team members during an emergency event. We are looking for a donation of a 2m/440 radio. Please contact me if you can help with this. chs-rick@live.com

Balloon update:

K7CNT Pico balloon made a gentle splashdown in the Atlantic Ocean during its 4th orbit after apparently picking up some moisture from a very high thunderstorm (44,500ft) as it was passing over Costa Rica. The balloon was at 44,000ft. It spent a day down at 20,000ft and then the next day it succumbed to the added weight of the moisture and its last few transmissions showed it gradually coming down. The last reported altitude was 1,050 in grid FL65. All in all, it was a very successful flight. Thank you Bob Goulden KJ7VBX for sponsoring this balloon and getting the balloon stretched

and being a vital part of the launch. It's a team effort, well done !

Distance Traveled Km: 115,618

Distance Traveled Mi: 71,842

Spots: 1,627

Flight duration: 40 days, 21 hours, 20 mins

WB6RER Pico Balloon is still over the Antarctic region and was last spotted by DPOGVN over the continent a few hundred miles southeast of the German Newmyer research station that has been spotting it for the last few months.

Distance Traveled Km: 229,552

Distance Traveled Mi: 142,637

Spots: 872

Flight duration: 592 days, 20 hours, 10 mins

Thank you, Rick/K7CNT 73

OPERATING

(use ctrl-click to follow the links)

A.R.R.L. 10mtr Contest last December

A follow-up on the results of this worldwide competition, mainly looking at the score from the team operating VP2VMM (British Virgin Islands) shows that they crushed their 2023 record-setting score. This team has four (4) operators and competes in low power (100 watts) and multi-single operating, meaning only one transmitter on the air at a time and using both CW and SSB modes.

Their record-setting 2023 score:

QSO's Mults Hours score

3002 277 31.5 2,733,990

The mode breakdown was:

CW 1933 Q 147 mults

SSB 1069 Q 130 mults

....but, this past December, conditions were improved, with the flux hitting 200 and the Team also added a third element to the 2el vertical array aimed at US/Asia, helping the Team set this new record:

QSO's Mults Hours score

3818 329 36 3,966,424 **new record**

The mode breakdown was:

CW 2210 Q 175 mults

SSB 1608 Q 154 mults

The Team's assessment was that even with improved antennas, it was increased participation that brought the new record.

The highest scores in the world came from three (3) high-power, multi-operator stations: one in the USA, one in the US Virgin Islands and one in Puerto Rico.

The K1LZ (home call LZ1SA) station is located in Jonesboro, ME with the main antennas for 10mtrs being a stack of five (5) 7-element



Yagi antennas on a 211' rotating tower in the above photo.

The K1LZ score (5 operators):

QSO's Mults Hours score
4118 341 29.5 **4,924,940**

The mode breakdown was:

CW 3103 Q 180 mults
SSB 1015 Q 161 mults

Next in overall high score is NP2X in the US Virgin Islands on the island of St. Croix. Couldn't locate any recent photos of their antenna system; however, they have survived a hurricane or two over the years, with a main tower and secondary, shorter supports.

The NP2X score (2 operators):

QSO's Mults Hours score
4410 344 34.3 **4,830,448**

The mode breakdown was:

CW 2611 Q 176 mults
SSB 1799 Q 168 mults

Third overall high score is KP4AA in Puerto Rico. They run multiple towers with relatively small Yagi antennas, wire antennas for several bands and beverage receive antennas for the low bands.

The KP4AA score (2 operators):

QSO's Mults Hours score
3802 338 33.0 **3,987,048**

The mode breakdown was:

CW 2096 Q 174 mults
SSB 1706 Q 164 mults

The main difference in the above scores is the ratio between CW and SSB QSO's. CW is worth 2 points each and SSB is 1 point.

Considering that these top three (3) scores are all running high power (1,500 watts), the 4-op crew at VP2VMM running 100 watts and all equipment carried on the plane, setting up Field Day style, their **3,966,424** score for 4th highest overall is quite amazing and is the new World Record for low power. The operators were: AG9A, K2KW, K5PI, KD4D.

All their antennas were verticals on the beach, with a 2el Moxon at 20', manually rotated to cover the directions going over land.

The antennas were basically the same as in 2023, except as noted earlier, adding a director to the original 2element vertical covering the US/Asia direction.



USA, Asia thisa-way

Various Radio News

ARRL School Club Roundup - IMPORTANT

The next biannual ARRL School Club Roundup begins next month on Monday, February 10 at 1300 UTC (5:00 AM Pacific), ending on Friday, February 14 at 2359 UTC (3:59 PM Pacific). There are categories for elementary, primary, middle, intermediate, junior high school, senior high school, college, university, non-school and individuals.

Be sure to help out these youngsters by getting on the air and contacting them. Details and rules are at:

(<https://www.arrl.org/school-club-roundup>)

QuartzFest

“QuartzFest” is a week-long ham radio, camping, learning and living event.”, held near Quartzsite, Arizona. This year, it will be January 19-25, 2025, coinciding with the Quartzsite Arizona “RV Show”. Most attendees bring their RVs and camp on site, but some stay in hotels in nearby Quartzsite.

Get all the details at:

(<https://quartzfest.org/>)

Winter Field Day

A reminder that Winter Field Day will be on January 25-26, 2025, organized by the Winter Field Day Association. It’s not a contest but a practical field exercise; a perfect opportunity to practice portable emergency communications in winter environments that pose unique operational concerns. You may use frequencies on the HF, VHF, or UHF bands and are free to use any mode that can faithfully transmit the required exchange intact.

Similar to the ARRL Field Day, bonus points are earned in several ways, including using non-commercial power sources, operating from remote locations, satellite contacts, and more." Get details at:

(<https://winterfieldday.org/>)

MDARC Technician License Class

The Mt. Diablo club will hold its next Technician Class 8-session course each Tuesday evening, January 7-February 25, 2025 at 7:00 PM, both in person and on Zoom. There will be a test session the following Tuesday, March 4, and two optional (but highly recommended) Get-On-The-Air sessions on the two Tuesdays following the test session. For details and to register, go to:

(<https://www.mdarc.org/education-and-testing/class-details>)

Scroll down to the section “January Course” and click the course title to register. Be sure to read the rest of the above web page to get needed information, such as the required manual. Send any questions to:

(info@mdarc.org)

Board of Directors Meeting

The ARRL Board of Directors meets in Connecticut on the third weekend each January. That will be January 17-18 this time. Typically, participants arrive on Wednesday, committee meetings are held on Thursday, and the Board meets on Friday and Saturday. At that meeting, ARRL officers and members of the Executive Committee will be elected and official business of the League will be conducted. The Executive Committee is authorized to act on behalf of the Board between board meetings. The President and other officers are chosen for two-year terms

at the January meeting in even numbered years. The agenda is available at:

[https://www.arrl.org/files/file/About%20ARRL/Board%20Meetings/Draft%20Agenda%202025%20\(SH\).pdf](https://www.arrl.org/files/file/About%20ARRL/Board%20Meetings/Draft%20Agenda%202025%20(SH).pdf)

Proposed Changes to ARRL By-Laws

Last month, updates on proposed changes to Bylaw nos. 42 and 46. Bylaw 42 establishes the Ethics and Elections were noted.

Committee and describes its duties. Bylaw 46 is the Board's Conflict of Interest Policy. In short, an ad hoc committee prepared the proposed revisions, which were posted on the League website for your review. Since then, in response to comments from Board members, the Committee made several minor wording changes and two relatively major changes.

Proposed By-Law 42, Section 1(e) now has a better description of a neutral independent third party. A proposal to modify Article 7 of the ARRL Articles of Association was added to better describe ineligibility.

In addition to the above proposed changes, new proposals to revise Bylaws 18 and 20 were prepared, both of which concern elections. The Bylaw 18 revisions would clarify election procedures and candidate qualification; and move important elements describing elections into the Bylaws from less formally controlled documents. The Bylaw 20 revision would remove the current requirement that a selected qualified and disinterested third party be in person to observe ballot processing. This requirement is now obsolete, as the process is automated and can't really be "observed" in person.

The link to all these proposals and revisions is:

<https://www.arrl.org/by-laws-update>) with more detail.

The existing Bylaws are available at:

https://www.arrl.org/files/file/About%20ARRL/ByLaws%202024%20Jan%2001_20_24.pdf) [PDF, 17 pages.]

ARRL Foundation Scholarship

The ARRL Foundation Scholarship Program is for eligible amateur radio operators pursuing higher education. The ARRL Foundation manages more than 100 scholarships established by generous donors ranging from \$500 to \$25,000. The 2025 scholarship cycle is open and has been extended to Monday, January 13, 11:59 PM EST (8:59 PM Pacific). All applicants must be an active, FCC-licensed amateur radio operator. Simply holding a license, without being active in some way, is unlikely to be successful in receiving a scholarship. All applicants must submit an application, along with additional documents that vary among the different scholarships. Requirements are detailed and must be followed exactly. All documents must be submitted with the application.

Applications without the accompanying required documents (if applicable) will not be considered. Get details on the program and the various scholarships, and the applications, at:

<https://www.arrl.org/scholarship-program>)

On the Air Live

The ARRL Education & Learning Department will soon launch an interactive livestreamed video podcast, "On the Air Live". The monthly episodes will be aimed toward educating new and intermediate-level hams, inspiring them to explore the nearly endless

aspects of amateur radio and develop their skills. ARRL Education Specialist Wayne Greene, KB4DSF, will host each episode. Listen to this podcast, as he shares more details, including upcoming topics and how to participate in real time:

(<https://blubrry.com/arrlontheair/139659758/learn-even-more-with-on-the-air-live/>)

[audio, 00:17:42] and

(<https://www.youtube.com/watch?v=ZEQWSWDFXUo>)

[YouTube, 00:17:740]

Club Information

January is the month when a lot of clubs have new officers beginning their terms of office. It's important that every affiliated club update their information on the ARRL website each year. This includes listing some of the officers, such as the president and club contact, so that potential new members can contact you. This information may only be updated by a currently listed club officer. If the listing is out of date and no officer is available to update it, contact:

(clubs@arrl.org) and ask to have the club's contact updated. There's a link on each club listing page, called Club Update Help, which provides instructions on how to update the club information. There are a few reminders:

1. Only currently listed club officers or contacts may change the information.
2. You must be logged into the ARRL website as a member to make any updates.
3. Remember to hit the submit button at the bottom of the page.

Updates make it possible to keep listings for clubs up to date and help new members find your club.

Government Recommends Not Texting Between Android and iPhone Devices

Early last month, the FBI, NSA and CISA released new guidelines for protecting communications infrastructure in the United States, following an October cyberattack against U.S. telecommunications companies AT&T, Verizon and Lumen Technologies. In a news conference about the effects of the hack, an official mentioned that anyone with an iPhone or Android should stop sending text messages because they were not secure. This comment was either misstated or misunderstood by the media to mean we should stop all text messages. However, the FBI's advice recommends only that users do not send text messages from an iPhone to an Android or vice versa. Sending within one's network is reasonably secure. A press release about the new guidelines is at:

(<https://www.cisa.gov/news-events/news/cisa-nsa-fbi-and-international-partners-publish-guide-protecting-communications-infrastructure>) and include a link to the guidelines themselves.

[NSA = National Security Agency. CISA = Cybersecurity and Infrastructure Security Agency.]

Amateur Extra Course Available

The Amateur Radio Club of the National Electronics Museum in Maryland is hosting an Amateur Extra licensing course, beginning January 16, 2025, and running through March 27. The 11 3-hour sessions will be on Zoom, each on a Thursday beginning at 6:30 PM Eastern Time (3:30 PM Pacific). Those attending should hold (or be studying for) the General Class Amateur Radio License. Those wishing to sign up should email Rol Anders, K3RA, at:

(roland.anders@comcast.net)

This announcement is also available on the club's website at:

(<https://www.k3nem.org/?p=2588>)

[Thankx to Jim, K2YE, for the information.]

Quantum Communications Over a Fiber Optic Cable

Researchers from Northwestern University in Illinois and other locations have demonstrated the ability to teleport quantum information over a standard fiber optic cable while normal network traffic is also on the cable. This has major ramifications, as it not only shows that quantum communications may soon become practical, it removes the need to build a completely separate network for it, a feat previously though impossible. See this BBS Science Focus magazine article about it (<https://www.sciencefocus.com/news/impossible-quantum-teleportation>). The study paper itself is at:

(<https://opg.optica.org/optica/fulltext.cfm?uri=optica-11-12-1700&id=565936>)

04/11-13/2025

International DX Convention

76th Annual. Visalia, CA. Sponsored by Southern California DX Club. Website:

(<http://www.dxconvention.org>)

05/30/2025- 06/01/2025 SEA-PAC

ARRL Northwestern Division Convention. Location: Seaside, OR. Sponsor: Oregon Tualatin Valley ARC and Clark County ARC. Website: (<http://www.seapac.org>)

10/10-12/2025 Pacificon 2025

Location: San Ramon, CA.

Sponsor: Mount Diablo Amateur Radio Club. Website:

(<http://www.pacificon.org>)

01/07/1943 Nikola Tesla died in New York City, New York at age 86.

01/09/1942 All amateur radio operations were suspended, as the U.S. entered World War II.

01/12/2018 A rocket launch from India's eastern coast carried a large Indian mapping satellite and dozens of secondary CubeSats from other countries, including 4 from a U.S. company called Swarm; becoming the first illegal satellite launch in history.

01/13/1946 The Dick Tracy comic strip introduced what became an immediate icon, the two-way wrist radio; possibly inspiring the invention of mobile phones and smartwatches.

01/22/1947 Experimental station W6XYZ was relicensed as KTLA and became the first commercially licensed television station west of the Mississippi River. Bob Hope served as the emcee for KTLA's inaugural broadcast.

CLUB EVENTS

Breakfast: JAN 18th (Third Saturday) 7:30 AM
Airport Café

If not – please advise 😊

...end