



The Rumble

Next Meeting

Mar 6, 2024 6:00PM

Program

tbd, maybe live demo

Meeting Location:

Northern AZ Fire Station #31,
2600 Northern Ave

From the Pres February 2024:

Hi, everyone – I am over in Spain and other points East for a short vacation. No rig with me, so will have to be satisfied with enjoying the scenery and company.

73, Jerry Zitterkopf, WS7T

D.V.M., H.A.R.C. President

From H.A.R.C. Director and immediate Past President, Rick, K7CNT:

KRMC has given us permission to install Vicki's (N6KLS) digital (aka D-Star) tri-band repeater (licensed as W7KDS) into the facility.

We will need to run coax and the internet cat cable. I believe we can just extend the existing cat cable that was disconnected from the KRMC digital repeater through the new conduit pipe that was installed for us during the start of project.

This will really expand our system to a greater audience and should be a great system for us all to use. Digital is not for the future, as it is here now and we should take advantage of it.

This new system will ensure that HARC is current with technology and not just a two-meter net club. This is a great opportunity for HARC and we are very thankful for Vicki and Tom's generosity.

Balloons:

March 2024

Bob, KG7VBX is purchasing the materials to build a few PICO Balloon trackers and he wants to go for a "circumnavigation". He will be flying the best of available balloons, Yokohama brand. Not an easy task, but if other people can do it, he can to! You have my support, Bob.

WB6RER-4 balloon was last spotted on February 2nd off the coast of Mexico. It was at 51,181ft, 4.1 volts, 39°F, 14mph. It has been stuck in a more central latitude track, which has much fewer spotters, so I'm hopeful it's still up there. The last two orbits only had a couple of spots and with its diminished transmitter system, that is to be expected (I would think).

More Trailer:

Tom, N6BT has offered to build an aluminum, square tube type crank-up (and maybe tilt-over) mast for us to attach to the HARC trailer. This would enhance simplicity in setup efforts when deploying our antennas. Not to mention it would look really cool.

May God bless you

Thank you, Rick/K7CNT 73

Chs-rick@live.com

CLUB EVENTS

Mar 30 8AM Saturday Breakfast at the Airport Café (Kingman airport, of course) ☺

Question:

When may amateur stations transmit information in support of broadcasting, program production, or news gathering, assuming no other means is available?

- A. When such communications are directly related to the immediate safety of human life or protection of property
- B. When broadcasting communications to or from the space shuttle
- C. Where noncommercial programming is gathered and supplied exclusively to the National Public Radio network
- D. Never

(answer is found later in this Rumble)

.....

Vicki, N6KLS, is the President of the YLRL (Young Ladies Radio League) and asked if any of their members would like to write an article for their publication, YL HARMONICS. The following was submitted and shares about the NTS, the National Traffic System.

Hello All,

First of all it was nice meeting you all on the Zoom call. I must admit I have not been very active with YLRL although I do read Harmonics and try to attend the forums at ham conventions. I have been quite busy with NTS for a long time, perhaps busier now with the NTS 2.0 project including as editor of the new monthly NTS Letter, similar to the ARES Letter and as administrator of our new web based portal for entering radiograms into the network. Here is a little info regarding NTS for your newsletter.

The National Traffic System (NTS) is a network for message relay, promoting training and practice in accurate and efficient messaging. There are many types of activities available in amateur radio but one of these, the NTS, has received very little publicity in recent times, and many newer hams have little to no knowledge of what it is about if they have heard of it at all. I became interested in amateur radio through my son who, while in middle school, was

introduced to the hobby by a local ham who taught a summer school course in Morse code and consequently brought a group of young people into the hobby. After a year of DXing I decided to try traffic nets and I was "hooked". I have been involved in NTS in varying capacities ever since.

NTS has its roots in the founding of the American Radio Relay League in 1914, which was formed to better organize networks of message relays at a time when long distance phone calls and telegrams were quite expensive. There were various relay "routes" at that time handled by a few "Iron Men" operators. However following World War II, a time when hams were kept off the air, there was a renewed interest in message relay and George Hart W1NJM, an employee at ARRL, formed the National Traffic System, with its layering and sequencing of traffic nets where many hams could participate, spending as little or as much time as they chose. This activity became very popular during the 50s, 60s and 70s. SSB nets and VHF nets were eventually added to the existing CW nets as was a digital network. But then came the internet and cell phone service, making communications much faster and more readily available to the population at large, and participation and message traffic via amateur radio declined with less attention paid to this aspect of the hobby.

Fast forward to 2022. A new ARRL director was elected in the New England Division, who saw a real purpose for message handling skills as a resource for emergency communications. He also recognized the potential of a very dedicated group of operators, who regularly honed their own skills and provided training for new operators, and who kept a system of traffic nets operating 7 days a week, 52 weeks a year. A committee was authorized under the ARRL Emergency Communications and Field Services standing committee (EC&FSC) to study NTS and to develop a plan to both improve and enhance its capabilities in order to meet the needs and be an acceptable resource for emergency service agencies. I have been privileged to work with this committee of hams from across the US. Our project is referred to as NTS 2.0 and our goal is not only to

improve the NTS but to make its activity and services better known to other amateurs and to the public with hopes of recruiting a cadre of new traffic handlers who will have the skills necessary to assist when disasters strike. By the way one of our earliest projects was an improvement on the ARRL's online net directory. We have provided specifications and "wire frames" to the IT department at HQ and they are at work building this on their platform, so stay tuned. Our newest projects have included the monthly NTS Letter, similar to the ARES Letter, and a web based portal for entering message traffic into the network. To learn more about this project, check out the website [nts2.arrl.org](https://www.nts2.arrl.org) which is continually being updated.

73 and 33,

Marcia Forde KW1U

.....

More A.R.R.L. News from the January, 2024 Board Meeting

*** "Radiogrammers" Needed**

Over the last year or so, the League has had a number of working groups going in an effort to improve the National Traffic System (NTS). They've completed or nearly completed several efforts, but others are still being worked on. For example, we now have an NTS 2.0 website (<https://nts2.arrl.org/>); the NTS newsletter available for subscription; a directory of nets of all types, including traffic nets is almost ready; and several other things. One of the things still in progress is a web-based radiogram portal that will introduce radiograms to the public and provide an easy way for the public to submit messages that can be originated as formal traffic. It's almost ready to go live, but now they need traffic handlers to volunteer to check this portal on a regular basis, similar to checking into a traffic net. If you would like to be able to generate more traffic while performing a public service, send an email to

ntsletter@arrl.org).

*** Annual Club Record Updates**

Please remember to have someone in your club to update information at ARRL about your local club. This will allow visitors to learn about your club and will allow prospective members to learn about your club and its goals. Information on how to update your club information can be found at (<https://www.arrl.org/clubs>).

*** Local ARES Group Recruiting Assistance**

The League is going to be launching advertising in ARRL publications and other national publications to recruit new members to ARES. This campaign will lead them to a webpage where they can enter their location and it will provide the contact information for a local ARES team. We want this to provide a much quicker and easier process for them to get plugged in locally. To make this work we need your help. We're now collecting ARES group registrations on our website. This is a one-page form to be filled out by the EC or ARES team leader in each local community or club. This is very similar to the Club Registration we've been using for some time and will work very similarly to the club look up function we currently have but will be for ARES EmComm groups. The link to the page is: (<http://www.arrl.org/ares-group-registration>).

GOVERNMENT NEWS

*** *New Bill to Eliminate Private Land Use Restrictions on Amateur Radio***

On January 30, 2024, Senate bill S.3690 was introduced, the Senate companion bill to H.R.4006, introduced last June. Both bills reflect the Congressional campaign efforts by the ARRL to eliminate homeowner association land use restrictions that prohibit, restrict, or impair the ability of an amateur radio operator to install and operate amateur station antennas on residential properties they own. The text of bill S.3690 can be found at (<https://www.congress.gov/bill/118th-congress/senate-bill/3690/text>). See the full ARRL announcement at (<http://www.arrl.org/news/senators-roger-wicker-and-richard-blumenthal-introduce-s-3690-to-eliminate-private-land-use-restrict>).

*** *FCC Batch Filing System Dies – Yet Again***

The FCC Batch Filing System failed for several days last year; twice. Well, on February 13 this year, it happened yet again, and was down for a week this time. As you likely understand, the ARRL and presumably many other organizations, can't file license applications unless the batch filing system is operational. Another occasional(?) consequence of these failures is that, even when the system comes back up, some applicants are reporting that they aren't receiving the FCC payment email. As a reminder, applicants don't have to wait for the FCC email to pay the fee. As soon as the application is in the FCC system, the applicant can log into the FCC's CORES system (<https://apps.fcc.gov/cores/userLogin.do>) and pay the fee. CORES payment system information can be found at (<https://www.fcc.gov/licensing-databases/fees/cores-payment-system>).

Additional information and instructions are located on the ARRL VEC's FCC Application Fee web page at (<http://www.arrl.org/fcc-application-fee>). Other applicants are reporting that they aren't receiving the automated email with the link to their new, upgraded, renewed, or modified license. The FCC instructions for obtaining the official authorization (official license) is located at

(<https://www.fcc.gov/wireless/support/knowledge-base/universal-licensing-system-ulesources/how-obtain-official>).

*** *Want To Go To Mars (Virtually)?***

NASA is looking for four volunteers to spend a year living on Mars – or at least a 3D-printed replica of the red planet. The venture is designed to help develop and evaluate the systems that will be used by the first generation of astronauts to visit Mars, on missions ambitiously slated for the 2030s. The “lucky” four will be living in a 1,700 sq ft habitat which will simulate the challenges of a Mars mission, “including resource limitations, equipment failures, communication delays, and other environmental stressors”. See the full story on The Guardian's website at

(<https://www.theguardian.com/science/2024/feb/20/year-mars-simulation-volunteers-nasa>).

OTHER NEWS

March 2024

*** *Young Ladies Radio League***

Are you a lady ham? Do you know one? All female hams should consider joining the nationwide Young Ladies Relay League. Vicki Zumwalt, N6KLS; past president of the Mt. Diablo club and Contra Costa Repeater Association, and now president of the YLRL, sends the following message: “As the President of the Young Ladies Radio League, I invite you, and all other women to join us in supporting other women in our service/hobby. It is a wonderful opportunity to be with other women of like minds. \$15.00 a year is a small amount and goes towards our YLHarmonics sent electronically and our scholarship programs. I hope to see YL's at the Zion Hamcon in St. George, Utah, where the YLRL is celebrating 85 years! Check us out at (<https://ylrl.net/>) for more information.” Also remember that the YLRL meets in person at the Pacificon convention each October in San Ramon.

*** *Extra Class Question Pool Revisions***

The National Conference of Volunteer Examiner Coordinators (NCVEC) Question Pool Committee (QPC) has released errata for the new 2024-2028 Element 4 Extra Class Question Pool, which goes into effect on July 1. The errata includes minor question changes, the removal of one question, and one modified graphic. These updates are reflected in the new downloadable files, dated January 31, 2024. Get the revised question pool at (<https://www.ncvec.org/index.php/2024-2028-extra-class-question-pool-release>).

*** *HAARP Players Needed***

Amateur radio operators and radio astronomers are being asked to help monitor a new research project by the High-frequency Active Auroral Research Program (HAARP). The project began on Feb. 28 and will run into early March. Hams are especially asked to submit reception reports on HAARP signals between 2.8 and 10 MHz. Actual transmit days and times are highly variable based on real-time ionospheric and/or geomagnetic conditions. See the full ARRL item at

(<http://www.arrl.org/arrlletter?&issue=2024-02-29#toc01>).

The HAARP website is at

(<https://haarp.gi.alaska.edu/>).

* **Echolink Web Interface**

Echolink now has a web interface; a welcome addition for users. It runs entirely within a web browser. It runs on various browsers and OS platforms and doesn't require any app to be installed. Get details on the FAQ page at

(https://www.echolink.org/faq_webapp.htm).

* **America's Last Morse-Code Station**

According to an article in the April, 2024 edition of The Atlantic magazine, the former commercial CW station at Point Reyes, KPH, is the only remaining operational Morse code station in the U.S.; and it's now run entirely by volunteers. You can read the first several paragraphs at the link below, but unfortunately need to start a free trial to get the rest of the story.

(<https://www.theatlantic.com/magazine/archive/2024/04/ann-hermes-morse-code/677468/>).

They're on the air every Saturday. See their listing at (<https://www.qrz.com/db/K6KPH>) or on the US Maritime Radio Museum website at (<https://www.radiomarine.org/>).

[Thankx to Gregg, K6XSS, for the link to the article.]

Significant Events in Telecomm History in the month of March

03/01/1893 Nikola Tesla gave the first public demonstration of radio to the National Electric Light Association in St. Louis, although he had presented his work prior to this behind closed doors.

03/01/1938 Claude Shannon submitted his MIT Master's thesis for publication in the Transactions of the American Institute of Electrical Engineers, forming the basis of modern digital circuit design.

03/03/1847 Alexander Graham Bell was born in Edinburgh, Scotland.

03/03/1885 The American Telephone & Telegraph Company (AT&T) was incorporated as the long-distance division of American Bell Telephone

Company. It became the head of the Bell System on the last day of 1899.

03/03/1901 The National Bureau of Standards (now the National Institute of Standards and Technology, or NIST) was created via a law passed by Congress.

03/03/1969 AMSAT, the Radio Amateur Satellite Corporation, was formally chartered as a 501(c)(3) educational corporation.

03/07/1876 Alexander Graham Bell received U.S. Patent, No. 174,465 for the telephone.

03/10/1876 Alexander Graham Bell called out to his assistant Thomas Watson, "Mr. Watson, come here! I want to see you", becoming the first transmission of intelligible speech over electrical wires.

03/14/1879 Albert Einstein was born in Ulm, Kingdom of Württemberg, German Empire.

03/20/1800 Alessandro Volta wrote to the London Royal Society to describe the technique for producing electric current using what became known as the "voltaic pile", the first electrical battery.

03/29/1941 Joseph Hooton Taylor Jr., K1JT, Nobel Laureate and creator of the weak signal programs WSPR and WSJT, was born in Philadelphia, Pennsylvania.

03/30/1978 The most comprehensive overhaul of the amateur radio callsign structure since World War II went into effect, creating the fundamental structure in place today.

03/31/2006 Amateur radio operators from AMSAT in Germany tracked and received radio waves from Voyager 1 using the 20-meter (66 ft) dish at Bochum. Retrieved data was checked and verified against data from the Deep Space Network station at Madrid, Spain. This seems to be the first such amateur tracking of Voyager 1.

OPERATING

Question and the Answer:

When may amateur stations transmit information in support of broadcasting, program production,

or news gathering, assuming no other means is available?

A. When such communications are directly related to the immediate safety of human life or protection of property

B. When broadcasting communications to or from the space shuttle

C. Where noncommercial programming is gathered and supplied exclusively to the National Public Radio network

D. Never

ANSWER—

A. When such communications are directly related to the immediate safety of human life or protection of property

[Technician Class question pool (2022-2026) no. T1D09 (<https://www.ncvec.org/index.php/2022-2026-technician-question-pool-release>)]

A.R.R.L. International DX Contest, SSB:

This contest was last weekend (March 2-3) and conditions were.....how good?

The results from a handful of the contest stations in our area – AZ and NM are amazing.

Single-band, high power, unlimited (assisted, etc.)

10 meters only, N2IC (NM), a premier operator, made 2,030 contacts and 130 countries in 26.5 hrs.

All-band, **5 watts, 20' end-fed wire in a tree**, N6HI (Chandler, AZ) operated 10 hours, worked 15 mtrs for 19 contacts and 16 countries, plus 10 mtrs 29 contacts and 24 countries.

Single-band, high power, unlimited (assisted, etc.)

15 meters only, AA7A (at NA7TB-remote station in Safford, AZ) two tri-band non-trapped Yagis 794 contacts, 104 countries in 18.5 hrs.

Single-band, high power, (unassisted) **15 meters only**, N7RQ (YL of K8IA, Mesa), co-founder of the Arizona Outlaws Contest Club ("AOCC") various antennas: 1,353 contacts, 100 countries in 27 hrs.

All-bands, low power (100w), unassisted (no spots), N7IR (Chandler, AZ) and 29 relaxed hours:

80:	19	15
40:	102	50
20:	109	52
15:	219	81
10:	348	87

Total:	797	285

QSO
Countries

K7JQ, using two rigs/amp, each one to a Tarheel 200A-HP screwdriver vertical for 80 through 10 meters: one ground-mounted on a hill behind his house and the other on a fence.

80:	8	8
40:	37	17
20:	71	43
15:	161	54
10:	223	65

Total:	500	187

The above few scores indicate that we are definitely in a superior radio propagation cycle. The solar flux was up to 175 and even a flare over the weekend didn't dim the fun with spectacular results. All this to say – our HF bands, especially 15-10 meters are the best in several decades – ENJOY!

...end