The RELAY

May 2024

The Official Publication of the Arrowhead Radio Amateur Club
A.R.A.C. Inc. P.O. Box 7164 Duluth MN 55807-7164 http://www.thearac.org Dues: Member $20/Family $25

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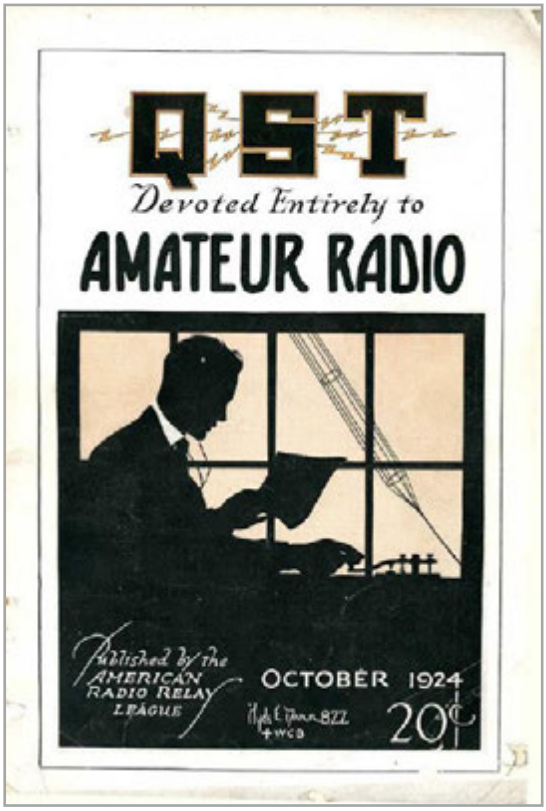
SPRING
2024

Join us on facebook!

Hamfest History

Marking One Century of Hamfests

A look back in history shows a variety of terms for annual or semi-annual gathering of hams in a region. Ham convention, ham swap meet, ham rally—all have been used in the past to describe an event for amateur radio enthusiasts to enjoy food and music, participate in crazy stunts, hear ham news, tell stories, swap advice—and sometimes trade radio equipment.



Aptly named "QST" is amateur radio shorthand for "Calling All Stations."

It was ***QST Magazine***, however, that first published one of these special festivals as "***Hamfest***" in the October edition of 1924. Reporting on one of several such regional events, a headline on page 40 said:

"The Midwest Division Hamfest

Forty enthusiastic members of the Midwest division attended the banquet held under the auspices of the Citizen Radio Club of Omaha on August 9th at the Conant Hotel."

The article went on to report that the Midwest Director L.B. Laizure was the distinguished speaker who "broke much-looked-for news of his first directors meeting in Hartford." This of course refers to a directors meeting of the **American Radio Relay League** (**ARRL**), headquartered in Hartford Connecticut.

The ARRL directors meetings were convened by legendary ARRL President **Hiram Percy Maxim**. Educated at the Massachusetts Institute of Technology (MIT), Maxim was an inventor and radio pioneer who, on April 6, 1914, co-founded the ARRL, with **Clarence Tuska**. A brilliant radio experimenter, Tuska was creator, owner and editor of ***QST*** from its inception in 1915 until he officially sold the publication to ARRL in 1919. To view PDFs of ***QST*** magazines from 1915 through 1969, visit https://www.worldradiohistory.com/QST.htm

Continued on Page 13

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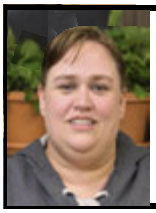

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1ST YEAR BOARD

PHOTO COMING SOON!

KD9VKI
Justin Cheever

Board Meeting Minutes - April 2, 2024

Present:

Board Members
Gene Ellefsen – N0VRM, Dave Pyrlik – K0DJP, Melinda Nelson – KF0GJW, Dave Davis – AA0AC, Doug Nelson - AA0AW, Sam Frey – KE0YTM, Justin Cheever – KD9VKI

Board Advisors (Non-Board Members)
Randy Wabik – KR0B

Guest: Diane Saunders – K0DSL, and Robin Davis

Meeting called to order by President Gene – N0VRM at 18:35 (6:35 pm)

Minutes:
Minutes were sent via email. Motion to approve Gene Ellefsen – N0VRM. Seconded by Justin Cheever – KD9VKI, motion passed.

Treasurer's Report:
No report due to not being able to get on the portal.

Repeater:
Randy Wabik – KR0B Received the repeater last Friday. Will get with Dave Pyrlik and set up a time to go up and install it.

HamFest:
Coming up in May. Need a check for $600.00 for the rent of the curling hall. Currently have 43 tables reserved. Still looking for donations for hourly prizes and Volunteers.

Testing:
The next big one will be at the HamFest on May 4th. Another test session on June 11th. After the General Class is done. As always if you are looking to test or upgrade, or know of anyone that is interested in testing please contact Doug Nelson at AA0AW@arrl.net

Continued on Page 3

Name Tags:
Stewarts will do it for $8.00 per badge. If we have a group of badges that go at one time then he will drop the price to $6.00 per badge. With them local and competitive Doug made a motion to go with Stewarts. Seconded by Melinda Nelson – KF0GJW. Motion passed.

New Business:
Diane Saunders – K0DSL is requesting permission to use the Club call sign and QSL cards for a special event on June 1st. "Museum Ships Weekend 2024". There will be a station set up on the William A. Irvin for Saturday. Starting at 10:00 AM and going till 5 or 6 pm. Also, looking for volunteers who would be interested in operating during the event and setting up.

Grandma's Marathon:
We have a slight conflict of issue with Field Day being the same weekend as Grandma's Marathon. If you have had a spot last year please let Doug Nelson – AA0AW know if you are going to be able to make it again this year to volunteer. Please register on Grandma's Marathon Site. Password is Ham24. If you have any questions please contact Doug Nelson – AA0AW.

Motion to adjourn by Doug Nelson – AA0AW. Seconded by Sam Frey – KE0YTM, motion passed at 19:01 (7:01 pm)

April 11, 2024

Minutes approved and seconded.

Treasurer report
Checking=$1212.34
Savings = $3255.72
Repeater=$1371.12
Total cash=$5839.18
CD=$1748.93
Total overall=$7588.11
- Approved - Justin
- Second - Paul D

Name/call sign badge announcement
- We have a vendor again - see Sam for requesting a badge, free for first badge, $5 for replacements

Ham Fest Announcements
- We need: morning volunteers to start at 6, kitchen help, door prizes

We purchased a Yaseu DR2 repeated for the Duluth-Mahtowa link.

A repeater and antenna for the 94 has been bought but we want to also replace the feed line and will need to have a tower climb so more funds are needed.

Drawing to Justin

CLUB REPEATER
WØGKP
146.94 (-)
CTCSS TONE
103.5

Prez Sez ...

Hello Everyone,

Grandma's Marathon is rapidly approaching and this is Club's biggest event of the year. Now is the time to get out your radios and check to see they are operating correctly. If you need to replace batteries there is plenty of time to get them before **June 22**.

If you are a new Ham or have not volunteered before and would like to, please contact **Doug Nelson AAØAW** and he will get set up. **All Volunteers** must go to the Grandma's website as follows:

- **Go to https://grandmasmarathon.com/support-us/volunteer/**
- **Click the green button that says:**

  REGISTER TO VOLUNTEER FOR THE 2024 GRANDMA'S MARATHON

- In the white password box, type **HAM24** and click the **Submit** button.

Hope to have you all join us to volunteer. This is a fun event and we get to show off our Radio Skills!!

73, Gene Ellefsen NØVRM

LOOKING for an Amateur Radio License TESTING SESSION?

Schedule your own Testing Session TODAY!

Contact Doug Nelson-AA0AW at aa0aw@arrl.net or 218-391-5874

All Exam Candidates are REQUIRED to have an FCC Registration Number (FRN) before exam day, which will require your email address.

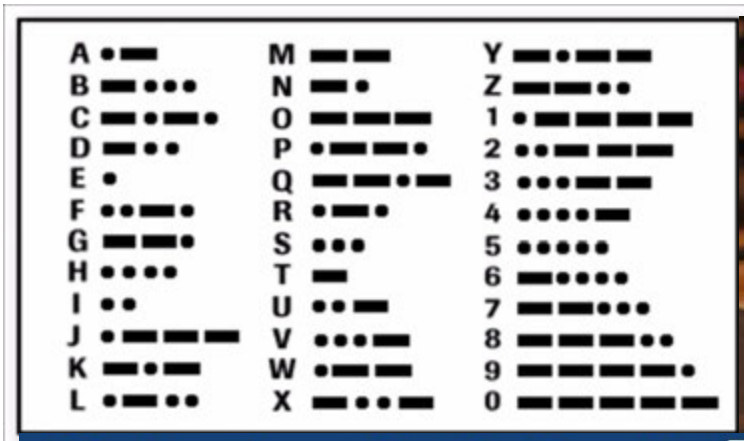
Not Currently Licensed? For New License Candidate FRN registration, go to: www.fcc.gov/new-users-guide-getting-started-universal-licensing-system-uls

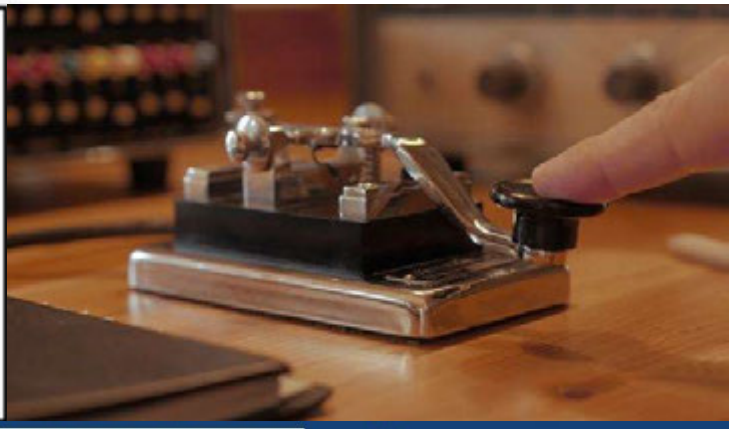
Upgrading to General or Expert Class & not sure you have an FRN number? go to *https://wireless2.fcc.gov/UlsApp/UlsSearch/searchLicense.jsp*

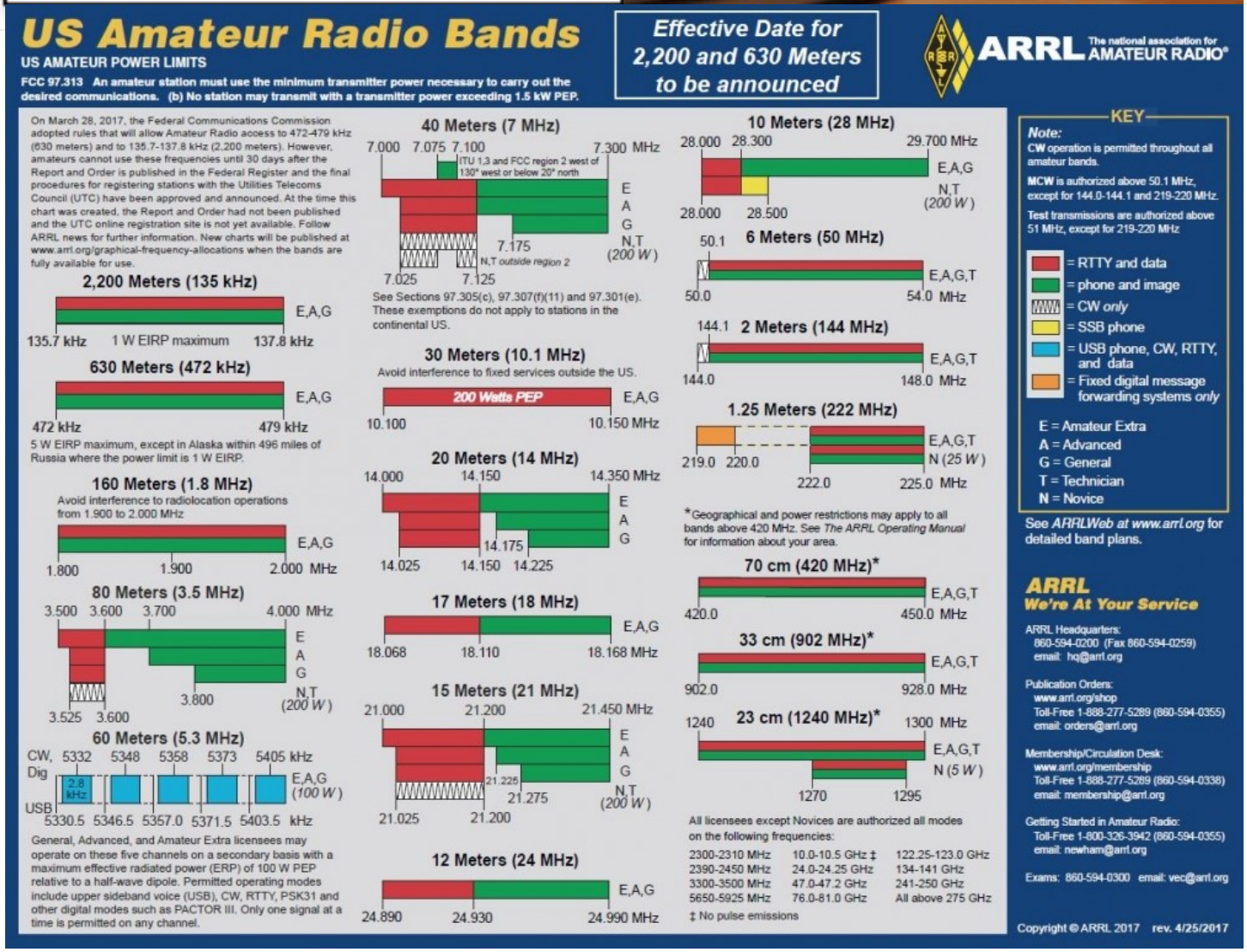
UPGRADE CANDIDATES:
Please bring a copy of your current license to the exam session.

CW Abbreviations

AR End of Message	AS Pse QRX	BK Back to You	SK End of Contact
TU Thank You	PSE Please	K Invite to Transmit	
QST Calling all Amateurs	QRL Are You Busy?	QRU Have anything for me	
QRV Are You Ready?	QRX Standby	QRS Transit Slower	







NETS

Have a favorite HF/6m/2m/1.25m/7Øcm net that you check into or listen in on? Also, please send corrections and we will add it to the list below - Kim KEØNQS at my email KEØNQS.mn@gmail.com.

- **Northland Weather Group Net:** Mondays 2ØØØ on the ARAC repeater (146.940 MHz with a tone of 103.5 and standard offset).
- **Minnesota D-Star Net:** Sundays at 19:3Ø on Reflector 53A
- **Minnesota Section Net** 12ØØ and 173Ø on 3.86Ø [Net Manager: NØYR] http://www.mn-section.org/dept_stm.html
- The non-non-net: Evenings 2ØØØ 144.2ØØ USB except for Sunday evenings.
- Badger WX Net: Ø5ØØ-Ø715 on 3.985. Give 24 hour high/low/current temperature, precipitation and snowfall.
- **PICONET**: 3.925 from Ø9ØØ-11ØØ CT Mon-Sat and 16ØØ-17ØØ CT Mon-Fri. Info at: http://www.piconet3925.com
- Michigan Upper Peninsula Net: 16ØØ (CST) on 3.921 MHz Sun-Sat and 12ØØ Sun. Info: http://www.michupnet.com
- Great Lakes Marine/Maritime Mobile Net: Morning Ø7:3Ø - 3.932; Ø8:15 - 7.261 MHz and evening 18:3Ø - 3.173Ø927; 19:15 - 7.268 MHz. Weekend extra net: 1Ø:ØØ - 7.261/7.268 MHz. All CST, LSB and +/- QRM. See: http://www.sailblogs.com/member/glmmnet/
- MIDCARS: Ø7:3Ø-13:ØØ - 7.258 MHz. See: http://www.midcars.net
- Iowa snowbird net on 14.257MHz, M-W-F at 1Ø:ØØ am Local Time. This is an open net.
- Spider Web Net (Marco Island FL) on 14.347 every morning at Ø73Ø CST/CDT: http://www.spiderwebnet.net
- Maritime Mobile Service Network: Daily at 11ØØ—21ØØ Central on 14.3ØØ. http://mmsn.org and http://www.143ØØ.net
- RV Radio Network: Every day at 19ØØ Central on 7.265 MHz. Web site: http://www.rvradionetwork.com
- Upper Midwest Ten Meter Net: Every Thursday Evening @ 8 PM – 28.48Ø MHz USB
- Wisconsin Sideband Net: Daily @ 5:15 PM – 3985 [or 3982.5] KHz LSB
- Hobby Helpers Net - Tuesday @ 8 PM – 28.33Ø MHz USB (Isanti MN) LSB [Net Manager: WOØA].
- Northstar Trader Net: 3.9Ø8 +/- at Ø83Ø CST Sundays
- WARFA: 3.9Ø8 +/- Sun/Tue/Thu nights at 22ØØ CST, http://warfa.org/
- Youth Net: 14.32Ø-1433Ø Sundays 18ØØ-19ØØ UTC, Net Control: AC8PI
- YACHT: Saturdays 19ØØ CST on EchoLink #481872, http://yachthams.webstarts.com
- Northwestern Ontario ARES Net: Evenings at 2Ø:15 (Central) on +/- 3.75ØMhz
- The Iron Range Net: Saturdays at Ø8ØØ Central time on or near 3.919 Mhz. Look them up on Facebook!
- FORX Net: Mondays at 19ØØ Central at 3.941 Mhz +/- QRM. WAØJXT — Grand Forks, North Dakota
- HF CW: Fridays Ø8:ØØ CST, 7.112 MHz. Informal slow speed CW Net. W8IRT NCS. Email: w8irt@aol.com
- Minnesota ARES Digital Net: Thursdays at 2ØØØ CST, 3.5835 MHz USB +/- QRM, Mode: Olivia 8/5ØØ.
- SARA Digital Net: Sundays at 19ØØ Local, 3.582.15Ø MHz USB +/- QRM, Mode: BPSK31/BPSK63
- Spider Web Net (Marco Island FL): 14.347 every morning at Ø73Ø CST/CDT: http://www.spiderwebnet.net
- Broadcaster Net: 7.231 or 3.855 M/W/F @ 15ØØ UTC. 14.255 M-F @ 213Ø UTC. http://www.cbsretirees.com/ham.htm
- Old Military Radio Net: 7.268 +/- nightly at Ø2ØØz. Other times/Frequencies too. See: http://www.mrca.ar88.net/
- Rag Chew Crew/Tailgaters/Freewheelers Nets: 3.916 +/- nightly at 19ØØ CST, http://www.tailgatersnet.com
- North South Net: 7.214.6 +/- at Ø7ØØ CST, Monday-Saturday

DULUTH AREA REPEATERS

ARAC System WØGKP

Frequency	Offset	Tone	Location
146.940	minus	103.5	Duluth
146.940	minus	107.2	Lakeside (recv)
146.940	minus	151.4	Two Harbors (recv)
146.940	minus	100.0	Gary-New Duluth (recv)
146.940	minus	110.9	Cloquet (recv)
147.000	minus	103.5	Mahtowa
444.100	plus	103.5	Duluth UHF Link

N9MMU/N9QWH System (WI)

145.310	minus	110.9	Duluth
145.490	minus	110.9	Solon Springs
147.255	plus	110.9	Hayward
145.110	minus	110.9	Rice Lake
147.345	minus	136.5	Holcombe
145.230	minus	110.9	Eau Claire

WECOMM – WI Statewide Linked System WE9COM

147.075	plus	110.9	Meteor Hill (closest repeater to Duluth)

LSAC System # 1

147.330	plus	151.4	Proctor
147.330	plus	103.5	Duluth (recv for Proctor)
147.270	plus	114.8	Two Harbors
147.270	plus	103.5	Wales
147.090	plus	114.8	Silver Bay
145.410	minus	114.8	Finland
147.300	plus	114.8	Isabella
145.150	minus	103.5	Washburn, WI
146.700	minus	103.5	Bayfield, WI
443.850	+5.00	none	Bayfield, WI
147.165	plus	110.9	Hurley, WI
146.640	minus	151.4	Ely
443.500	+5.00	141.3	Gilbert
147.060	plus	103.5	Virginia
147.360	plus	162.2	Cook
147.165	plus	114.8	Coleraine
443.925	+5.00	110.9	Brainerd
443.200	+5.00	114.8	Tamarack
147.360	plus	203.5	Aitkin
146.865	minus	146.2	Giese
147.570	simplex	146.2	Hinckley
444.575	+5.00	146.2	Hinckley
443.325	+5.00	146.2	Isanti

Rev. KCØWDQ as of 10/1/22 For ARAC Newsletter

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DULUTH AREA REPEATERS, continued

NARC System NAØRC

147.135 plus 103.5 Knife River
145.450 minus 114.8 Park Point (rcv)
147.135 plus 114.8 Knife River - Park Point (rcv)

Stand Alone Repeaters

145.210 minus 110.9 Clam Lake, WI
146.880 minus 123.0 Grand Rapids, MN
146.910 minus 146.2 Duxbury, MN
146.955 minus 146.2 Askov, MN
147.105 plus 110.9 Chaffey, WI
444.850 +5.00 141.3 Cloquet, MN

Fusion

Fusion **(**Analog has tone and C4FM digital with no tone)

147.150 plus 151.4 NTØB Gilbert. MN Fusion Repeater
145.170 minus 110.9 WA9KLM Superior, WI – Douglas County RACES/ARES Fusion Repeater (Digital only) Fusion Room 28373

145.250 minus 103.5 KBØYHX Cloquet, MN – Carlton County RACES/ARES Fusion Repeater

444.300 +5.00 103.5 NØEO Duluth, MN – Spirit Valley Amateurs Fusion Repeater WIRES-X NØEO (Analog only) Fusion Room 40494

444.400 +5.00 103.5 NAØRC Knife River, MN – Wires X Connected to NØEO Room 40494
444.500 +5.00 103.5 NØLCR Two Harbors, MN – Wires X Connected to NØEO Room 40494
444.600 +5.00 103.5 NØLCR Silver Bay, MN – Wires X Connected to NØEO Room 40494
444.800 +5.00 103.5 NØLCR Grand Marais, MN – Wires X Connected to NØEO Room 40494

D-Star

147.375 plus NØEO D Star
442.200 plus NØEO D Star

Rev. KCØWDQ as of 10/1/22 For ARAC Newsletter

Elmers

El-mer / ɛl-mər/ [el-mer]
1. a male given name: from Old English words meaning “noble” and “famous.”
2. an adhesive used to bond like or unlike materials
3. An experienced ham radio operator who mentors new and prospective hams.

Name	Call Sign	Expertise
Jeff Nast	KCØMKS	APRS, EchoLink, WinLink, Fusion, Contesting
Bob Schulz	KCØNFB	Contesting
Jim Anderson	NØJWA	QsoNet
Doug Nelson	AAØAW	HF, VHF/UHF, Contesting, Packet, APRS, Morse Code, VE testing, Echolink, Allstar, EmCom…

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Members, please check your name and email address for accuracy. If you are not on this list and want to be on the list, contact us with your info. If you need to make a change, please let us know at KE0NQS.mn@gmail.com OR KE0NQT@gmail.com

SUNDAY NIGHT NETS
193Ø - **CW - 28.125 MHz USB-CW**
2ØØØ -**USB 28.45Ø MHz**
21ØØ - **Southern St. Louis County Emergency Services Net**

MONDAY NIGHT NETS
2ØØØ- **Northland WX Net - ARAC Repeater**

MAY
CLUB EVENTS

TUESDAY NIGHT NETS
2ØØØ -**Douglas Cty 145.49Ø MHz**
2Ø3Ø -**Central Carlton County**

WEDNESDAY NIGHT NETS
19ØØ -**Lake County - LSAC1**
2nd & 4th Wednesdays
21ØØ -**BWAR**

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1 May Day 21ØØ -**BWAR**	2	3	4 **Hamfest** 9 am—1 pm Head of the Lakes Fairgrounds 4700 Tower Ave Superior, WI
5 CW 1930 NØPDG USB 2000 K9KDK ES 2100 KCØWDQ	6 DC ARES/ RACES Mtg 1900 DC EOC WX 2000 KCØMKS	7 **ARAC BOARD MEETING** Sammy's Pizza 6:30 pm DC Net 2000 CC Net 2030	8 Lake County ARES/ RACES Meeting 1800 Lake County Net 1900 21ØØ -**BWAR**	9 **ARAC** Club Meeting Coppertop Church **7:00 PM**	10	11
12 Mothers Day CW 1930 AAØAW USB 2000 NØVRM ES 2100 NØVRM	13 DC ARES/ RACES Mtg 1900 DC EOC WX 2000 KCØMKS	14 DC Net 2000 CC Net 2030	15 St Louis County ARES/RACES Meeting 1800 21ØØ -**BWAR**	16	17	18
19 CW 1930 NØPDG USB 2000 NØPDG ES 2100 KEØYTM	20 WX 2000 KCØMKS	21 DC Net 2000 CC Net 2030	22 Lake County Net 1900 21ØØ -**BWAR**	23 Carlton County ARES/RACES Meeting 1900 CC EOC	24	25 **ARAC Club Breakfast** The Chalet 8 am
26 CW 1930 AAØAW USB 2000 AAØAW ES 2100 AAØAW	27 Memorial Day WX 2000 KCØMKS	28 DC Net 2000 CC Net 2030	29 21ØØ -**BWAR**	30	31	

Get this newsletter *faster* via email!
Email Doug AAØAW at
aaØaw@arrl.net

Next Club Meeting:
Thursday,
May 9th, 2024 - 7 pm

ARAC Committee Chairs

Club License Trustee:
Ray Barnes KEØZN

Control Operators:
AAØAW - NØKXT - KCØNFB

Newsletter/Historian:
Kim KEØNQS & Steve KEØNQT Waller

Education Chair:
Bob Schulz KCØNFB

Hamfest Chair:
Bob Schulz KCØNFB

Chaplain:
Rollie Bockbader KBØCK

Visiting Chaplin:

Parliamentarian:
Grant Forsyth KCØWUP

Website:
Thomas Dorr KEØRHA

Membership:
Sam Frey KEØYTM

Property Chair:
Scott Ahlgren NØVYU

Testing:
Doug Nelson AAØAW

Field Day:

Picnic Chair:
Scott Ahlgren, NØVYU

Repeater Chairs:
Randy Haglin NØBZZ
Randy Wabik KAØJZV

Contest Calendar at www.contestcalendar.com

National Contest Journal at www.ncjweb.com

QSO Party Note: State/Province/National QSO Parties are abbreviated with the 2 or 3 letter abbreviation for the state/province/national designation followed by QP for QSO Party:

Examples: Minnesota QSO Party is MNQP
British Columbia QSO Party = BCQP

QRZ web site at www.qrz.com
VHF Propagation site at www.aprs.mountainlake.k12.mn.us

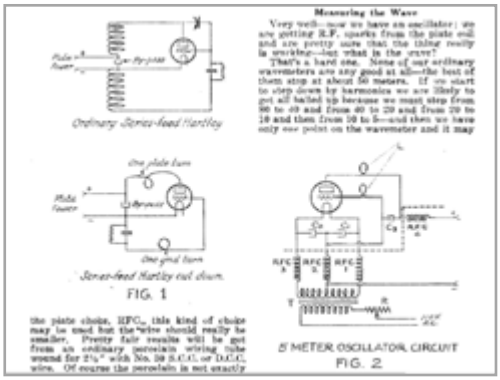
Reminder: The Contest Corral monthly listing of contests can be found in each issue of QST. ARRL sponsored contests can be found in Contest Corral, highlighted, or on the ARRL's web site at arrl.org.

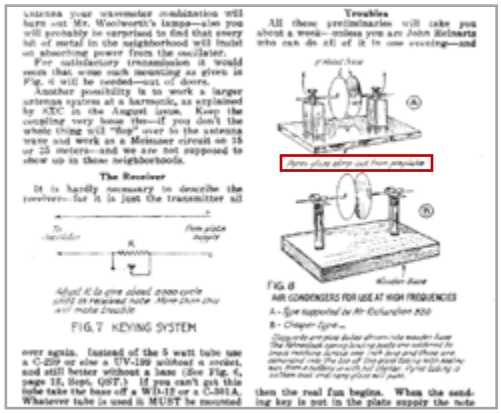
Hamfest History continued from page 1

From the beginning of ARRL history, these ARRL regional festivals and Club events were an exciting gathering of what would best be described as the "technology nerds" of their day. This is term is not meant to belittle at all, for many of these are giants in technology history, especially in (but not at all limited to) amateur radio. These men were dedicated to teaching radio technology to an eager public, for the good of humanity. This is not an understatement of their goals, as ***they firmly believed that communication technology is essential to the future health, safety, convenience and enjoyment of civilization.***

Those were the days that amateur radio operators usually gathered individual parts to build their own stations. They savored advice on the newest understanding of power, reception, and transmission. The public therefore also served as "citizen scientists", experimenting with various components and situations and submitting their observations of success or failure to other hams, including occasional publication in ***QST*** magazine.

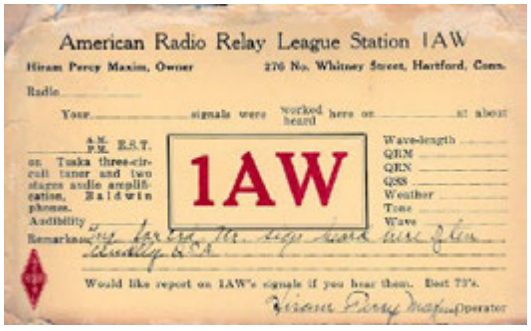
Until the internet, **QST** was arguably the most important way to gather the amateur radio community virtually in "one place." The publication would set the tone for hamfest program content for at least 7 decades.





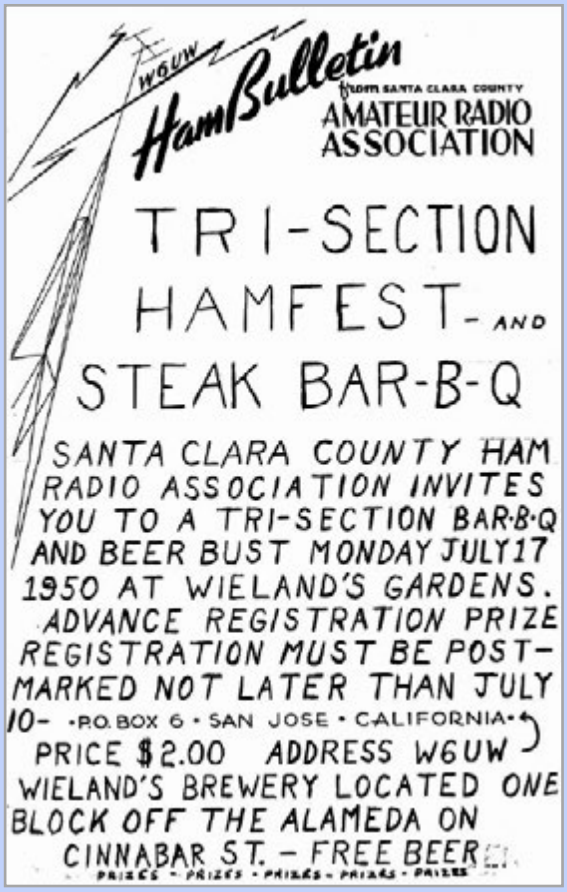
Typical QST article content (right) with project diagrams for hams to build or improve their stations. See description "Pyrex strip cut from pie plate" which we loved, & outlined in red!

In the early days, hamfests were considered prestigious members-only events, sometimes a 2– or 3-day duration. They incorporated things like ticketed "waffle breakfasts" benefitting a local orphanage or Salvation Army. They listened to a keynote speaker for insights on new technology development, the predecessor to our modern "trade show rep" at a vendor table iteration. They did silly contest stunts like running a race against each other with a spoon and a uncracked egg to win prizes. They had sit-down dinners with musical accompaniment, whether live musicians from the ham community or an amplified radio show. They viewed each other's QSL Card designs, laughed, made new friends, and renewed "lapsed" friendships from prior years.



After World War II ended on September 2, 1945, "pre-assembled" amateur radio component manufacturing became much more common place and assembling your choice of commercially available components for your station became the standard, rather than building your station "from the ground up". This naturally gave rise to hamfests that featured a trade show/swap meet format, whether outdoors or inside. Vendors showed the latest ready-made ham radio components and some of them would even take your old *Continued on Page 14*

gear as trade-ins. Hams set up tables with their used gear to sell or trade with other hams and talked for hours about various exciting aspects of the hobby. Many hamfests became family-style events that had indoor exhibit tables at a community center or other location along with outdoor swap tables, picnic tables, and tables with lemonade, baked goods or hot dogs for sale. Adjacent parking lots had cars with mobile stations to show to one another. Hamfests became the number one way to sell or trade your used amateur radio equipment and upgrade to a newer item.



Hamfest History Images
Upper Left: 1939 Boston Hamfest Token & W1UP Registration Tag
Upper Right: 1956 ARRL New England Convention, Cranston, RI
Above Photo Credits: Skip Youngberg K1NKR, https://hamxposition.org
Lower Left: 1950 Santa Clara County Amateur Radio Association Hamfest
Photo Credit:Santa Clara County Amateur Radio Assoc. www.qsl.net/sccara
Lower Right: 1977 Rockhill, SC Hamfest – Press Release Photo
Photo Credit: Knight Publishers Newspapers

Nowadays, the number one way to sell your used ham radio equipment is on the internet. Ebay, Facebook Marketplace, Craigslist and Community pages commonly list items to pick up locally year round. This has changed the dynamics for many Amateur Radio Club Hamfests, as vendor table sales for used goods decreases. Virtually all of the Club websites & blogs I've visited observed this clear trend.

Continued on Page 15

Hamfest History continued from page 14

Not to worry! Hamfests are adapting to this in a variety of ways. Some have Club members sponsor tables as exhibits of ham radio history, which is a LOT of fun. Showcasing your vintage collection of items and manning the table to tell attendees about them is great. Exhibiting your Dad's or Grand Dad's vintage station is wonderful, along with their collection of QSL cards or other items. All of these things tell the story of those who came before us in the hobby and ignited us to join in too! See our **ARAC 2024 Hamfest** on page 16.

Many hamfests are now featuring several technical "**How To**" **sessions** where elmers present cool projects they've done step-by-step, and audience Q&A is encouraged throughout. Young hams get to learn about an aspect of the hobby they've never tried, while seasoned hams get ideas and pointers too.

Some Clubs are shifting focus to robust trade-show style hamfests, even joining forces with other Clubs to create a larger regional event that includes live demos and food vendors. These have already been common in the bigger cities' convention centers & are often advertised as "ham conventions", featuring new products.

Other hamfests have shifted to a outdoor ticketed family-focused festival atmosphere with home-grown music, local food trucks or vendor tables, kid-friendly activities, and family exhibit tables to swap and/or sell used ham radio items and other miscellany.

Many Clubs are simply doing a ticketed BBQ Hamfest instead of food trucks, where Club members make the various food selections, along with a Best Dessert contest and raffles. A couple of years ago there was one that included a pie contest at an extra ticket price and paying pie tasters got to rank the pies on a ballot for blue ribbon, red ribbon and white ribbon. Another hamfest had an ice cream social that attracted their community and was the Club's biggest fundraising year.

Glacier Waterton Hamfest
"The oldest continuous running annual hamfest in the world! Every year since 1934! 90 years and counting."

Glacier Meadow RV Park and Campground, East Essex, MT
Visit https://www.gwhamfest.org/

This beautiful annual outdoor hamfest attracts U.S. and Canadian families and features an ice cream social, outdoor BBQ, tailgate swap meet, raffles, "historic beer bottle auction & more!

All photos Credit Elizabeth Simon

All of this reminds me of the1950 SCCARA Hamfest BBQ invitation we saw on page 14, and how so many clubs are just returning to a relaxed form of outdoor hamfests that attract the community around them. Like the post-WW2 era, we've all been through a lot the past few years. But we're going to continue to keep gathering together, indoor or outdoor, what ever it looks like, laugh, tell our stories, and realize we have great hope and a bright future.

We really do, so believe it. ***The best is yet to come.***★

Arrowhead Radio Amateur Club

2Ø24 Hamfest

Saturday May 4th, 2Ø24 9am – 1pm

HEAD OF THE LAKES FAIRGROUNDS, MULTI-PURPOSE BUILDING

47ØØ Tower Ave (WI HWY 35), Superior WI 5488Ø

The fairgrounds are located next to the Superior Airport

Admission $1Ø (12 and under FREE)

Free parking for most vehicles

Used and like new radios, electronic equipment, tools, vendor reps, parts, and computer items.

<<**QSL card checking** for ARRL awards programs by: Mike Cizek WØVTT>>

Mike's Email: mgcizek@gmail.com

ARRL The national association for AMATEUR RADIO

This is an A.R.R.L. sanctioned event.
Come meet your ARRL representatives!

Talk-in on WØGKP Repeater:
146.94Ø (-) [1Ø3.5] Duluth
146.94Ø (-) [151.4] 2 Harbors
147.ØØØ (-) [1Ø3.5] Mahtowa

Dealer / Vendor Tables:
4 foot table: $5 8 foot table: $1Ø
Vendor setup starts at: 7am

Testing on site!

1Øam 4-H Building
Contact: Doug AAØAW
218-391-5874
AAØAW@ARRL.NET

Table Reservations

Robert Schulz, KCØNFB
115 Eden LN, Duluth, MN 558Ø5-1533
218-39Ø-5ØØØ (please use email below)
arac_hamfest@charter.net

WWW.THEARAC.ORG

Hourly Drawings! Grand Prize: $5ØØ

Contest Calendar - May 2024

+ Phone Weekly Test	0230Z-0300Z, May 1
+ A1Club AWT	1200Z-1300Z, May 1
+ CWops Test	1300Z-1400Z, May 1
+ AGCW QRP/QRP Party	1300Z-1900Z, May 1
+ Mini-Test 40	1700Z-1759Z, May 1
+ VHF-UHF FT8 Activity Contest	1700Z-2100Z, May 1
+ Mini-Test 80	1800Z-1859Z, May 1
+ CWops Test	1900Z-2000Z, May 1
+ Walk for the Bacon QRP Contest	0000Z-0100Z, May 2 and 0200Z-0300Z, May 3
+ CWops Test	0300Z-0400Z, May 2
+ CWops Test	0700Z-0800Z, May 2
+ NRAU 10m Activity Contest	1800Z-1900Z, May 2 (CW) and 1900Z-2000Z, May 2 (SSB) and 2000Z-2100Z, May 2 (FM) and 2100Z-2200Z, May 2 (Dig)
+ SKCC Sprint Europe	2000Z-2200Z, May 2
+ NCCC FT4 Sprint	0100Z-0130Z, May 3
+ Weekly RTTY Test	0145Z-0215Z, May 3
+ NCCC Sprint	0230Z-0300Z, May 3
+ K1USN Slow Speed Test	2000Z-2100Z, May 3
+ 10-10 Int. Spring Contest, CW	0001Z, May 4 to 2359Z, May 5
+ RCC Cup	0300Z-0859Z, May 4
+ SBMS 2.3 GHz and Up Contest and Club Challenge	0600 local, May 4 to 2359 local, May 5
+ Microwave Spring Sprint	0800-1400 local, May 4
+ ARI International DX Contest	1200Z, May 4 to 1159Z, May 5
+ F9AA Cup, PSK	1200Z, May 4 to 1200Z, May 5
+ 7th Call Area QSO Party	1300Z, May 4 to 0700Z, May 5
+ Indiana QSO Party	1500Z, May 4 to 0300Z, May 5
+ Delaware QSO Party	1700Z, May 4 to 2359Z, May 5

Continued on Page 18

Contest Calendar - May 2024

+ New England QSO Party	2000Z, May 4 to 0500Z, May 5 and 1300Z-2400Z, May 5
+ MIE 33 Contest	2300Z, May 4 to 0300Z, May 5
+ WAB 7 MHz Phone	1000Z-1400Z, May 5
+ K1USN Slow Speed Test	0000Z-0100Z, May 6
+ ICWC Medium Speed Test	1300Z-1400Z, May 6
+ OK1WC Memorial	1630Z-1729Z, May 6
+ ICWC Medium Speed Test	1900Z-2000Z, May 6
+ ARS Spartan Sprint	0000Z-0200Z, May 7
+ Worldwide Sideband Activity Contest	0100Z-0159Z, May 7
+ ICWC Medium Speed Test	0300Z-0400Z, May 7
+ Phone Weekly Test	0230Z-0300Z, May 8
+ A1Club AWT	1200Z-1300Z, May 8
+ CWops Test	1300Z-1400Z, May 8
+ Mini-Test 40	1700Z-1759Z, May 8
+ VHF-UHF FT8 Activity Contest	1700Z-2100Z, May 8
+ Mini-Test 80	1800Z-1859Z, May 8
+ CWops Test	1900Z-2000Z, May 8
+ CWops Test	0300Z-0400Z, May 9
+ CWops Test	0700Z-0800Z, May 9
+ QRP Minimal Art Session	1400Z-2200Z, May 9
+ NCCC FT4 Sprint	0100Z-0130Z, May 10
+ Weekly RTTY Test	0145Z-0215Z, May 10
+ NCCC Sprint	0230Z-0300Z, May 10
+ K1USN Slow Speed Test	2000Z-2100Z, May 10
+ FISTS Saturday Sprint	0000Z-2359Z, May 11
+ SKCC Weekend Sprintathon	1200Z, May 11 to 2400Z, May 12
+ CQ-M International DX Contest	1200Z, May 11 to 1159Z, May 12
+ VOLTA WW RTTY Contest	1200Z, May 11 to 1200Z, May 12
+ Canadian Prairies QSO Party	1700Z, May 11 to 0300Z, May 12

Continued on Page 19

Contest Calendar - May 2024

+ 50 MHz Spring Sprint	2300Z, May 11 to 0300Z, May 12
+ K1USN Slow Speed Test	0000Z-0100Z, May 13
+ 4 States QRP Group Second Sunday Sprint	0000Z-0200Z, May 13
+ ICWC Medium Speed Test	1300Z-1400Z, May 13
+ OK1WC Memorial	1630Z-1729Z, May 13
+ ICWC Medium Speed Test	1900Z-2000Z, May 13
+ RSGB 80m Club Championship, SSB	1900Z-2030Z, May 13
+ Worldwide Sideband Activity Contest	0100Z-0159Z, May 14
+ ICWC Medium Speed Test	0300Z-0400Z, May 14
+ DARC FT4 Contest	1900Z-2000Z, May 14
+ Phone Weekly Test	0230Z-0300Z, May 15
+ A1Club AWT	1200Z-1300Z, May 15
+ CWops Test	1300Z-1400Z, May 15
+ VHF-UHF FT8 Activity Contest	1700Z-2100Z, May 15
+ Mini-Test 40	1700Z-1759Z, May 15
+ Mini-Test 80	1800Z-1859Z, May 15
+ CWops Test	1900Z-2000Z, May 15
+ Walk for the Bacon QRP Contest	0000Z-0100Z, May 16 and 0200Z-0300Z, May 17
+ NAQCC CW Sprint	0030Z-0230Z, May 16
+ CWops Test	0300Z-0400Z, May 16
+ CWops Test	0700Z-0800Z, May 16
+ NTC QSO Party	1900Z-2000Z, May 16
+ NCCC FT4 Sprint	0100Z-0130Z, May 17
+ Weekly RTTY Test	0145Z-0215Z, May 17
+ NCCC Sprint	0230Z-0300Z, May 17
+ K1USN Slow Speed Test	2000Z-2100Z, May 17
+ UN DX Contest	0600Z-2100Z, May 18
+ NZART Sangster Shield Contest	0800Z-1100Z, May 18 and 0800Z-1100Z, May 19

Continued on Page 20

Contest Calendar - May 2024

+ EU PSK DX Contest	1200Z, May 18 to 1200Z, May 19
+ His Maj. King of Spain Contest, CW	1200Z, May 18 to 1200Z, May 19
+ Arkansas QSO Party	1400Z, May 18 to 0200Z, May 19
+ Feld Hell Sprint	1600Z-2000Z, May 18
+ Baltic Contest	2100Z, May 18 to 0200Z, May 19
+ FISTS Sunday Sprint	0000Z-2359Z, May 19
+ Run for the Bacon QRP Contest	2300Z, May 19 to 0100Z, May 20
+ K1USN Slow Speed Test	0000Z-0100Z, May 20
+ ICWC Medium Speed Test	1300Z-1400Z, May 20
+ OK1WC Memorial	1630Z-1729Z, May 20
+ RSGB FT4 Contest	1900Z-2030Z, May 20
+ ICWC Medium Speed Test	1900Z-2000Z, May 20
+ Worldwide Sideband Activity Contest	0100Z-0159Z, May 21
+ ICWC Medium Speed Test	0300Z-0400Z, May 21
+ SKCC Sprint	0000Z-0200Z, May 22
+ Phone Weekly Test	0230Z-0300Z, May 22
+ A1Club AWT	1200Z-1300Z, May 22
+ CWops Test	1300Z-1400Z, May 22
+ Mini-Test 40	1700Z-1759Z, May 22
+ Mini-Test 80	1800Z-1859Z, May 22
+ CWops Test	1900Z-2000Z, May 22
+ RSGB 80m Club Championship, Data	1900Z-2030Z, May 22
+ CWops Test	0300Z-0400Z, May 23
+ CWops Test	0700Z-0800Z, May 23
+ NCCC FT4 Sprint	0100Z-0130Z, May 24
+ Weekly RTTY Test	0145Z-0215Z, May 24
+ NCCC Sprint	0230Z-0300Z, May 24
+ K1USN Slow Speed Test	2000Z-2100Z, May 24
+ CQ WW WPX Contest, CW	0000Z, May 25 to 2359Z, May 26
+ K1USN Slow Speed Test	0000Z-0100Z, May 27

Continued on Page 21

Contest Calendar - May 2024

+ QRP ARCI Hootowl Sprint	0000Z-0100Z, May 27
+ ICWC Medium Speed Test	1300Z-1400Z, May 27
+ QCX Challenge	1300Z-1400Z, May 27
+ OK1WC Memorial	1630Z-1729Z, May 27
+ ICWC Medium Speed Test	1900Z-2000Z, May 27
+ QCX Challenge	1900Z-2000Z, May 27
+ Worldwide Sideband Activity Contest	0100Z-0159Z, May 28
+ ICWC Medium Speed Test	0300Z-0400Z, May 28
+ QCX Challenge	0300Z-0400Z, May 28
+ Phone Weekly Test	0230Z-0300Z, May 29
+ A1Club AWT	1200Z-1300Z, May 29
+ CWops Test	1300Z-1400Z, May 29
+ Mini-Test 40	1700Z-1759Z, May 29
+ Mini-Test 80	1800Z-1859Z, May 29
+ CWops Test	1900Z-2000Z, May 29
+ CWops Test	0300Z-0400Z, May 30
+ CWops Test	0700Z-0800Z, May 30
+ RSGB 80m Club Championship, CW	1900Z-2030Z, May 30
+ PODXS 070 Club Three Day Weekend Contest	0000Z, May 31 to 2359Z, Jun 2
+ NCCC FT4 Sprint	0100Z-0130Z, May 31
+ Weekly RTTY Test	0145Z-0215Z, May 31
+ NCCC Sprint	0230Z-0300Z, May 31
+ K1USN Slow Speed Test	2000Z-2100Z, May 31

Our thanks to Bruce Horn, WA7BNM for use of this calendar!
Visit Bruce at www.contestcalendar.com/contestcal.html

The ARAC RELAY

Published monthly and distributed free to members, "The RELAY" is the official publication of the Arrowhead Radio Amateur Club, Inc. Members are encouraged to submit articles, opinions, and classifieds. Your submission will be placed as soon as possible providing it does not conflict with the bylaws of the Arrowhead Radio Amateur Club, Inc. The editors reserve the right to omit any submission that is not a required item. If a submission is questionable, it will be presented to the Board of Directors at the next scheduled board meeting for authorization.