March Newsletter 2021

KCARC Meeting
Monday, March 8, 2020, 7:00 PM

ZOOM – Meeting
(Watch your email for ZOOM Link)

WEEKLY NET TIME
Thursday, 8 PM on 146.76 repeater
(146.2 Hz tone)
Club Website:
https://keycityarc.org/

2021 Officers:
Allen Brooks, KF5SPQ, President
Ron Harden , WT5X, Vice President
Jacob Bachmeyer, KE5WHG, Secretary
Peg Richard, KA4UPA Treasurer

•••_ •••_ •••_ •••_ •••_ •••_•••_•••

The Prez Sez ...CQ CQ CQ…

Now that the Winter Weather Storm is over I hope that the only difficulties that everyone may have encountered were a loss of water pressure and/or temporary electrical outage. I certainly hope that no one had damaged pipes or other winter storm related damages. We only had a problem with the water here at my house, but thankfully because of the amount of snow that we received we were able to boil the snow and use it for whatever was needed. I had to use a hair dryer to thaw the water lines under the kitchen sink that was on an outer wall. My son and his wife were without power for several days so they stayed with us.

The difficulties we encountered throughout the city, as well as the state, brought home the importance of being prepared for whatever we may encounter. Many homes throughout the state are still struggling to have water due to busted pipes.

As a result of our "Winter Weather" experience I will do a short presentation of Cold Weather Survival Tips during our next meeting which is coming up shortly.

Changing topics, the **Steam N Wheels bicycle race, which we as a club have supported for years, will be conducted on March 20th at 10 am**. The location of the race has been changed to SeaBee Park located at 6525 West Lake Road. The Short, Medium, and Long Courses will be along Fort Phantom Lake. The Short and Long Courses have been staffed with radio operators, but there is still a need for people to help with the Medium Course. I am in need of 4-5 people. Please consider helping to staff this section of the bike race. You can email me at: um_circuitrider@yahoo.com and let me know you can help as soon as possible. Please also let me know your T shirt preference. Those who will be helping with the bike race will need to be at SeaBee Park by 9:15 a.m. to check in and then go to your assigned location.

"73's everyone!".
Thanks!
Allen Brooks, KF5SPQ

•••_ •••_ •••_ •••_ •••_ •••_•••_•••

Pegged by Peg …

Reminder that 2021 dues are payable at $20.00 per family, all living at one address, or $15.00 per individual for the year. You can mail to:

Peg Richard, KA4UPA, KCARC Treasurer

1442 Lakeside Dr

Abilene, TX 79602

•••_ •••_ •••_ •••_ •••_ •••_•••_

Upcoming Hamfests:

March 13-14 QSO Today Virtual Ham Expo

https://www.qsotodayhamexpo.com/

•••_ •••_ •••_ •••_ •••_ •••_•••_•••

•••_ •••_ •••_ •••_ •••_ •••_•••_•••

CONTESTS:

http://www.arrl.org/contest-calendar

March 2021
6-7 International DX– Phone

April 2021
18 Rookie Roundup – Phone

June 2021
12-14 June VHF
19 Kids Day
26-27 Field Day

July 2021
10-11 IARU HF World Championship

August 2021
7-8 222 MHz and Up Distance Contest
21-22 10 GHz & Up – Round 1
22 Rookie Roundup – RTTY

September 2021
11-13 September VHF
18-19 10 GHz & Up - Round 2

October 2021
18-22 School Club Roundup
23-24 EME - 2.3 GHz & Up

November 2021
6-8 Nov. Sweepstakes – CW
20-22 Nov. Sweepstakes – Phone
20-21 EME - 50 to 1296 MHz

December 2021
3-5 160 Meter
11-12 10 Meter
19 Rookie Roundup–CW
18-19 EME - 50 to 1296 Mhz

For a more extensive Ham Radio Contest Calendar, check this website:

http://www.hornucopia.com/contestcal/contestcal.html

•••_ •••_ •••_ •••_ •••_ •••_•••_•••

HAM EXAM SESSION

Berry Lane Baptist Church
1515 Lakeside Dr
Abilene, TX at 1 p.m.
Saturday, March 6, 2021

Ron Harden Jr., WT5X is the VE Liaison. His email is: wt5x@wt5x.org
Phone: 325-513-3184

•••_ •••_ •••_ •••_ •••_ •••_•••_•••

Approaches to Tackle Noise Problems Vary, Remedies Elusive

(from ARRL.org)

03/03/2021

RF noise is a frequent discussion topic among radio amateurs. A proliferation of electronics has cluttered and complicated the noise environment; it's not just power lines anymore. Unless isolated from civilization, most hams experience RF interference (RFI) — sometimes without even realizing it, although spectrum scopes on modern transceivers make RF noise much more apparent. Various approaches to address the apparently worsening noise floor have been taken around the world, some addressing lax regulation.

"We all want to enhance our ability to copy the weak ones by increasing our signal-to-noise ratio," Alan Higbie, K0AV, said in his March/April *NCJ* article, "Tracking RFI with an SDR One Source at a Time." He suggests practical methods for individual radio amateurs to improve their own noise environment. "We can do that by reducing the noise on each band that we operate. Lowering the noise floor increases the relative signal strength of weak signals. Those in typical residential environments find that locating and eliminating RFI sources is a never-ending process. It is much like weeding a garden."

The International Amateur Radio Union (**IARU**) warns against complacency. "Radio amateurs cannot sit back, because even if the desired noise limits are agreed, there are many rogue manufacturers and dealers who will happily sell noise-generating devices, leaving out filter circuits to cut costs," IARU said in a statement. IARU has urged member-societies to get involved.

The FCC Technological Advisory Council (**TAC**) — a Commission advisory group — **initiated an inquiry** in 2016 looking into changes and trends to the radio spectrum noise floor to determine whether noise is increasing and, if so, by how much. The TAC had encouraged the FCC to undertake a comprehensive noise study in 1998, and cautioned the FCC against implementing new spectrum management techniques or initiatives without first concluding one. In 2017, the FCC Office of Engineering and Technology (OET) invited comments on a series of (TAC) spectrum-management questions. ARRL, in its comments, took the opportunity to strongly urge the FCC to reinstate the 2016 TAC noise floor study, which, ARRL asserted, was terminated before it even got started. ARRL urged the FCC to "depart from the traditional regulatory model" that placed limits only on transmitters and called for "a 'holistic' approach to transmitter and receiver performance."

Greg Lapin, N9GL, represents ARRL on the TAC and chairs the ARRL RF Safety Committee. “Perhaps the best result that we obtained was an indication that illegal devices, mainly LED lights, were in circulation, and the Enforcement Bureau agreed to look into it,” he told ARRL. “We never heard what they found out, but recently, I was buying some LED bulbs over the internet from a site in Texas, and they were selling non-FCC approved lights — and didn’t seem to care.” Lapin said his complaint went nowhere, and the TAC’s focus has been nudged in the direction of addressing 5G issues.

- **ARRL offers a wide range of information on RFI on its website.**
- **ARRL Northwestern Division Director Mike Ritz, W7VO, will offer a seminar on HF Noise Mitigation as part of the ARRL Learning Network webinar series, on Thursday, April 22, at 1930 UTC).**

Some national regulators are paying attention to noise complaints, although not necessarily from users of licensed services. In the UK, regulator Ofcom recently dispatched an engineer just 30 minutes after receiving a report of interference to unprotected license-exempt devices — key fobs in this instance. “On rare occasions, faulty or unauthorized equipment can interfere with nearby technology and prevent it from working properly,” Ofcom said. Unclear is whether interference to licensed services would get the same level of attention.

Participants at the 2017 International Amateur Radio Union (IARU) Region 1 Conference in Germany, devoted considerable discussion to noise issues and the need to monitor the noise floor. The Deutscher Amateur Radio Club (**DARC**) has been working on developing a noise measurement system that approximates methods used by the International Telecommunication Union-Radiocommunication Sector (ITU-R). DARC reported that 35 of these electrical noise area monitoring systems (ENAMS) have been delivered, and it’s seeking another 20 locations as part of the effort to monitor noise interference on the HF bands. DARC said the ENAMS can help to make scientifically reliable statements about interference levels.

The IARU Region 1 EMC (electromagnetic compatibility) RF Noise Measurement Group meets quarterly to share ideas and experiences. One project under consideration is development of a common database to gather output from various monitoring stations for further analysis.

IARU sees wireless power transmission (WPT) technology as an impending major noise threat, especially from WPT electric vehicle (WPT-EV) charging systems. “For the amateur service, given the planned density of WPT-EV systems, it is calculated that there will be a widespread and serious impact on its operation in the vicinity of WPT systems” from spurious emissions, said a 2019 *ee publishers* **article**, written by “Amateur radio societies concerned about the HF noise floor.” The article also said, “To ensure a low probability of harmful interference to radiocommunication services, further study is required, including evaluation of real equipment, mitigation techniques and other measures to improve WPT-EV systems.”

The South African Radio League (SARL) is encouraging radio amateurs to set up their own RF noise monitoring systems using a dongle and a Raspberry Pi. The HF noise monitoring system takes 12 × 1 MHz bandwidth samples every 2 minutes, saving the data to a file.

•••_ •••_ •••_ •••_ •••_ •••_•••_•••

ARRL CEO David Minster, NA2AA, to Keynote QSO Today Virtual Ham Expo

02/23/2021

ARRL CEO David Minster, NA2AA.

CLOSE ✖

ARRL CEO David Minster, NA2AA, will keynote the **QSO Today Virtual Ham Expo** March 13 – 14 weekend. Minster's talk — part of an **80+ speaker lineup** — will begin at 2000 UTC (3 PM EST) on March 13. His appearance will highlight ARRL's featured role at the Expo, which also will include "Ask The ARRL Lab." ARRL is a QSO Today Virtual Ham Expo Partner.

Minster, who assumed the ARRL Headquarters leadership position last September, has launched major projects and assembled teams to foster innovation and individual skill development in radio technology and communications. In his keynote, Minster will share his enthusiasm for advancing amateur radio and highlight current ARRL initiatives to engage and inspire the current generation of hams. His presentation topics will include:

- ARRL's digital transformation, which promises to bring new value to ARRL members. An all-in digital approach will improve the way members access and engage with content, programs, and systems.
- The ARRL Learning Center, a hub for members to discover the many facets of amateur radio and develop practical knowledge and skills.
- Increasing video content, opening opportunities for amateur radio content creators and member-volunteers to learn, stay informed, and keep connected.
- Improving training and tools to engage radio clubs, emergency communication volunteers, and students.

The ARRL Expo booth will feature "Ask the ARRL Lab," where Lab staffers will answer questions live. Attendees can come into the booth lounge (featuring the Expo's latest virtual meet-up and video technology), sit down at a virtual table, and ask ARRL Lab technical wizards for tips about projects or suggestions to address various station installations and problems. Attendees can also learn about Product Review equipment testing by the Lab, see a presentation on how the Lab can help hams with RFI problems, and tour W1AW — the Hiram Percy Maxim Memorial Station — virtually. ARRL booth staff will also point attendees to helpful resources from across membership benefits, services, and programs.

Representing the ARRL Lab will be Lab Manager Ed Hare, W1RFI; Test Engineer Bob Allison, WB1GCM; Senior Laboratory Engineer Zack Lau, W1VT; RFI Engineer Paul Cianciolo, W1VLF, and W1AW Station Manager Joe Carcia, NJ1Q. Between all of them, they have over 100 years of experience at ARRL Headquarters,

QSO Today Virtual Ham Expo Chairman Eric Guth, 4Z1UG, also announced four live group

kit-building workshops. Workshop instructors will guide participants through building a variety of kits, which will be available for purchase and delivered prior to the Expo so attendees can build them at home. Attendees unable to participate during the live sessions can order and build kits by watching the workshop videos during the on-demand period that follows the Expo through April 12.

Workshop kits prices range from $15 to $30. Early-bird discount tickets and links to purchase kits can be found at the **QSO Today Expo website**. These workshops will include:

- Building the NS-40 QRP Transmitter, a 14-component, 5 W transmitter for 7.030 MHz (with instructors David Cripe, NM0S, and Virginia Smith, NV5F).
- The Learn-to-Solder Workshop will introduce the basic tools and techniques of building electronic kits. Participants will build a 20-meter transmitter kit (with instructors Rex Harper, W1REX, and Stephen Houser, N1SH).
- Building the Cric-Key, a simple CW keyer with paddle, suitable for home and field use (with instructor Joe Eisenberg, K0NEB).
- The Mini-Sudden Receiver, a pocket-and-mint-tin friendly direct-conversion 20-meter receiver (with instructors Rex Harper, W1REX, and Stephen Houser, N1SH).

(from ARRL.org)