

### CARC Membership Meeting

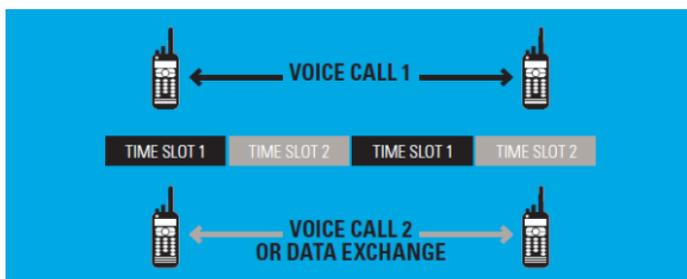
Tuesday 27 April 2021 7:00 PM  
**NOTE THE TIME CHANGE**

The April 2021 MEETING WILL BE  
CONDUCTED BY VIDEO CONFERENCE!

**"DMR Basics & the RWK DMR Repeater", by Andrew Koenig KE5GDB**

#### April Meeting Announcement

The April General Membership Meeting of the Collins Amateur Radio Club will be held Tuesday, April 27th, from 7:00 to 8:30 p.m. via Zoom. The main program for the night will be "DMR Basics and the RWK DMR Repeater," presented by Andrew Koenig KE5GDB



The "Zoom doors" will open at 6:30 p.m. to allow for socializing and adjustment of audio/video settings. In addition, we'll keep Zoom open for 30 to 45 minutes after the meeting to allow more socializing and mentoring. Zoom login info will be emailed to all members the weekend prior to the meeting. To help with missing emails and accidental deletes, the Zoom credentials are now posted via links in the Members Only section of the [www.n5cxx.us](http://www.n5cxx.us) website. Look for the "Business Table" near the top of the Members Only section and click on the "CARC General Meeting Zoom Login" link. This information will be updated monthly. If you need the Members Only login info, please contact the Club's webmaster.

The April program will provide an overview of DMR (Digital Mobile Radio), what it is, how many clubs world-wide implement repeater systems for the mode and what is needed

to get on the air using DMR. Andrew will also describe the DMR repeater capabilities of the Richardson Wireless Klub and how to program a DMR radio to use this repeater.

Andrew is an Extra Class licensee and a recent graduate of the University of Texas at Dallas. He continues to be involved in the K5UTD Amateur Radio Club and is active with the Denton County ARA and the Richardson Wireless Klub, for which he is Repeater Trustee.

His interests in amateur radio are varied and include repeaters (particularly Allstar and DMR), Raspberry Pi projects, satellites, Foxhunting (RDF), high-altitude weather balloons, dabbling with 220 and 900 MHz, collecting HTs and weather.

#### CARC Community Service Activities

**Siren Testing** Dennis Cobb WA8ZBT, Frank Krizan KR1ZAN, and Jim Skinner WB0UNI participated in the Richardson emergency siren testing on 7 April. The April test went fairly well—most sirens worked well. The sirens are monitored by amateur radio operators and reports made using the Richardson Wireless Klub (RWK) repeater at 147.120 MHz. Siren testing occasionally uses the University of Texas at Dallas (UTD) repeater at 145.430 MHz, which is designated as the backup repeater. Jim Stafford, W5DTG, and Bob Jones, W5BJ, took part in the March 2021 Garland Siren Test. The April test was cancelled due to cloud cover.

**Crime Watch Patrol** Jim Skinner WB0UNI participates in Richardson Duck Creek Crime Watch Patrol (CWP). CWP members, after successful completion of Richardson Police Department training, patrol their neighborhoods and report all suspicious activities to the police department.

#### New Radio Room



This is one picture of the CARC radio room showing our equipment inside the door. Lots of work to do. More pictures on page 10.

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**N5CXX CLUB STATION**

Phone Number/Mail Station  
Unavailable until further notice

**VE SESSIONS**

**Collins Amateur Radio Club (CARC)** Test sessions take place on fourth Tuesdays, immediately following the regular CARC monthly membership meeting (about 7:30 p.m.). The test sessions are held in Conference Room A of the Methodist Richardson Medical Center, at the Bush/Renner/Shiloh intersection in Richardson. Walk-ins are welcome, but it's best to register with the lead examiner, Kerry Weeks, at [weeks.kerry@gmail.com](mailto:weeks.kerry@gmail.com) or by phone at (214) 478-3230. **CANCELLED UNTIL FURTHER NOTICE**

**Dallas** tests are held on the fourth Saturday of each month at 1000 hrs. 13350 Floyd Rd. (Old Credit Union) Contact Bob West, WA8YCD 972.917.6362

**Irving** tests are held on the third Saturday of each month at 0900. Fifth and Main St. Contact Bill Revis, KF5BL 252-8015

**McKinney** VE test sessions are held at the Heard Museum the first Sunday of the month. The address is 1 Nature Place, McKinney TX. The time of the testing is 1430, ending no later than 1645. **Note: no tests given on holiday weekends.**

**Garland** testing is held on the fourth Thursday of each month, excluding November, and begins at 1930 sharp. Location is Freeman Heights Baptist Church, 1120 N Garland Ave, Garland (between W Walnut and Buckingham Rd). Enter via the north driveway. A HUGE parking lot is located behind the church. Both the parking lot and the Fellowship Hall are located on the east side of the church building, with

big signs by the entrance door. Contact Janet Crenshaw, WB9ZPH at 972.302.9992.

**Plano** testing is on the third Saturday of each month, 1300 hrs at Williams High School, 1717 17<sup>th</sup> St. East Plano. Check Repeater 147.180+ for announcements.

**Richardson** The Richardson Wireless Klub (RWK) VE team hold license testing on the third Thursday of each month at St. Barnabas Presbyterian Church, 1220 West Beltline Rd. Testing begins at 1900 hrs in room 12. Enter through the Northern most door on the east side of the church building. For further information contact Don Klick KG5CK. 972.464.2889 or E-mail [rwkhamtest@gmail.com](mailto:rwkhamtest@gmail.com).

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**The Prez Sez**

with KR5N

In last month's column, I shared the sad news that our Club station was in the process of being dismantled and put into storage. This month I can report that some significant progress has been made on finding a new location within Collins Aerospace Building 461.

The Club has been informed by Company management that as the facilities are being reconfigured to accommodate future program needs, a room has been designated for a future radio room for the Collins Amateur Radio Club. This is a case of "it's not 100%" but definitely better than 50%. The designated room is approximately 12 ft by 15 ft in size, which is larger than the prior radio room.

If we are able to get the proposed room, it is convenient to the 461 main lobby, upstairs, has restrooms nearby, along with several conference rooms. The room has windows and should be able to allow re-routing existing antenna coax and rotor control cables into the room. We plan to offer a show-and-tell at the April meeting to show what's proposed. Exactly when the room would become available is still up in the air. For now, the equipment and furniture of the existing radio room will be in storage awaiting a future move.

The Board of Directors has adopted a new format for its monthly meetings. Board meetings begin with an informal workshop allowing for discussion of numerous topics. Action items requiring motions may be developed during this workshop. Motions may also be developed during the month as a result of email discussions among Board members.



Following the workshop, a formal Board meeting is opened, principally to handle motions developed during the workshop or previously agreed upon via email discussions. The Board is also planning to use the formal meeting as a way to document formal reports from officers and committees.

All Club members are welcome to attend these meetings, currently via Zoom. The Board meetings are announced to all members using the Ham Club Online messaging system, and the Zoom login credentials are available in the Members Only section of the [n5cxx.us](http://n5cxx.us) website. If you need the login ID and passcode for this section, contact the Club's webmaster.

The minutes of the Board meetings will include a list of the topics discussed during the workshop, but without detail. If you're interested in any particular topic, ask about it during the Officer Reports section of the monthly membership meeting or send an inquiry to [n5cxx@arrl.net](mailto:n5cxx@arrl.net).

The 70cm repeater (441.875 MHz) has had some form of interference or reduced receiver sensitivity recently - one such occurrence was during our Drive Home Net on April 6th. The problem is intermittent. If you experience difficulty with our repeater, please send a report to [n5cxx@arrl.net](mailto:n5cxx@arrl.net). Include your name, call, date and time of problem with a brief description of what you experienced. With enough observations, we may be able to find out what's happening. One observation we'd like to have you include is weather conditions (i.e., sunny, cloudy, raining, high winds, etc.).

The Club Room equipment and furniture has been prepared for storage and a BIG THANK YOU is extended to Bob Kirby, K3NT, Dennis Cobb, WA8ZBT, and Rohan Thomas, KG5RCN. Based on what I reported earlier, I hope 'unpacking' will soon be in the works.

Another BIG THANK YOU goes to Jim Brown, AF5MA, our Club Secretary, who spent countless hours working with Rick "The Sign Man" creating our new Club Badge and a very attractive, collectable Coffee Mug. If you want additional badges or one or more of the slick mugs, check out the ordering page at <https://www.thesignman.com/clubs/collinsarccart.html>.

73 de Frank KR5N

## **Vice President/Membership Chairman Report**

**Membership Chairman Report** - The CARC did not add any new members during this reporting period. CARC did acknowledge the renewal of several members. It is important for the overall plans of the CARC to be accomplished that our members stay current by renewing their membership. If you have any question regarding your status and/or current expiration date, please get in touch with me and I will be happy to help.

Current Membership - 57

Full Members - 36

Associate Members - 13

Life Members - 8

The most current roster is posted on the Members Only portion of our web site. If you need a Member ID and Password for the Members Only portion you can contact Mike Hollingsworth at (C) 972-571-6060.

73s,

Bill K5MWC

## **Secretary's Report**

23 March 2021

President Frank Krizan KR5N called the meeting to order on-line via Zoom at 1900.

The following logged into the meeting:

Brian Belcher	WA5M
Jeff Box	WA5TCA
Jim Brown	AF5MA
William Caldwell	N0LNO
Gene Duprey	K1GD
Bill Fell	KK5PB
John Galvin	N5TIM
Gus Gustovich	W5GUS
Dave Jaksa	W0VX
Bob Jones	W5BJ
Frank Krizan	KR5N
John McFadden	K5TIP
Liz McFadden	K5LIZ
Keith Parris	WB5RBA
Clarence Sebesta	K5YO
Jim Skinner	WB0UNI
Jim Stafford	W5DTG
Bill Swan	K5MWC
Al Ward	W5LUA
Kerry Weeks	K5WKS
Tom Wright	NN2X

## **Officer and Committee Reports**

The President's Report, Vice President's Report, Secretary's Report and Activity Manager's Report as included in the March 2021 CARC Newsletter were accepted as published. Membership Chairman Bill Swan K5MWC noted that three member renewals were received this month. President Frank Krizan KR5N presented the Treasurer's Report for Treasurer Rohan Thomas KG5RCN.

Minutes of the March Board of Directors Meeting were not included in the newsletter this month, but Frank Krizan summarized the key actions and noted that he had distributed them to members by email.

**Old Business**

There was no old business.

**New Business**

There was no new business.

**Announcements**

President Frank Krizan recognized visitor William Campbell N0LN0 logging in from Cedar Rapids and member Tom Wright NN2X, who was attending for the first time after acquiring new ham gear.

Frank mentioned that the FCC was not yet collecting their newly-approved \$35 application fee, and noted that the state of Texas was now opening Covid vaccination authorizations (as of 29 March) to all adults in the state.

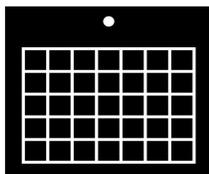
**Adjournment**

The meeting was adjourned at 1928, followed by a presentation on "Moon Bounce Basics - EME Demonstrations on the Microwave Bands," by Al Ward W5LUA.

**ACTIVITY MANAGER'S REPORT**

by Kerry Weeks, K5WKS

Wow! The March meeting just about blew my mind - Al Ward, W5LUA, gave us a talk on EME (Earth-Moon-Earth) moon-bounce, what you need to accomplish it, and he provided some video samples of moon-bounce signals. Most of it was beyond me, but the photos and examples were inspiring.



This month's program is on "DMR Basics and the RWK DMR Repeater" presented by Andrew Koenig KE5GDB. This is definitely a topic I want to learn more about. I figure that if I hear enough presentations on the subject, I may eventually be able to get on DMR.

**Upcoming meetings:**

May 25 - Status of ARES/RACES in Collins and Dallas Counties - John Galvin N5TIM

June 22 - Field Day Final Preparations - Activities Committee

July 27 - Annual Ice Cream Social

If you'd like to do a program in 2021 or have a suggestion for a program (either a topic or the name of a speaker), let me know. How about Operating Events - which ones do you think the Club should take part in? And don't be shy

about stepping up to organize our Club's involvement in a contest or special event. Send your ideas to [weeks.kerry@gmail.com](mailto:weeks.kerry@gmail.com)



Field Day is just around the corner, and, with Covid-19 somewhat under control, the CARC Board sent out a survey recently to see what our members' interests were on the subject. Out of 58 active members, we received 15 responses, a return rate of

26%. Considering that we have about 18 members attending monthly meetings, the 15 responses is probably pretty good.

Here are the results of the survey:

Q. 1: If CARC organizes a FD operation, would you participate at a FD site?

Yes-6, No-5, Maybe-4

Q. 2: If CARC organizes a FD operation, would you participate from home or on your own outdoors?

Yes-6, No-5, Maybe-4

Q. 3: Are you participating in Field Day 2021 with another club?

Yes-1, No-12, Maybe-2

Q. 4: Would you be interested in a workshop on Field Day, what it is, how to operate/log/score/submit results?

Yes-3, No-11, Maybe-1

Q. 5: If you have thoughts on what CARC's 2021 Field Day should include, add your comments here:

Four comments were received, not all related to CARC's efforts. One was an offer of two 40-ft guyed masts. Another suggested simplified operation as Class 1A with generator and maybe a V/UHF station. Breckinridge Park (north end) using E-Z-Ups or possibly use of the pavilion. Maybe a Saturday evening group meal.

Even though the responses were limited, the Board of Directors has directed the Activity Chairman and the Activities Committee to pursue a Field Day operation. Exactly what this will look like is unknown, but if Covid-19 restrictions continue we may push for individual operation from homes or personal/family operation outdoors. Ideally we'll be able to find a suitable location for a limited Field Day to get us back into on-the-air activities.

Your thoughts are always welcomed. Send comments and ideas to Kerry Weeks at [weeks.kerry@gmail.com](mailto:weeks.kerry@gmail.com), or, give Kerry a call at (214) 478-3230. The Activities Committee plans to announce details regarding Field Day at the May meeting.

**In the meantime, check out Field Day information at:** <http://www.arrl.org/field-day>

## IMPORTANT ANNOUNCEMENT FOR ALL

**HAMS:** Updated Radio Frequency Exposure Rules Become Effective on **May 3**

**[The following material is ARRL Bulletin 11, dated April 13, 2021 which applies to all amateur radio operators. As soon as OET Bulletin 65 and OET Bulletin 65 Supplement B for Radio Amateurs, referenced near the bottom of the Bulletin are revised, we will notify Club members. The Club is considering offering Zoom clinics to assist Club members in complying with this Report and Order.]**

The FCC has announced that rule changes detailed in a lengthy 2019 Report and Order governing RF exposure standards go into effect on May 3, 2021. The new rules do not change existing RF exposure (RFE) limits but do require that stations in all services, including amateur radio, be evaluated against existing limits, unless they are exempted. For stations already in place, that evaluation must be completed by May 3, 2023. After May 3 of this year, any new station, or any existing station modified in a way that's likely to change its RFE profile - such as different antenna or placement or greater power - will need to conduct an evaluation by the date of activation or change.



The Report and Order can be found online in PDF format at <https://docs.fcc.gov/public/attachments/FCC-19-126A1.pdf>.

"In the RF Report and Order, the Commission anticipated that few parties would have to conduct reevaluations under the new rules and that such evaluations will be relatively straightforward," the FCC said in an April 2 Public Notice. "It nevertheless adopted a 2-year period for parties to verify and ensure compliance under the new rules."

The Amateur Service is no longer categorically excluded from certain aspects of the rules, as amended, and licensees can no longer avoid performing an exposure assessment simply because they are transmitting below a given power level.

"For most amateurs, the major difference is the removal of the categorical exclusion for amateur radio, which means that ham station owners must determine if they either qualify for an exemption or must perform a routine environmental evaluation," said Greg Lapin, N9GL, chair of the ARRL RF Safety Committee and a member of the FCC Technological Advisory Council (TAC).

"Ham stations previously excluded from performing environmental evaluations will have until May 3, 2023, to perform these. After May 3, 2021, any new stations or those modified in a way that affects RF exposure must comply before being put into service," Lapin said.

The December 2019 RF Report and Order changes the methods that many radio services use to determine and achieve

compliance with FCC limits on human exposure to RF electromagnetic fields. The FCC also modified the process for determining whether a particular device or deployment is exempt from a more thorough analysis by replacing a service-specific list of transmitters, facilities, and operations for which evaluation is required with new streamlined formula-based criteria. The R&O also addressed how to perform evaluations where the exemption does not apply, and how to mitigate exposure.

Amateur radio licensees will have to determine whether any existing facilities previously excluded under the old rules now qualify for an exemption under the new rules. Most will, but some may not.

"For amateurs, the major difference is the removal of the categorical exclusion," Lapin said, "which means that every ham will be required to perform some sort of calculation, either to determine if they qualify for an exemption or must perform a full-fledged exposure assessment. For hams who previously performed exposure assessments on their stations, there is nothing more to do."

The ARRL Laboratory staff is available to help amateurs to make these determinations and, if needed, perform the necessary calculations to ensure their stations comply. ARRL Laboratory Manager Ed Hare, W1RFI, who helped prepare ARRL's RF Exposure and You book, explained it this way. "The FCC did not change any of the underlying rules applicable to amateur station evaluations," he said. "The sections of the book on how to perform routine station evaluations are still valid and usable, especially the many charts of common antennas at different heights." Hare said ARRL Lab staff also would be available to help amateurs understand the rules and evaluate their stations."

RF Exposure and You is available in PDF format for free download from ARRL at <http://www.arrl.org/files/file/Technology/RFsafetyCommittee/28RFSafety.pdf>

ARRL also has an RF Safety page on its website at <http://www.arrl.org/rf-exposure>.

The ARRL RF Safety Committee is working with the FCC to update the FCC's aids for following human exposure rules - OET Bulletin 65 and OET Bulletin 65 Supplement B for Radio Amateurs. In addition, ARRL is developing tools that all hams can use to perform exposure assessments.

### Need another Badge or Coffee Mug?



Order from The Sign Man of Baton Rouge at:  
<https://www.thesignman.com/clubs/collinsarccart.html>



## Sporadic SIGNALS

...captured by

Frank KRIZAN

**The Austin ARC SwapNet Newsletter is often a wealth of useful information.** From the March 21st edition comes this note courtesy of Mark AE5SJ:

Low Cost and Free Tools Fit for an Engineers (or Hams?) Personal Budget

<https://www.signalintegrityjournal.com/articles/2026-low-cost-and-free-tools-fit-for-an-engineers-personal-budget>

**Summary.** Eric and Jay go over free and cheap software good for electrical design. They also cover relatively inexpensive hardware tools for electrical measurement. The software includes free SPICE versions, Octave (a freeware MATLAB clone), SDR#, and others. For hardware, the NanoVNA is included, as well as some familiar SDR USB dongles, DMMs, etc.

**From the March 31, 2021 ARRL Contest Update:**

"Don't forget to make time for your annual station inspection, including your outdoor equipment. Before you get to the antenna and cable part, take some time to review Frank's, W3LPL, "Contest Antennas and Coaxial Cables" presentation from Contest University (<https://www.contestuniversity.com/videos/>). There are so many details, it's easy to forget some simple things that can cause problems, like using an inappropriate type of cable for burial, or not preventing energy-discharge-created pinholes in the cable running up the tower." *I agree and the video is worth taking the time to watch. You'll find the video in the 2013 collection of presentations.*

**Contest University 2021 is scheduled for Thursday, May 20, 2021.** It's free and available via Zoom Live Webinar. Plus, ICOM is giving away four ICOM radios during the Webinar at random times. You must be registered in Zoom and present during the random drawing. Full details at <https://www.contestuniversity.com>

**Now, if they pull this off, it will be cool for showing off to non-ham friends, especially youth.** From the April 11, 2021 AMSAT News Bulletin: LightCube, an educational mission by Arizona State University, Tempe, to allow a CubeSat in low-Earth orbit (LEO) to be easily operable by members of the general public, has been approved by NASA as one of the 12th CubeSat Launch Initiative (CSLI)

projects for 2022-2025. The LightCube CubeSat will provide a platform that increases the number of individuals who can participate in space activities. Specifically, anyone with appropriate amateur radio licensing within their jurisdiction and commercial radio equipment available for purchase for less than fifty dollars will be able to telecommand LightCube. The LightCube CubeSat will respond with a flash visible to the naked eye of the commander. In the process of operating LightCube, the user will inevitably learn important science, technology, engineering, and math (STEM) concepts in areas such as telecommunications, spacecraft design, atmospheric and climate science, and orbital mechanics. (ANS thanks NASA, JoAnne Maenpaa, K9JKM, Harry Bloomberg, W3YJ, and Rick Lindquist, WW1ME, for the above information.)

**The Friends of W5AC (FOW5AC@groups.io ) has been established** for the purpose of preserving and supporting the Texas A&M University Amateur Radio Club. The "Texas A&M College Radio Club" was established in 1909 as one of the oldest college radio clubs in the nation. Student members, former members, former student hams, advisors, faculty and all other friends of W5AC are invited to join the group and support W5AC. Subscribe at: [FOW5AC+subscribe@groups.io](mailto:FOW5AC+subscribe@groups.io) This info from Glen Reid, K5FX.

... until next month, 73 de KR5N

### Drive Home Net Report - April 2021

The Collins ARC Drive Home Net continues on Tuesdays from 5:30 to 6:00 p.m. on the N5CXX Repeater 441.875 MHz, +5 MHz, PL=131.8 Hz. The Net is not held on the 4th Tuesday due to the monthly membership meeting (the exception is December when Net Schedules work around the Christmas Dinner and Christmas Eve/Day).



All stations are invited to check in, whether a member of CARC or not. The Net is informal, operating as a roundtable. Here's the log since last month:

MARCH 16 - [5] KR5N Frank (NCS); K5WKS Kerry; K5GLD Randy; WB0UNI Jim; K5YO Clarence.

MARCH 23 - No Net; General Meeting

MARCH 30 - [7] KR5N Frank (NCS); K5WKS Kerry; K5MWC Bill; WB0UNI Jim; W5BJ Bob; KC5MVE Paul; KE5ATE Will.

APRIL 6 - [4] Net cancelled due to repeater problems - KR5N Frank (NCS); WB0UNI (ANCS) Jim; K5MWC Bill; KC5MVE Paul (Early Bird via email).

APRIL 13 - [5] KR5N Frank (NCS); K5MWC Bill; WB0UNI Jim; K5WKS Kerry; AC5BC Bill.

The Drive Home Net is intended for comments on amateur radio topics, listing items for buy/trade/sell, asking questions or contacting others on frequency. We hope you'll

give it a try soon. We've had some great conversations of late.

**HAM EXAM 101 - APRIL 2021**

It may have been a while since you took your ham exams, or, it may have been just a few weeks ago. Each month, we'll review one question from each of the pools (Tech, General and Extra) to test your Ham Knowledge. The correct answers are shown (upside down) elsewhere in this issue of SIGNALS.



1. What is the purpose of a safety wire through a turnbuckle used to tension guy lines?
  - A. Deter unauthorized climbing of the tower
  - B. Prevent loosening of the guy line from vibration
  - C. Prevent theft or vandalism
  - D. Secure the guy if the turnbuckle breaks
2. Generally, who should respond to a station in the contiguous 48 states who calls "CQ DX"?
  - A. Any stations outside the lower 48 states
  - B. Only contest stations
  - C. Any caller is welcome to respond
  - D. Only stations in Germany
3. Which of the following signal paths is most likely to experience high levels of absorption when the A index or K index is elevated?
  - A. Polar
  - B. Transequatorial
  - C. Sporadic E
  - D. NVIS

**Minutes of March 2021 Board Meeting**

The Collins Amateur Radio Club Board of Directors held its meeting on Tuesday, March 9, 2021, via Zoom with all officers in attendance and one visitor. In attendance were: Frank Krizan, KR5N, Bill Swan, K5MWC, Jim Brown, AF5MA, Rohan Thomas, KG5RCN, and, Kerry Weeks, K5WKS. Jim Skinner, WB0UNI, participated as an observer.

The Board now starts its monthly session with a workshop followed by a formal Board meeting. Following the workshop, Frank called the meeting to order at 8:18 p.m. The Agenda was reviewed by Frank and a motion was made by Kerry and seconded by Jim Brown. to accept the agenda. Motion approved.

Several motions were added to the agenda from the workshop and were handled without need for discussion:

Motion: Move to purchase 500 Collins Amateur Radio Club business cards for promotional purposes at a cost not to exceed \$45. Made by Kerry, seconded by Jim Brown. Approved unanimously.

Motion: Move to purchase an Alinco DR-135T FM Transceiver to replace the aging transceiver in the CARC PBBS System at a cost not to exceed \$180.00. Made by Kerry, seconded by Jim Brown. Approved unanimously.

Motion: Move to authorize the Board of Directors to vote by email to authorize procurement for equipment for the HF and V/UHF Go-Kits and the Power Plant Project per the CY21 Major Projects Budgets. Such approvals shall be summarized at the following Board meeting. Made by Kerry, seconded by Jim Brown. Approved unanimously.

Motion: Move any officer is authorized to approve purchase of honoraria (i.e., coffee mugs) per the approved Operating Budget. Made by Kerry, seconded by Jim Brown. Approved unanimously.

There being no further business, a motion to adjourn was made by Kerry, seconded by Jim Brown. and approved by all.

The meeting was adjourned at 8:28 p.m.

Minutes recorded by Frank Krizan, KR5N

**CARC Board Meeting - April 13, 2021**

The Collins Amateur Radio Club Board of Directors met on April 13, 2021 with the following in attendance: Frank Krizan KR5N (p), Bill Swan K5MWC (vp), Jim Brown AF5MA (s), Rohan Thomas KG5RCN (t), Kerry Weeks K5WKS (am), and, Club members Bill Fell KK5PB and Jim Skinner WB0UNI.

The meeting was held via Zoom and began with a Board Workshop at 7 p.m. The following topics were discussed:

1. Methodist Richardson conference rooms
2. Proposal for new Radio Room location
3. Field Day 2021 - June 26-27
4. Capital projects
5. Activity Committee
6. Constitution/By-law re-write procedure
7. [Groups.io](https://groups.io) account for Board (alt: MailMan acct on [krizan.org](https://krizan.org))
8. Badge and Coffee Mug Order Process and Status
9. Treasurer's Report Format (Budget vs. Actual) and Funds Request Form
10. Membership Timeframe (calendar year vs. anniversary year)

- 11. RaDAR Rapid Deployment Amateur Radio CARC Sponsored Event
- 12. Member and employee participation

The workshop allows for open discussion of topics and the generation of specific motions to be handled during the formal Board meeting. Two motions were generated during the workshop, and no motions were brought forward from online discussions.

A matter of operating procedure was discussed regarding Item # 7 that instead of creating another discussion group, the Board would use a Subject Line Tag of [CARC BOARD] to flag items for full Board review and discussion and to remind Board members to use REPLY-ALL in any responses.

The workshop was concluded and the Board of Directors meeting called to order at 8:18 p.m.

The first item was the approval of the agenda with a motion made by Kerry and seconded by Jim Brown. Approved.

Motion: Moved that the CARC Board of Directors accepts the proposal for the new radio room location in Bldg 461. Motion made by Kerry and seconded by Bill Swan. Approved.

Motion: Moved that the CARC pursue implementing a Field Day operation for 2021 under the direction of the Activities Committee. Motion made by Bill Swan and seconded by Rohan. Approved.

There being no further business, a motion to adjourn was made by Kerry and seconded by Bill Swan. With no objection, the Board meeting was adjourned at 8:24 p.m.

Minutes recorded by Frank Krizan, KR5N

## **An Elmer Epitaph**

A few weeks back, those of us on the CARC Drive Home Net were reminiscing about the day our first ticket arrived in the mail. It was fun remembering the excitement of tearing open that little envelope from the FCC and seeing what call sign chance had selected for you. This was prompted by a tale in a recent ARRL Propagation Bulletin on the same subject.

Shortly thereafter, this story appeared in the Austin SwapNet Newsletter of April 4, 2021. It was so well written that I kept on reading and discovered that the author lives in Murphy, TX. With permission from Matt, it's reprinted below. Maybe this will inspire others reading SIGNALS to pen a short article on their start in amateur radio and the support of their Elmer. We'll be happy to publish such memories in the newsletter.

### **Alex Galbraith, K5CGH (SK)**

Quite coincidentally last week, I read in Jeff's SwapNet Newsletter that a local ham was handling the estate of K5CGH. I was quite saddened to see that callsign listed as

such, as I am of most SK callsigns I recognize. This callsign had particular significance to me.

I was born and raised in Austin and met Alex Galbraith, K5CGH, in the May/June 1971 timeframe. Before I met him face-to-face, I already knew the callsign K5CGH to a degree, just as I knew the callsigns WA5YAN, W5FUA, WA5LHS, W5EBJ, W5FQR, WA5ESR, WA5YZD and others. I had been listening to these gentlemen on the police band of my father's Montgomery Ward multi-band radio. Tuning to the very bottom end of the range of that band, I had heard these fellows almost every morning for a few months talking on their mobile radios as they drove to work, then again in the late afternoons and so on.

In the summer of 1971, at 15 years old, my interest in ham radio had piqued from listening to the fellows on what I learned was 2m FM. I rode my bicycle the short distance to the Radio Shack store near the NE corner of Burnet Road and Anderson Lane. There in the parking lot I spotted a car with the call letter license plates K5CGH. I had memorized the names of most of the folks on 2m FM I had listened to and even though Alex wasn't as regular a participant in the drive-time conversations as some of the other folks, I knew the name. When I went into the Radio Shack, I walked around, looking at the goodies. I don't remember what "project" I was working on at the time, but I'm sure I bought something and I saw the manager's name tag had "Alex" on it. I asked if he was K5CGH and he said he was and asked if I was a ham. I said, "No, but I'm interested" and mentioned that I had been studying the license manual and so on.

Over the course of the next couple of weeks, I returned to the Radio Shack frequently and Alex and I would pick up our conversation where we left off last. One time, Alex asked if I had learned the code (for my Novice license). I said I had learned it on my own and had listened to W1AW a few times. He said, "Well, let's see how you're doing." With that, he pulled out a code practice oscillator and handed me a notepad. He started sending some code, and this went on for five minutes or so. After he stopped, he took my notepad and looked it over, comparing to what he had sent and finally said, "Congratulations, you just passed your Novice code test." I was taken aback, as I really had not thought until then how I was going to find anyone to administer the Novice exam to me (I wasn't aware of AARC at the time). Alex then filled out a form, put it in an envelope and said to come back in a couple of weeks.

Two weeks later, I rode my bicycle to the Radio Shack and when I walked into the store, Alex waved an envelope at me. It was the Novice test from the FCC. Alex motioned me to the office at the rear of the store and handed me the exam to complete. I don't remember how long it took me to finish the exam, but when I took it up to Alex, he looked it over carefully, and after a few minutes, stuffed it and some other papers in an envelope, sealed it and told me, "I think you're going to like the results."

About three weeks later, coincidentally the week after I had visited AARC's 1971 Field Day at the Georgetown Airport, my "ticket" arrived and I was WN5EYL. I immediately rode to Radio Shack and showed my license to Alex. He was as excited as I was.

I lost touch with Alex shortly after that; he might have been transferred or maybe moved on professionally. Spin the clock forward 48 years to January 2019. I was listening to 40m FT8 when I spotted callsign K5CGH decode. "Could that be Alex?", I asked myself and I quickly looked up the callsign on [qrz.com](http://qrz.com); sure enough it was. I quickly called him and we made the QSO. FT8 NOT being a conversational mode, I sent Alex an email after the QSO and reminded him of the 15-year-old kid that took the Novice exam at his Radio Shack store. He replied with a warm and friendly response saying he remembered me and told me he was retired and in Cedar Park now. Since "life" had happened to both us since we last talked, we exchanged a few emails, catching up, and agreed we should get together during one of my Austin visits. We came close one time, during the 2019 Austin Summerfest weekend, but just were not able to connect. That was the last I communicated with Alex and the last I heard of or about him until last week.

I now know that Alex might find this "silly," but it's my belief that the Lord puts the right people in your life at the right time. I don't know if my interest in the hobby or even my then-future career would have played out the same without the brief intersection of Alex's life with mine. Those few weeks 50 years ago led to a half century (and counting) enjoyment of amateur radio, making many great ham radio friends, and led to an enjoyable and prosperous career that coincidentally started when I was hired, because of my ham radio experience, at the Applied Research Labs in Austin, as a UT sophomore when the department manager told me he hired only juniors and seniors. All because a then 25-year-old Alex Galbraith, K5CGH, one day took an interest in a 15-year-old kid with a fascination about ham radio, and who because of his help became WN5EYL, WB5EYL, AA5WH and now W5MT today.

While I didn't really know Alex well enough to be friends, he certainly had an impact on my life - one I will not forget. It is for this reason that I shared the above.

73

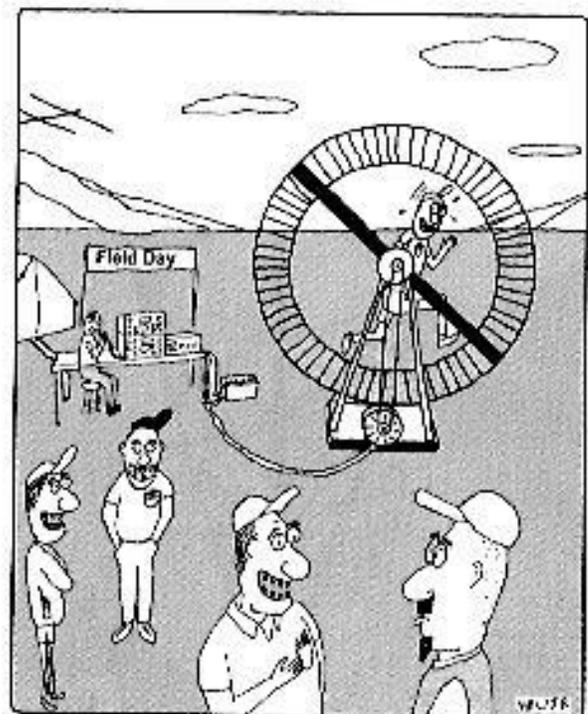
Matt Thomas W5MT

Murphy, TX

**New Collins Building Access Restrictions**

Per Security, all "non-essential" access to Collins Aerospace facilities (including employee recreation activities) is shut-down until the Covid-19 pandemic is resolved. Anyone needing access to the Club Station must submit an email request to Security with an explanation of who, when and why access is needed, and the Security team will review, and if approved, the person will only be allowed access via the North Gate. For contact information, send an email to [kr5n@arrl.net](mailto:kr5n@arrl.net) asking for Security contact information.

\*\*\*\*\*  
 FYI—Until further notice, masks are now required inside all Collins buildings. Also, a temperature check is required before entering the property. During busy hours there is a manned tent near the north gate where the temperature check is performed. During off hours, there is a place at the north gate for a self-check.



"For years we couldn't afford a portable generator, but this solution became obvious when we were voted the squirreliest ham club in the state three years on a row"

"NDJR and His Friends" Cartoons used by Permission from Greg Trook, NDJR



## Upcoming Events

<b>Daily</b>	DFW Early Traffic Net (NTS) at 6:30pm 146.88 – PL 110.9Hz
<b>Daily</b>	DFW Late Traffic Net (NTS) at 10:30pm 146.72 – PL 110.9Hz
<b>Daily</b>	Texas CW Traffic Net at 7:00pm on 3541 KHz and at 10pm on 3541 KHz <a href="http://www.k6jt.com">www.k6jt.com</a>
<b>Tuesdays</b>	Collins ARC Drive Home Net. 441.875 (+5) MHz, PL=131.8 Hz, 5:30-6:00pm (no net 4 <sup>th</sup> Tuesday.)
<b>1<sup>st</sup> Wednesday</b>	Richardson Emergency Siren Test. At noon using the Richardson Wireless Klub (RWK) repeater at 147.120 MHz.
<b>2<sup>nd</sup> Wednesday</b>	ARES North Texas HF Net Every month—3860 KHz at 8:30 pm—9:30pm

### JUNE

- 12-14 June VHF** For amateurs in the US and Canada (and their possessions) to work as many amateur stations in as many different 2 degrees x 1 degree Maidenhead grid squares as possible using authorized frequencies above 50 MHz. Stations outside the US & Canada (and their possessions) may only work stations in the US (and its possessions) and Canada. All legal modes are permitted. Details at <http://www.arrl.org/june-vhf>.
- 19 Kids Day** Twice a year, ARRL offers an event designed to promote Amateur Radio to our youth. Share the excitement with your kids or grandkids, a Scout troop, a church or the general public! Kids Day is designed to give on-the-air experience to young people and hopefully foster interest in getting a license of their own. It is also intended to give older hams a chance to share their station and love for Amateur Radio with their children. Details at <http://www.arrl.org/kids-day>
- 26-27 Field Day Objective:** To contact as many stations as possible on the 160, 80, 40, 20, 15 and 10 Meter HF bands, as well as all bands 50 MHz and above, and to learn to operate in abnormal situations in less than optimal conditions. Details at <http://www.arrl.org/field-day>.

### JULY

- 10-11 IARU HF World Championship.** Objective: to contact as many other amateurs, especially IARU member society HQ stations, around the world as possible using the 160, 80, 40, 20, 15 and 10 meter bands. Begins 1200 UTC Saturday and ends 1159 UTC Sunday.

## The Amateur's Code

by Paul M. Segal, W9EEA (1928)

The Radio Amateur is:

**CONSIDERATE** - never knowingly operating in such a way as to lessen the pleasure of others.

**LOYAL** - offering loyalty, encouragement and support to other amateurs, local clubs and the American Radio Relay League, through which Amateur Radio in the United States is represented nationally and internationally.

**PROGRESSIVE** - with knowledge abreast of science, a well built and efficient station, and operation beyond reproach.

**FRIENDLY** - with slow and patient operation when requested, friendly advice and counsel to the beginner, kindly assistance, co-operation and consideration for the interests of others. These are the hallmarks of the amateur spirit.

**BALANCED** - Radio is an avocation, never interfering with duties owed to family, job, school or community.

**PATRIOTIC** - with station and skill always ready for service to country and community

# Quiz Answers

1. B (TOB13)
2. A (G2A11)
3. A (E3C03)

## PERIODIC TABLE OF MAJOR AMATEUR RADIO CONTESTS



# 2021

Multimode	CW	Digital
off-the-air	SSB	VHF/UHF

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2 ARRL RTTY Roundup	3 NA Sprint CW	7 ARRL DX SSB	3 SP Polish DX	4 7QPI/IN/DE New England QSO Parties	5 SEANET Contest	6 Marconi Memorial HF	7 NAQP CW	8 CWops CW Open	9 California QSO Party	10 ARRL SS CW	11 ARRL 160
9 NAQP CW	10 WPX RTTY	14 NA Sprint RTTY	10 JIDX CW	11 CQ-M DX	12 ARRL June VHF	14 IARU HF	15 WAE CW	16 WAE SSB	17 Oceania CW	18 WAE RTTY	19 ARRL 10
16 NAQP SSB	17 ARRL DX CW	20 Russian DX	17 CQMM DX	18 King of Spain	19 All Asian CW	20 CQ VHF	21 NAQP SSB	22 WA/NJ/NH QSO Parties	23 Worked All Germany	24 ARRL SS SSB	25 RAC Winter
16 ARRL January VHF	18 CQ 160 SSB	26 WPX SSB	24 Florida QSO Party	25 Contest University Dayton Hamvention	26 ARRL Field Day	27 RSGB IOTA	28 WW Digi	29 CQWW RTTY		30 CQWW CW	HAPPY HOLIDAYS
29 CQ 160 CW	31			29 WPX CW	30				30 CQWW SSB	31	

A contribution from EA3O.



Richardson, Texas  
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**PO Box 830766  
 Richardson, TX 75083-0766**

**TO:**



Richardson, Texas  
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**N5CXX REPEATER**  
 441.875 MHz +5 MHz Input  
 131.8 Hz PL - RX and TX

**N5CXX-1 PACKET BBS COL Node**  
 145.05 MHz

**N5CXX-N1, NRCXX-N2 & N5CXX-N3 HSMM-MESHNET Nodes 2.4 GHz**

**Membership Meeting**  
 Tuesday 27 April 2021 **7:00 PM**  
**NOTE THE TIME CHANGE**  
**THE April 2021 MEETING WILL BE CONDUCTED BY VIDEO CONFERENCE!**

**NEXT SIGNALS INPUTS DEADLINE:**  
**→→→ 14 May 2021 ←←←**