

RAINBOW CANYONS AMATEUR RADIO CLUB NEWSLETTER

CEDAR CITY, UTAH



Club Website: www.rcarc.info Number 5 – Vol. 3 – March 2023

Club Meeting Information

The RCARC meets at 7:00 p.m. on the 2nd Tuesday of each month at the Cedar City Senior Center, 489 E. 200 South. Down Stairs.

2023 Club Officer's

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CQ, CQ, - Happy St. Patrick's Day



Presidents Message

Dear Fellow Amateur Radio Operators,

It has been quite the start to 2023! It seems like we have had a new storm almost every week (especially on Tuesday nights!). The weather has definitely been a bit cold and wet with lots of snow and ice. Despite this we did have a great Winter Field Day at the end of last month and I hope we have a better chance for our meeting next month. We will have a presentation on some different digital modes for HAM radio (this is the presentation that was postponed from our canceled January and February meetings). We will be starting a new Technician class on March 2nd so let potential students know!

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RCARC Club Nets:

7:00 a.m. Breakfast Net - Monday – Saturday – 146.760.
12:30 p.m. Daily – Utah Beehive Net On 7.272.
8:30 p.m. Tuesday's - ORCA Digital Net. Using FLDIGI, FLMSG AND FLAMP – 3.581 +, 1500/MFSK32.
8:00 p.m. Wednesday – Panguitch Net – 147.160.
7: pm. Thursday– Morse Code Net- This is a Zoom Meeting.
8:30 p.m. Thursday's - WDN Digital Net. Using FLDIGI, FLMSG AND FLAMP – 3.581 +, 1500/MFSK32.
8: p.m. Saturdays – SSTV – 449.925.
9:00 p.m. Daily – Friendship Net – 146.760.
11: a.m. Saturdays (Mtn. Time) QCWA – 160 Net, Utah Chapter,
12: p.m. Freq. 7.272.
7:30 pm. Sunday's – New Harmony Valley Net – Bumblebee Repeater. – 146.680 with a minus offset – PL 100.

Local Repeaters:

Iron Mountain

146.760 MHz – Tone 123.0 Hz
146.980 MHz – Tone 100.0 Hz
448.800 MHz – Tone 100.0 Hz
449.500 MHz – Tone 100.0 Hz
448.400 MHz – Tone 100.0/FM & DMR

Intermountain Intertie:

146.940 MHz – Tone 100.0 Frisco.
146.800 MHz – Tone 100.0 Blow Hard
147.200 MHz + Tone 100.0 Tod's/Hatch
146.820 MHz – Tone 100.0 Utah Hill

Bumblebee/New Harmony:

146.680 MHz – Tone 100.0 Hz

Rowberry:

449.925 MHz – Tone 100.0 VHF Remote

Dutton:

147.160 MHz + Tone 100.0 Hz.

Save The Date

March 14, 2023

RCARC Club Meeting.

7:00 pm. Cedar City Senior Center,
489 E. 200 South. **Program: Digital
Modes in Ham Radio.**

April 11, 2023

RCARC Club Meeting.

7:00 pm. Cedar City Senior Center,
489 E. 200 South. **Program: Ham
Radio and Satellites. George Gallis
(AL7BX)**

May 9, 2023

RCARC Club Meeting.

7:00 pm. Cedar City Senior Center,
489 E. 200 South. **Program to be
determined.**

June 13, 2023

RCARC Club Meeting.

7:00 pm. Cedar City Senior Center,
489 E. 200 South. **Program to be
determined**

President's Message

Continued from page 1.

I encourage you all to play, share, and have fun on the radio! We all have strengths and weaknesses but we are all interested in radio communications and can benefit from each other. If you are interested in any aspect of HAM radio please explore the topic, experiment, and share what you have done with the group! That is what makes this such a fun hobby! Don't be shy, we are all friends here!

In service,

Fred Govedich (KI7TPD)

Heads Up

Daylight Savings Time is just around the corner.
Sun, March 12, 2023 at 2:00 AM American/Denver Time

Mark your calendars

RCARC Monthly Breakfast

Please come join us on the first Saturday of each month at 9:00 am. for our club breakfast. We meet at the Golden Corral Buffet & Grill (in the back room), 1379 S. Main Street, Cedar City. Their menu offers an unmatched variety of quality foods from breakfast to dinner. See you there.



**Happy Birthday and
Anniversary to those
celebrating in March**



Happy St. Patrick's Day

Breakfast Net		Friendship Net		
First Place	Third Place	First Place	W6DLW - Dennis	
K2MFK - Kevin	KZC6ZIM - Johnny	K7HDX - Ron	W9YNK - Benjamin	
K7ZI - Dick		K7NKH - Lee	Second Place	
KI7TPd - Fred		KA7J - Lance	K7WEP - Paul	
KI7WEX - Bonnie		KE8YI - Caleb	K7ZI - Dick	
Second Place		KI7LUM - Bruce	KJ7LTQ - Brant	
KG7PBX - Linda		KI7TPD - Fred	KK7FLL - Maddie	
KI7SCX - John		KI7WEX - Bonnie	N7SIY - Silvia	
N7SIY - Silvia		N7SND - Larry	Third Place	
N7SND - Larry		N7WWB - Darlene	N7TCE - Merlin	

Rainbow Canyons Amateur Radio Club
Treasurer Report February 14, 2023

Bank balance (reconciled) Jan 31, 2022	\$1,408.54
Deposit - memberships & Donation* KA1CMQ	+ 20.00
Balance as of Feb 14, 2023	\$1,428.54
February Expenses	
Rocky Mountain Power (Due 2/16/2023)	- 20.34
Funds available as of Feb 16, 2023	\$1,408.20

Submitted by
Linda Shokrian KG7PBX
2023 RCARC Treasurer
435-867-5914

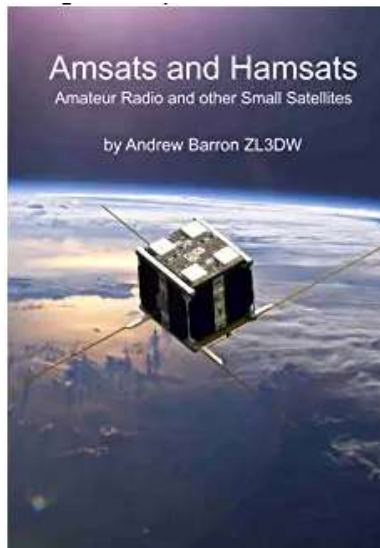


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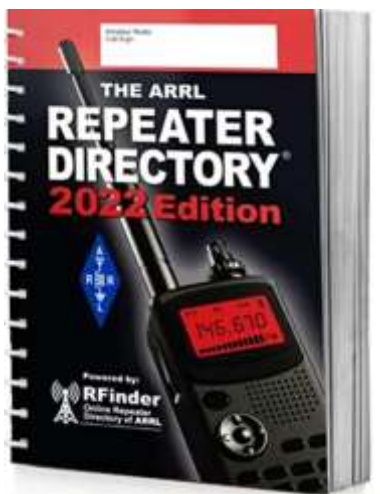
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RCARC Book Giveaway.
Books are donated by
Linda Shokrian
(KG7PBX)

Shown below is the book that will be given away at the March 14, 2023 meeting.



The Book below will be given away in April



There was no book giveaway in February as the meeting was canceled due to severe weather.

Contact Us.

Mailing Address:

195 E. Fiddler's Canyon Road #3.
Cedar City, Utah 84721

Club E-mail:

cedarcity.rcarc@gmail.com

Newsletter E-mail:

rcarcnewsletter@gmail.com

Website

www.rcarc.info

Face Book Page:

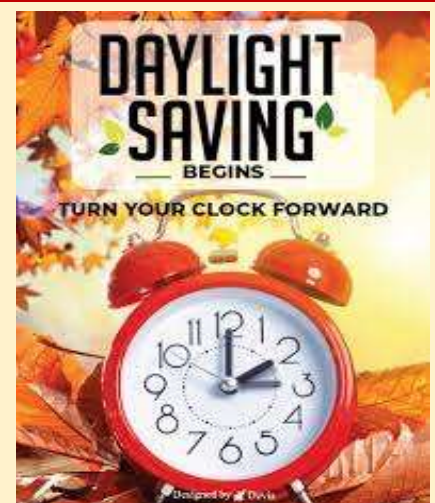
<https://www.facebook.com/groups/440325486875752/>

To Join RCARC or Pay Dues:

Go to www.rcarc.info select "Club Info" and then "Join " RCARC. Follow the instructions on the template.

Make check payable to RCARC.
Please write call sign on check.

Thank You



Sunday March 12, 2023



Buzz's March Safety Tip(s)



March is National Ladder Safety Month

Almost every home in the United States has one, and chances are you have used one personally either at work or at home. From changing out a lightbulb to getting on top of a roof, ladders are a common piece of equipment used in almost every home or building and appear to be harmless — and yet according to Injury Facts, thousands of people are killed due to falls from a ladder or scaffolding work. In fact, falls are the second leading cause of death next to highway crashes.

Understanding the different types of ladders as well as safe ladder practices are key to preventing falls and other potential injuries.

Here are some helpful tips to always keep in mind when using a ladder provided by OSHA:

- Read and follow all labels/markings on the ladder.
- Avoid electrical hazards! – Look for overhead power lines before handling a ladder. Avoid using a metal ladder near power lines or exposed energized electrical equipment.
- Always inspect the ladder prior to using it. If the ladder is damaged, it must be removed from service and tagged until repaired or discarded.
- Always maintain a 3-point (two hands and a foot, or two feet and a hand) contact on the ladder when climbing. Keep your body near the middle of the step and always face the ladder while climbing (see diagram).
- Only use ladders and appropriate accessories (ladder levelers, jacks or hooks) for their designed purposes.
- Ladders must be free of any slippery material on the rungs, steps or feet.
- Do not use a self-supporting ladder (e.g., step ladder) as a single ladder or in a partially closed position.
- Do not use the top step/rung of a ladder as a step/rung unless it was designed for that purpose.
- Use a ladder only on a stable and level surface, unless it has been secured (top or bottom) to prevent displacement.
- Do not place a ladder on boxes, barrels or other unstable bases to obtain additional height.
- Do not move or shift a ladder while a person or equipment is on the ladder.

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March is National Ladder Safety Month

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- An extension or straight ladder used to access an elevated surface must extend at least 3 feet above the point of support (see diagram). Do not stand on the three top rungs of a straight, single or extension ladder.
- The proper angle for setting up a ladder is to place its base a quarter of the working length of the ladder from the wall or other vertical surface (see diagram).
- A ladder placed in any location where it can be displaced by other work activities must be secured to prevent displacement or a barricade must be erected to keep traffic away from the ladder.
- Be sure that all locks on an extension ladder are properly engaged.
- Do not exceed the maximum load rating of a ladder. Be aware of the ladder's load rating and of the weight it is supporting, including the weight of any tools or equipment.
- While some of these dos and don'ts may seem obvious, it's important to keep things in perspective. According to [National Ladder Safety Month](#), every year over 100 people die in ladder-related accidents, and thousands suffer disabling injuries.
- The good news, however, is that ladder safety is becoming a key safety topic among employees in the construction industry.

Continued next column

- Don't miss the [2018 Stats](#) as reported by National Ladder Safety Month for spreading the news about the safety dangers ladders can create and how to work safely both on and around ladders.
- While falls from ladders are a growing concern, it's also reassuring and important to remember that ladder-related injuries and fatalities are completely preventable.

USA Radio Orienteering Championships Set for April 19 - 23, 2023

Registration is now open for the 22nd USA Radio Orienteering Championships.

The event will be held April 19 - 23, 2023, at Cooper Lake State Park in Texas, and is hosted by the [New Mexico Orienteers](#), Albuquerque, New Mexico, using maps provided by [North Texas Orienteering](#) Association.

The [White Rock Lake Amateur Radio Club](#) will provide communications support.

The name Radio Orienteering has been transitioning to this new name but it is actually the same radio navigation sport known as Amateur Radio Direction Finding (ARDF). The sport involves using special radio receivers to find hidden transmitters in timed events.

USA ARDF Co-coordinator Gerald Boyd, WB8WFK, said the event is open to everyone of all age groups, and three medals will be awarded for first, second and third place in all groups. "We have events beginning with the Sprint," said Boyd. "Participants will have 60 minutes to find their transmitters. After that, three more events, the Fox -O, and two Classics events, all lasting three hours." Results of the competitions on April 20 - 23, 2023, will help determine the members of Team USA who will compete in the ARDF World Championships scheduled for the fall of 2023 in Liberec, Czech Republic.

Charles E. Scharlau, NZ0I, USA ARDF Co-coordinator, said they are hoping for a good turnout.

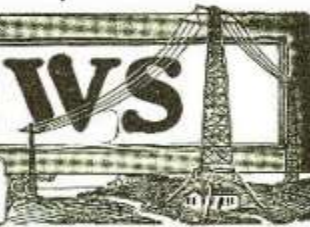
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RADIO NEWS

H. GERNSBACK—Editor and Publisher
ROBERT E. LACAULT—Associate Editor

EDITORIAL AND GENERAL OFFICES, 33 PARK PLACE, NEW YORK



Vol. 4

MARCH, 1923

No. 9

Radio's Greatest Opportunity

THE great boom in Radio has come and gone. It came like a tidal wave, and left in its wake the customary amount of devastation. Now that the radio industry is recovering from the slump and is working hard to set its house in order, our best minds in the radio field are trying to find new channels for the radio trade. In some cases they are successful—in the majority of cases, the success is not so marked.

The first thing a radio manufacturer or dealer will do is to look for his trade in the big cities. He will secure all the directories where the radio trade is thickest and will push this territory for all it is worth. Salesmen galore are sent out into the large centers, and while they do not report zero sales as they did last summer, the sales that are being made at the present time, although fair, are far from satisfactory.

We have pointed out, before this, some of the fundamental reasons why the radio trade slumped. We have mentioned heretofore that what the radio industry needs most are goods that will stay sold and that will do the work. That, however, is only half the story.

In our December, 1922, issue, the writer called attention to the fact that at the present time about 60 per cent of the population has never even heard a radio concert. To people who live in the large centers this seems like a very curious statement, but it is nevertheless a fact. Draw a circle on a map with a radius of 25 miles around any broadcasting station, and within that circle, at the present time, is located an overwhelmingly large percentage of all the radio broadcast listeners. *Outside of this circle, Radio is practically not known.* If this statement is not taken as a big and evident truth, you may jump upon the next train and canvass the country yourself. You will be very much astonished.

Here are a few towns selected at random, which have been investigated, and which were canvassed carefully with these results:

"Waterford, Virginia. 40 miles from Washington, the nearest broadcasting center. Two radio outfits. Population 500.

"Canton, Pennsylvania. About 200 miles, air-line, from the Greater New York broadcasting district. Six radio outfits, only one of which was in operation, when investigator was there in October. Population 3,500.

"Addison, New York. About 125 miles from Buffalo. Two radio sets when investigator was there in October. Population about 2,000.

"Kayford, West Virginia, and other coal mining camps along Cabin Creek. Several thousand miners and a hundred or more well-paid officials. *Not a radio set in the region.* All interested, too, but nobody had been out there to sell them. About

20 miles from Charleston and possibly 200 from Louisville, Ky."

Here, then, are four towns, with a total population of about 8,000 inhabitants and with the magnificent total of 10 radio outfits! The percentage of outfits to the population, it will be seen, is microscopic. It is another case of one-half the world not knowing what the other half is doing. The conditions, as shown in these four towns, may be duplicated, *ad infinitum*, all over the country. In other words, as far as radio and the country are concerned, the surface has as yet not been scratched. There are literally millions of Americans all over the country who are waiting to be sold, and these same people go without their outfits simply because the radio industry lacks proper salesmanship to establish radio in the small towns and on the farms.

There are, today, few farm houses in rural districts that do not boast of their phonographs and their pianos. It is, indeed, a poor farm that does not have both. Now, if phonographs and pianos can be sold on a farm, why not radio outfits? Some day radio manufacturers will wake up to the fact that sending out salesmen into such territory will be like sending them into an open gold mine.

If the product is good, and if a demonstration can be given, a sale can be made in almost all cases. There is no district more anxious and willing to have radio outfits than the rural, for the simple reason that the small town inhabitant, or the farmer, can not come to the large city very frequently for his amusements. It is comparatively seldom that he sees a "movie" and much less frequently that he sees a good show. He does not hear good music, except on the phonograph, but with radio, the whole world comes right into his home. Once he has been introduced to a set there is hardly a greater radio enthusiast than the farmer or a small town citizen. Today, however, he is deprived of the benefits of radio simply because the radio industry as a whole is chasing butterflies in the large centers, instead of getting down to brass tacks and pushing sales where they are *easiest and most profitable.*

Nor is this all. Once a farmer has been sold an outfit, he, as a rule, will have become a customer for life, because he is not going to stop at his first radio outfit. He will soon need parts. He will also require tubes, new condensers, new coils, to reach out, and he will soon become a radio amateur who knows the code, and who must know the code to listen to the market reports that are transmitted in code.

There is no question that radio will have really arrived when the farming and rural districts have taken up radio in earnest, but we warn those who are starting out into this virgin field that *only first class goods will prove a success.* Anything that does not work—any outfit that has too many controls, and is made for experts only—will prove a boomerang to the manufacturer and to the entire industry.

H. GERNSBACK.

**The Rainbow Canyons Amateur Radio Club (RCARC)
is Sponsoring an Amateur Radio**

Technician Class

Beginner Level for Ham Radio

**Dates: Thursdays - March 2, 9, 23, 30 and April 6th, 2023
with the test, Thursday April 13, 2023
Time: 6:00 pm - 9:00 pm**

**Where: Cedar City Senior Center
489 E 200 South, Cedar City, UT 84720**

Class Cost: Free

Study Manual: Free Download

www.ad7fo.com/training.html

Click on Amateur Licenses Technician Syllabus (green button on left) to download. **Please bring to class**



Contact to Register:

**Linda Shokrian KG7PBX
435-867-5914 or
email: Lgshokrian@gmail.com**

**There is a \$15 ARRL Test Fee
and if you pass a \$35 FCC License Fee**

Article from our very own RCARC Club Member Tim (KI7LVC)



It might seem strange, but after spending a good part of my day here at the broadcast facility talking on the radio, want to guess what I do to relax after the day? Surprisingly, I go home and talk on the radio. Amateur radio.

I have always had an interest in audio communication, obviously, but I never got wrapped up in the CB Radio craze that briefly swept the United States several decades ago. And, I flirted with Amateur Radio as a kid, but once I got the book that one had to study to get a license, I said no thanks. To be honest, I probably could have been given better information at the time, but my mentors then guided me to handbook of the American Radio Relay League. It was thick and small print and had lots of numbers and weird pictures. Oh, and bonus you also had to learn Morse Code. Yeah, I'll go play baseball if that's ok. By the way, I've since learned that those weird pictures are called schematics.

But as I got in to broadcast, I found that I had a mild interest in the technical side of the operation. I wouldn't dare to make the claim of being an engineer here, but how things operate does interest me, and I've pretty much been always happy to help the technical staff in any way I could, and that has included helping to work on transmitters and learning a little about antennas and some light equipment installation and maintenance.

When I first arrived here at the station, the Chief Engineer here was also a licensed amateur radio operator. While we were working on a project one evening, he said, "you should really get your amateur license." Did I still have to learn Morse Code? Sorry, hard pass. A few years after that, the requirement to learn code was dropped and my friend was quick to let me know. Still, it was a no go.

Then in 2017, my friend came to me and said they were having a free class to get people prepared to take the test for the entry level license. He finally wore me down, and I agreed to attend. That evening I told my wife of my plans to attend and asked if she wanted to come as it would give us a built-in date night for the next six weeks. To my surprise, she agreed and we went off to class. We had fun, learned new things, and yes, we both were able to obtain our licenses.

We haven't regretted it at all. We get to associate with some really fun, although maybe slightly off center (we can be a bit nerdy) people who have welcomed us to the group. It has expanded our circle of friends and we look forward to meeting when we can. Plus, as you might guess I like talking on the radio. I actually upgraded my license to the next higher class which allows me to use frequencies that can talk around the world. One night I had a conversation with someone in Portugal. That was an endorphin release!

So, why spend the time writing this? Well, it's time for that free class again, and I would like you to give some thought in to joining our hobby. Classes begin on Thursday, March 2nd and will be held for 65 weeks. Then the test for the license will be offered on Thursday, April 13th. The class and the materials are free. If you decide to take the test it is a \$15 fee and if you pass, the FCC will require \$35 to issue the license. And then, you would need a radio, but you can get an entry level radio for around \$50. And yes, with that radio you can talk throughout Utah and the Intermountain West.

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Article from our very own RCARC Club Member Tim (KI7LVC)

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You can find out more about the class and our club at rcarc.info. I hope you'll think about it. By the way to talk on amateur radio you don't have to get out of bed before the break of day.

Hmmm...I might have to think about a swap.

By Tim Nesmith – KI7LVC

Tim has been on the air in Cedar City since 1992. His radio roots go back to the "golden age" of radio, as his grandfather was a producer on the "Fibber McGee and Molly" Show. The stories his Grand Father told him inspired him to pursue a career in radio beginning in the Riverside, California market in 1975. Tim currently serves as co-host of the Big Picture Morning Show, along with hosting the popular Tradio show (An on-air swan meet)

1940s BELL TELEPHONE "MOBILE TELEPHONES" MOVIE EARLY CELL PHONE / MOBILE TELEPHONE SYSTEM 90884

Created in the late 1940s, this film from Bell explains the operation of the Mobile Telephone Service (MTS) by showing how it can be used to make business more efficient. The film also shows some of the cutting-edge equipment used in the system and shows how it was installed in vehicles (7:30). MTS was a pre-cellular VHF radio system that linked to the Public Switched Telephone Network (PSTN). As such it used both radio signals and telephone lines to connect parties. MTS was the radiotelephone equivalent of land dial phone service. The Mobile Telephone Service was one of the earliest mobile telephone standards. It was operator assisted in both directions, meaning that if one were called from a land line the call would be routed to a mobile operator, who would route it to one's phone. Similarly, to make an outbound call one had to go through the mobile operator, who would ask for the mobile number and the number to be called, and would then place the call.

This service originated with the Bell System, and was first used in St. Louis on June 17, 1946. The original equipment weighed 80 pounds (36 kg), and there were initially only 3 channels for all the users in the metropolitan area, later more licenses were added bringing the total to 32 channels across 3 bands.

Continued next column

This service was used at least into the 1980s in large portions of North America. On October 2, 1946, Motorola communications equipment carried the first calls on Illinois Bell Telephone Company's new car radiotelephone service in Chicago. Due to the small number of radio frequencies available, the service quickly reached capacity. MTS was replaced by Improved Mobile Telephone Service (IMTS), introduced in 1964.

All calls were placed by a suitably equipped telephone operator. Outgoing calls were placed when the operator connected to a base station (originally using a cord board, but by the 1990s could be done by dialing a code sequence from a TOPS position), then announced the call over the channel (giving the channel's name first), e.g., "Adams calling 2M-2368, 2M-2368, 2M-2368." The page would usually be repeated twice more after a pause. The called party had to have their unit on and the volume set at a level that allowed them to notice a call and then listen to the called number. If the called party heard an incoming call, they would then use the microphone to announce they were receiving the call, and the operator would allow the two parties to speak, monitoring for the end of the call and marking a manual ticket for billing.

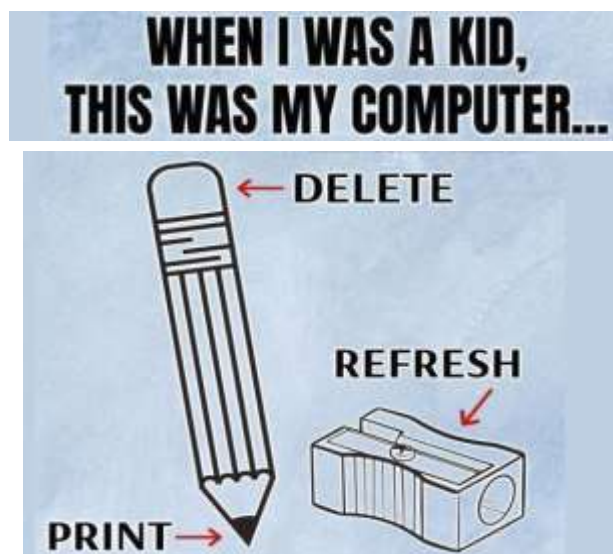
See the video at the below URL

There will be an advertisement when it first loads.

You can depress skip the ad after 5 or 6 seconds.

Enjoy.

[1940s BELL TELEPHONE "MOBILE TELEPHONES" MOVIE EARLY CELL PHONE / MOBILE TELEPHONE SYSTEM 90884 - YouTube](#)



USA Radio Orienteering Championships

Continued from page 6

"It is difficult to estimate attendance this year. We can accommodate up to 100 persons," said Scharlau. "Historically, we've had about 35 or fewer competitors in non-pandemic years, but we are hearing rumors of many people who are eager to get out and do things, so perhaps attendance will be up this year."

Scharlau said this year everyone participating in or attending the event will need to pay a \$5.00 parking fee at the park.

Detailed information about registration and the event site can be found [here](#). More information about Radio Orienteering is available on the [ARRL website](#). End

Amateur Radio Active in Turkey and Syria Following Earthquakes

In the days following the 7.8 magnitude earthquake and aftershocks that hit Turkey and Syria on February 6, 2023, emergency communications have been active with rescue and response efforts.



The emergency communications group Türkiye Radyo Amatörleri Cemiyeti (TRAC) is coordinating primary communications.

The designated primary disaster communication frequency is 28.540 MHz (USB). In addition, 3.777 and 7.092 MHz will also be used as needed.

Continued next column

Amateur radio operators have been asked to avoid these frequencies to allow any emergency traffic.

In a statement issued to ARRL on February 9, 2023, IARU Region 1 Emergency Communications Co-Ordinator Greg Mossop, GODUB, said the full effects of this disaster continue to unfold along with the search for any remaining trapped people

Here is his full statement:

"Aziz, TA1E, is now at the disaster area and coordinating frequencies for teams carrying out search operations. Many countries have sent Search and Rescue [(SAR)] resources but the only ones known to have [r]adios [a] amateurs embedded in them are Georgia and Bosnia [and] Herzegovina. The Romanian SAR team has no operators, but [it] does have communications equipment supplied by RVSU, one of the Amateur Radio emergency groups in Romania.

Aziz reported yesterday that 'due to the overwhelming dimension of the incident, some problems in coordination occur[ed]. These naturally have an impact [o]n the coordination of the incoming foreign SAR [g]roups.

As the assignment of their duty area is sometimes [a] 'last-minute decision,' and this decision is made by government officials, I would kindly ask the groups to report to me [for] that assignment. I will then [be] able to inform the groups [of] the usable frequencies in the area.'

With the large number of rescue teams deployed to the country, the challenges in coordinating teams, locations, and frequencies are to be expected.

With the death toll now over 17,000 in Turkey and Syria, the focus remains [on] getting the right help to the right place. A clear message from Aziz, when asked whether any radio operators or equipment were required, was:

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Amateur Radio Active in Turkey and Syria Following Earthquakes

Continued from page 11

'Assistance of individual radio amateurs is only possible if they are 'embedded' to SAR Teams with [International Search and Rescue Advisory Group] (INSARAG) Certification, which [has] been accredited by the Turkish government.'

At the time of the earthquake, a [European Conference of Postal and Telecommunications Administrations] (CEPT) meeting was taking place, and it has been reported that the Turkish delegation to that meeting confirmed that Radio Amateurs were being deployed in the emergency response.

Traffic is being heard on 10 and 80 meters in the Turkish language, so the request to keep frequencies in the area clear remains. The majority of emergency communications traffic remains on VHF.

The earthquake affected Syria as well. I have tried reaching the Syrian National Society but with no response, as they seem to have gone QRT.

[The] full effects of this disaster continue to unfold and [are] now encompassing the needs of survivors [to] search for any remaining trapped people."

To date, there have been more than 17,000 casualties in Turkey and Syria combined, and more than 14,000 casualties in Turkey alone, with more than 63,000 people reported injured. Aftershocks continue and relief organizations are on site, with more aid arriving in the areas daily.

Additional and updated information is available at <https://www.iaru-r1.org/2023/turkiye-earthquake-6-february-2023/>

End.

Roadside Rescue

The below URL shares a story of a roadside Ham radio rescue December, 4 2022. Near Pittsburg Massachusetts's Mount Washington area. Please see video at the following URL.

<https://www.youtube.com/watch?v=EDwKfqExDz4>

Get the CISA Auxiliary Communications Field Operations Guide (AUXFOG)

Interoperability: "The ability of emergency responders to communicate among jurisdictions, disciplines, frequency bands, and levels of government as needed and as authorized. System operability is required for system interoperability."

Volunteer organizations such as community emergency response teams and auxiliary communications volunteers (e.g., amateur radio operators) play key roles in emergency communications and preparedness. Volunteer emergency communications operators and groups using amateur radio have been providing backup communications to event planners, public safety officials, and emergency managers at all levels of government for nearly 100 years. Often, amateur radio services have been used when other forms of communications have failed or have been disrupted. Today, nearly all the states and territories have incorporated some level of participation by amateur radio auxiliary communication operators into their [Tactical Interoperable Communications Plans](#) and [Statewide Communication Interoperability Plans](#); this allows them to quickly integrate the operators into response efforts, which can strengthen communications and operations during incidents of any scale. You can download the Auxiliary Communications Field Operations Guide (AUXFOG) and other valuable FOGs on the [Cybersecurity and Infrastructure Security Agency \(CISA\) website publications/resources page](#). You can also download an electronic copy from the Apple and Google App stores.

Navigating Winlink

San Diego ARES - Winlink series of short clips

View these short videos to help Winlink learners navigate Winlink Express software. Winlink Express software is a user interface to the global radio email system that operates using Amateur Radio (ham radio) independently of the Internet. Users include transoceanic boat operators and the emergency communications community responding to hurricanes and earthquakes. The number in the video title (0.0 to 15) corresponds to user training conducted by San Diego Amateur Radio Emergency Service (ARES).

There are 27 "How to" short videos in all.

See URL below:

<https://www.youtube.com/playlist?list=PL-7mirT-kjfs84FQzLr-qv066KI94rtYM>

A Little Humor

I was driving when I saw the flash of a traffic camera. I figured that my picture had been taken for exceeding the limit even though I knew that I was not speeding.

Just to be sure, I went around the block and passed the same spot, driving even more slowly, but again the camera flashed. Now I began to think that this was quite funny, so I drove even slower as I passed the area once more, but the traffic camera again flashed.

I tried a fourth and fifth time with the same results and was now laughing as the camera flashed while I rolled past at a snail's pace.

Two weeks later, I got five tickets in the mail for driving without a seat belt.

You know, you just can't fix stupid.

World Amateur Radio Day Theme: Human Security for All

The International Amateur Radio Union (IARU) announced that Human Security for All (HS4A) will be this year's theme of [World Amateur Radio Day](#) on April 18, 2023.



The day is being celebrated with a 2-week operating event occurring April 11 - 25. Special event stations will be operating from around the world, making two-way radio contacts to call attention to the HS4A campaign.

The [concept of human security](#) measures the security of an individual by things essential to one's well-being. This includes economics, food, health, the environment, personal factors, the community, and political factors.

Amateur radio is uniquely positioned to address those challenges by promoting technical knowledge, practical skills, innovative technology, and the deployment of backup systems at the community level that can be called upon in times of emergency.

IARU, a federation of the national amateur radio societies of over 150 countries worldwide, is the global advocate for amateur radio through its Sector Membership in the International Telecommunication Union, an agency of the U.N., and other activities.

The [United Nations Trust Fund for Human Security](#) and the [World Academy of Art and Science](#) are partnering with [IARU](#) in the campaign.

In a release, the partners wrote, "Amateur radio has repeatedly demonstrated its ability to address human security needs. It is a truly global communications medium comprising some three million radio enthusiasts connecting communities and the peoples of the world."

Continued on page 15

RCARC February Breakfast Pictures



Benjamin (W9YNK) and family enjoying breakfast



Brody (K7VXV) and family enjoying breakfast



Fred (K17TPD) and Bonnie (K17WEX) with George (AL7BX) and Linda (KG7PBX) in rear



Ron (K7HDX) Kevin (K2MFK) top and Dick (K7ZI)



Group Shot



Another group shot

Continued next column

Amateur Radio on the International Space Station Seeking Contact Proposals

The Amateur Radio on the International Space Station (ARISS) program is seeking formal and informal educational institutions and organizations, either individually or working together, to host an amateur radio contact with a crew member on board the International Space Station (ISS).



ARISS anticipates the contact will be held between January 1, 2024, and June 30, 2024. Crew scheduling and ISS orbits will determine the exact contact dates. To maximize these radio contact opportunities, ARISS is looking for organizations that will draw large numbers of participants and integrate the radio contact into a well-developed education plan.

The deadline to submit a proposal is March 31, 2023. Proposal information and more details, such as expectations, proposal guidelines, and the proposal form, can be found at <https://www.ariss.org/apply-to-host-an-ariss-contact.html>

An ARISS introductory webinar will be held March 1, 2023, at 8:00 PM EST. The Eventbrite link to sign up for the free webinar is <https://www.eventbrite.com/e/ariss-proposal-webinar-for-spring-2023-proposal-window-registration-515706320487>.

ARISS is a cooperative venture of international amateur radio societies and the space agencies that support the ISS. The United States sponsors are ARRL, the Radio Amateur Satellite Corporation (AMSAT), Amateur Radio Digital Communications (ARDC), NASA's Space Communications and Navigation program (SCaN), and the ISS National Lab Space Station Explorers (SSE).

World Amateur Radio Day Theme: Human Security for All

Continued from page 13

ARRL participates in World Amateur Radio Day each year. It was on this day in 1925 that the IARU was formed in Paris. ARRL co-founder Hiram Percy Maxim was its first president. For additional World Amateur Radio Day resources, visit <http://www.arrl.org/world-amateur-radio-day>.

Click the URL below to watch a video about HS4A:

<https://www.youtube.com/watch?v=JPZaOzUrSkE>

More Humor



RCARC EComm Group Meets

EComm group member came together at the Cedar City Heritage Center on February 16, 2023 in lieu of our winter weather advisories.

Brad (WA7HHE) brought the meeting to order and gave an update of upcoming activities.

First up is the Southwest Utah Healthcare Preparedness (SWUPH) Coalition Regional Communications Drill on March 7, 2023 and then the Great Utah Shakeout on April 20, 2023. More information on these two events will be forthcoming.

Ron (K7HDX) brought everyone up-to-date on the creation and set up of a VARA FM Winlink Gateway. The gateway should be up and operational in a few days. Frequency 145.030, Simplex. Gateway ID is K7HDX-10.

Upon business completion the program for the night was for members to bring their Ham Radio portable go kits and do a show and tell.

See Pictures below:



Bruno (KG7VVN) presenting his go kit. The radio is an all mode Yaesu FT 857D.



Continued next column



These two pictures are from Dick (K7ZI) who keeps his go kit in an old suit case. Radio & all supporting items.



Ron (K7HDX) showing very compact and portable go kit.



Another view of Ron's portable go kit. Showing where the battery cable is located and where they connect to the radio. The back of kit has a sleeve in back where is Tablet PC is stored for digital work.

Continued on page 17

RCARC EComm Group Meets

Continued from page 16



Fred (KI7TPD) sharing information on his all mode Radioddity Q900 Radio.



Fred (KI7TPD) showing the small portable battery.



Brad (WA7HHE) portable go kit.



Another view of Brad's portable go kit.



Dennis (W6DLW) sharing information about his Uniden BCD436 HP scanner that will be part of his go kit when completed. A scanner can be a useful tool when deployed for gathering intel.

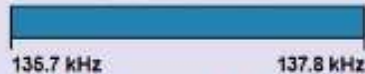
US Amateur Radio Bands

Operator license classes: **E** = Amateur Extra **A** = Advanced **G** = General **T** = Technician **N** = Novice
 CW operation is permitted throughout all amateur bands. Except as noted, all frequencies are in megahertz (MHz).

■ = RTTY, data, phone, image
 ■ = USB phone, RTTY, data and CW
 ■ = RTTY and data
 ■ = phone and image
■ = SSB phone
 = CW only

LF – Low Frequency band

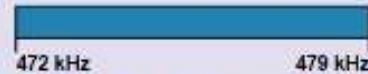
2200 Meters (135 kHz) E,A,G
1 W EIRP maximum



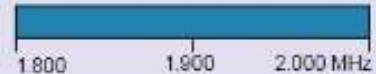
Amateurs wishing to operate on 2200 or 630 meters must first register with the Utilities Technology Council online at <https://utc.org/plc-database-amateur-notification-process/>. You need only register once for each band.

MF – Medium Frequency bands

630 Meters (472 kHz) E,A,G
5 W EIRP max, except in Alaska within 496 miles of Russia where the limit is 1 W EIRP

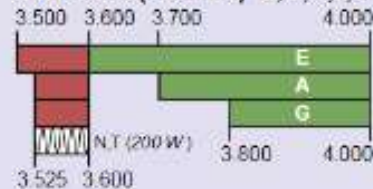


160 Meters (1.8 MHz) E,A,G

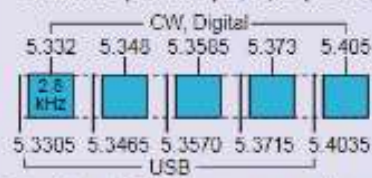


HF – High Frequency bands

80 Meters (3.5 MHz) E,A,G,T,N

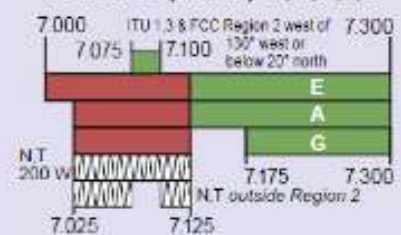


60 Meters (5.3 MHz) E, A, G (100 W)

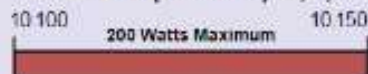


Gen, Adv, and Extra licensees may operate on a secondary basis with a maximum ERP of 100 W maximum.

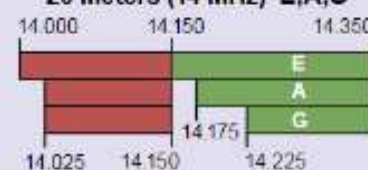
40 Meters (7 MHz) E,A,G,T,N



30 Meters (10.1 MHz) E,A,G



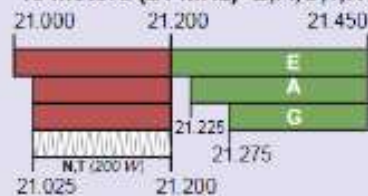
20 Meters (14 MHz) E,A,G



17 Meters (18 MHz) E,A,G



15 Meters (21 MHz) E,A,G,T,N



12 Meters (24 MHz) E,A,G



10 Meters (28 MHz) E,A,G,T,N

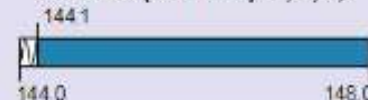


VHF – Very High Frequency bands

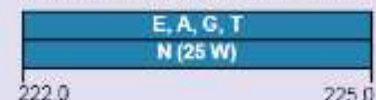
6 Meters (50 MHz) E,A,G,T



2 Meters (144 MHz) E,A,G,T

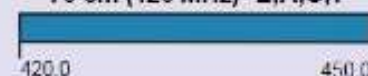


1.25 Meters (222 MHz) E,A,G,T,N



UHF – Ultra High Frequency bands

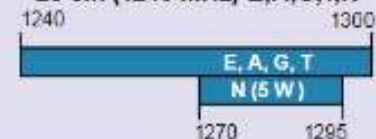
70 cm (420 MHz) E,A,G,T



33 cm (902 MHz) E,A,G,T



23 cm (1240 MHz) E,A,G,T,N



SHF&EHF – Super and Extremely High Frequency bands

All licensees except Novices are authorized all modes on the following frequencies:

2300-2310 MHz	3300-3500 MHz	10.0-10.5 GHz	47.0-47.2 GHz	122.25-123.0 GHz	241-250 GHz
2390-2450 MHz	5650-5925 MHz	24.0-24.25 GHz	76.0-81.0 GHz	134-141 GHz	All above 275 GHz

See www.arrl.org/band-plan for detailed band plans

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 OTAbands rev. 1-22-20

Amateur Radio Digital Communications Releases 2022 Annual Report

[Amateur Radio Digital Communications](#) (ARDC) has released its 2022 Annual Report detailing grants made for amateur radio projects.

In 2022, overall, ARDC approved nearly \$6.7 million in grants, and distributed nearly \$7.7 million.

ARDC's 2022 grants were distributed in four categories: Amateur Radio, Education, Scholarships, and Research & Development. Below is a list of the total grant amounts distributed in each category.

- Amateur Radio \$2,145,686
- Education \$2,326,744
- Scholarships \$1,561,548
- Research & Development \$2,402,293

In 2022, international grant making was expanded to 13% of funded projects, which was an increase from 9% in 2020, and is an area where ARDC is aiming for additional growth in 2023.

ARDC made 47 grants to amateur radio in 2022, which accounts for almost half of the total projects funded.

These included nine college amateur radio club projects and 33 community amateur radio club projects which involve network build outs, equipment upgrades, and repairs to old equipment.

Communications vehicles were commonly applied for, meaning that they were more competitive and difficult to obtain funding for. Clubs often share that these projects re-energize their membership and activities.

ARDC reviewers focused on selecting projects with strong outreach plans or opportunities to bring new people into the hobby. Projects with unique approaches and ones that aimed for big impacts stood out from the crowd.

At the same time, funds were available for bread-and-butter club projects in order to continue supporting typical groups enjoying the hobby.

An example of a stand-out project is the one proposed by Bay Area Mesh (BAM). BAM's goal is "to install a resilient, high-speed, wireless network throughout San Francisco and the greater Bay Area." The network would be used by responders, volunteers, and served agencies during disasters, emergencies, and large community events.

ARDC noted in the awarding of the grant, "They're building this network using inexpensive, commercial-grade Wi-Fi equipment, running open-source software developed by the Amateur Radio Emergency Data Network (AREDN)." Using AREDN software allows BAM volunteers to set up a node with minimal expertise and effort, Advanced network technology is not needed because the software configures the network automatically.

Scholarships continue to be a focus for ARDC. In 2023, ARDC is funding 95 scholarships, bringing the all-time ARDC scholar total to 313. The [ARRL Foundation](#) was the biggest beneficiary, with a grant of \$500,000. And, in keeping with their goal of reaching underserved groups, scholarship programs were also funded for the Society of Women Engineers and OMIK (a multicultural amateur radio organization), among others.

ARDC is a private foundation that exists to support amateur radio and digital communication science and technology.

The mission of ARDC is to support, promote, and enhance digital communication and broader communication science and technology, and to promote amateur radio, scientific research, experimentation, education, development, open access, and innovation in information and communication technology. End.

Continued next column

Community Emergency Response Team (CERT) Class

April 8, 2023, from 9:00am to 5:00pm at Festival Hall located in downtown Cedar City - 105 North 100 East, Cedar City, UT, 84720. If are not familiar with this location, please look it up before the class so you can arrive on time.

1. Community Emergency Response Teams (CERT Teams) respond in the period immediately after a disaster when response resources are overwhelmed or delayed. CERT Teams are a bridge to professional responders until they are able to arrive. This training covers basic skills that are important to know in a disaster when emergency services personnel may not be immediately available. This training is sponsored by the State of Utah, Div of Emergency Management and the Iron County Office of Emergency Management.
2. Skills taught during the CERT classes are:
 - a. First Aid
 - b. Incident Command System (ICS)
 - c. Light Search & Rescue
 - d. Emergency Communications and other skills
3. CERT classes also prepare families and communities prior to emergencies and assist neighbors during an emergency when first responders are not immediately available.
4. **The majority of this class is online**- so you can take it at your own pace and not have to leave the comfort and safety of your home. It requires about 6-7 hours online. Each module is about 1 hour long consisting of Power Point slides and some Videos. **You MUST complete the online training before attending the class.**
5. The cost for the class is FREE. We will conduct the practical hands-on portions of the course on SATURDAY, **April 8, 2023, from 9:00am to 5:00pm** at Festival Hall located in downtown Cedar City.
6. Course materials for the CERT program including the PowerPoint Presentation slides, Training Videos & participant manual can be downloaded and viewed at this FEMA/CERT site: <https://www.ready.gov/cert>
7. If the above FEMA link doesn't work, just copy the link and put it in your browser and Go. Scroll down on the site and view/download the CERT Presentation slides and View all of the CERT training Videos BEFORE the class.
8. We are encouraging both husband and wife members to take the course. It will be a review for some of our members and new material for others. Both members should sign up individually for the course. You can view the material together or separately as you wish, as long as both of you attend the practical portion
9. CERT Backpacks and supplies will be provided to Iron County Residents during the class on Saturday.
10. Hard copy CERT student manuals will be provided during the class from the Iron County Emergency Manager.
11. Finally, You MUST take the online CERT class and /or review all the PowerPoint slides BEFORE the Saturday class. Normally this is a 24 hour in-person class- Due to Covid and other issues we are teaching only the practical, hands-on portion in a single 8 hour class. **The remaining 16 hours you must review on your own.**
12. Please RSVP your name and email to the Iron County Emergency Manager at gcolson@ironcounty.net before April 1st so we can arrange to have all of the needed supplies at the class.
13. Thank You

Terry Meissner
Iron County CERT Coordinator
(435) 691-3742
Tmeissner@escgroup.us