RAINBOW CANYONS AMATEUR RADIO CLUB NEWSLETTER CEDAR CITY, UTAH

Club Websites: www.rcarc.info OR www.rainbowcanyons.com

Number 4 – Vol. 11 – November, 2022

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.

> 2022 Club Officer's President: Fred Govedich KI7TPD 1-435-559-2682 fred.govedich@gmail.com

Vice President

Ron Shelley K7HDX 1-623-261-6555 ronald.shelley@gmail.com

Secretary Bonnie Bain KI7WEX 1-435-865-1653 Bonnie.bain@gmail.com

Treasurer

Linda Shokrian KG7PBX 1-435-867-5914 Igshokrian@gmail.com

Newsletter Editor/Historian Dennis L. West W6DLW

1-760-953-7935 rcarcnewsletter@gmail.com



CQ, CQ, - Happy Thanksgiving.



Presidents Message

Greetings Everyone, Fall is here with cooler temperatures and snow! The bands seem to be opening up so I hope you can get out and play on the radio. We have an Iron Mission Days Special Event coming up on November 11 and 12 at the Frontier Homestead state park. We have a signup sheet on the RCARC club website (rcarc.info).

Please volunteer to help if you can and thank you to those who volunteer for these events! This is a great opportunity to come out and meet with the public and at the same time make contacts around the country and even the world. We can pair Techs up with Generals and Extra class HAMS so that you can try out the HF radio bands. All participants will also receive a certificate for taking part in this event.

We also have a fox hunt scheduled for November 5th, after our monthly breakfast. The plan is to have our breakfast at Golden Coral at 9:00am. After the breakfast at around 11:00 we will setup and conduct our fox hunt. Two hunts will be conducted. One will be held in the park behind the Cedar City Senior Center. Continued on Page 2

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. 8:30 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

November 8, 2022

RCARC Club Meeting.

7:00 pm. Cedar City Senior Center, 489 E. 200 South. Stop the Bleed. Learn to help in bleeding emergencies until professional help arrives.

December 13, 2022

RCARC Club Meeting. 7:00 pm. Cedar City Senior Center, 489 E. 200 South. Club Christmas Party.

January 10, 2023

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

February 14, 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.

The second fox will be hidden at another location (undisclosed) for those who would like a challenge. Both will start in the parking lot of the Cedar City Senior Center.

Remember if you need help with setting up your radio, software, or other equipment please ask your fellow HAMs for help. Part of the fun is helping others! As always, I would like to thank everyone who makes our meetings great by asking questions. I would also like to thank all of our net controls for the nets and everyone who participates!

Cheers!

Fred (KI7TPD)

November Meeting Program Reminder

"Stop the Bleed"

Become trained equipped and empowered to help in a bleeding emergency before professional help arrives.

Instructor: Austin Smith, SWUPHD.

RCARC Monthly Breakfast

Please cone 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 November



Happy Thanksgiving



Breakfast & Friendship Net Awards September 2022

Breakfast Net		Friendship Net		
First Place	Third Place	First Place	W6DLW - Dennis	
K7ZI, Dick	KI7TPD - Fred	KA7J Lance	Second Place	
KE7ZIM - Johnny	KI7WEX - Bonnie	K7NKH - Lee	K7ZI - Dick	
N7SIY - Sylvia		KI7LUM - Bruce	KI7WEX - Bonnie	
KC6WFI - Tony		K7WEP - Paul	KI7TPD - Fred	
Second Place		K7HDX - Ron	N7SND - Larry	
KI7SCX - John		N7WWB - Darlene	N7TCE - Merlin	
KG7PBX - Linda		KJ7LTQ - Brant	Third Place	
K7ZZQ - Johnny		KK7FLL - Maddie	KK7CEE - Bruce	
N7SND - Larry		N7SYI - Sylvia		

Rainbow Canyons Amateur Radio Club Treasurer Report as of Oct 11, 2022

Bank balance (reconciled) Sept 1, 2022	\$1,745.78
Membership deposits	+ 15.00
WB7UOZ	
Name Badges Income	+30.00
Checks/expenses	
Rocky Mountain Power	- 21.09
Funds in bank as of 9/30/2022	\$1,769.69
Rocky mountain Power due 10/14/2022	- 20.82
Funds available after Oct 14, 2022	\$ 1,748.87

Submitted by Linda Shokrian KG7PBX 2022 RCARC Treasurer 435-867-5914

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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 November 8, 2022 meeting.

RCARC Book Giveaway Winner. The winner of the October 11, 2022 book giveaway (pictured below is Brant Palmer (KJ7LTQ) The Fast Track to Understanding Ham Radio Propagation

Congratulations Brant

by Michael Burnette, AF7KB

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 www.rainbowcanyons.com

Face Book Page: https://www.facebook.com/gr oups/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

Reminder

Daylight Savings Time ends on November 6 2022 at 2:00 AM.

Mark Your Calendar





Buzz's November Safety Tip(s)



Autumn safety tips In your yard

After a season of backyard cookouts, swimming, hopscotch, and bike riding, it's time to tuck everything away and <u>get your yard</u> <u>ready for the changing weather</u>. Here's all you need to do to keep everyone safe and sound as summer gives way to fall.

Take care of fallen leaves

Bright foliage is the most obvious sign of the approaching fall season—but those golden and crimson piles can harbor hidden dangers. Wet leaves can make walkways slippery and promote the growth of mold in your yard.

Regularly rake up fallen leaves to keep your driveway and sidewalks clear, and mulch raked leaves or dispose of them in bags according to your city's requirements. Warn children to stay out of leaf piles—especially those along curbs because kids could trip or sprain an ankle—and supervise all leaf play.

Cover the pool

Getting the pool ready for cooler temperatures can be a chore. You need to lower the water level and balance its chemistry to prevent against freezing otherwise,

Continued next column

the water may expand and either crack surrounding cement or overflow and cause a slippery layer of ice to cover the sidewalk.

Make sure to also winterize the plumbing, safely store all pool accessories, and cover up your pool.

Your pool cover needs to be properly secured and fit tightly—there should be no holes or gaps where leaves and other debris could get in. Avoid solid pool covers, as they are safety hazards and require pumps to remove rainwater and melted snow.

Use ladders carefully

From pruning trees to cleaning out rain gutters, many fall maintenance activities require ladders. Always be sure to wear appropriate footwear, position the ladder on a flat surface, and have someone around to spot you. Even the most seasoned handyman can have a mishap, and you stand a better chance of mitigating potential injury if someone is around to offer help.



Iron Mission Days Shift Signup

- Please see the below link to sign up for shifts at the upcoming Iron Mission days.
- 2. Read the information below for added FYI information.

Event Sign up link:

https://docs.google.com/spreadsheets/ d/1Gk7ltxQmJVWs9W5QdNxE7HmYc bC6wkiOvr_Awp32GU0/edit?usp=shari ng

After you signup just close the program and it will save your entries.

Mark your calendar! "Iron Mission Days"

RCARC and Frontier Homestead State Park will join forces to celebrate *"Iron Mission Days"*

Date: November 11 & 12, 2022. **Time:** Normal business hours both days. **Reason: COMMEMORATING** the **171**st **anniversary of the first Iron Works in the Rocky Mountains.**

Operation: 2 HF radios and live operators making contacts with the outside world from *Frontier Homestead State Park & Museum!*

We have a unique situation for this event. We will operate a normal Special Event station, using the special call sign, N7U and simultaneously send out a POTA (Parks on The Air) operation number!

It is suggested we schedule operators for a 2hour shift at the microphone, both days for a total of 18 hours on the air.

Bring your lunch, drinks and family and have *FUN!* handing out contacts during this annual celebration event.

Should have any questions or concerns please contact Dick Parker (K7ZI) at 435-586-2167.

Autumn safety tips Continued from page 5

In your home

Not all autumn maintenance happens outside. As you prepare to spend more time indoors, it's important to check that your fireplace and furnace are in good repair and that you know what to do in a house fire in case one does happen.

Maintain your fireplace

Nothing's better than gathering around a crackling fire. Prepare for cozy upcoming nights by ensuring your fireplace is free of soot, creosote buildup, and potential bird nests.

You can check your fireplace yourself, but a safer option is to call a professional chimney sweep. Once you start using your fireplace, make sure you regularly remove ashes/debris and install a screen to keep sparks from escaping.

Read our <u>full guide to fireplace safety</u>.

Inspect your furnace

Just like people, furnaces need annual checkups. Have a professional inspect your furnace in the fall to ensure that everything works properly. Maintenance issues could potentially present hazards to your family and home.

You should also regularly replace the air filters in your furnace to <u>improve indoor air</u> <u>quality</u> and the furnace's efficiency.



Continued on page 8



NOVEMBER, 1922

Radio and the Beginner

HEN radio was young and a man wanted to delve into the mysteries of the new art, he, as a rule, started with a simple crystal outfit, which he used to his heart's content until he had mastered the rudiments of the new eighth wonder. He was content to receive clear signals, and he took his time to become familiar with every part of his set.

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Having mastered the first principles, he kept on adding to the outfit until he had a representative set that gave satisfaction to him because he knew all about it. After a while he plucked up sufficient courage to tackle a vacuum tube set, which he shortly worked to perfection, a thing he never would have accomplished had he not started first with the simple crystal set.

We can compare him to the man who drives his own car. As a rule, he does not start in with an imported car, costing anywhere from ten to fifteen thousand dollars. He starts in, generally, with a second-hand car, or, at least, a car that is not too costly. Then, after he has mastered the running of this machine, he feels that he can acquire a better and more powerful model.

In radio, nowadays, however, we do not work things that way. The merest novice must try a \$300 vacuum tube set, and if you have lived at all in the United States during the past six months, you know the rest.

All of this is not said with the idea of discouraging people from using vacuum tube sets. There is, of course, no question at all that the vacuum tube is far superior to the crystal set in that it brings in stations from inconceivably greater distances, especially if we consider the radiophone, but thus far, and we may as well be truthful about it, the average vacuum tube outfit has been beyond the novice. Very few people have been able to get results that are worth while. We know of one apartment house in New York City where there were 15 vacuum tube sets last spring, nearly all of which have been taken out, and in some cases crystal sets have been substituted by the owners who could not work the vacuum tube sets.

The trouble here, of course, is with the dealer and with the tremendous advertising that radio has received. The average man thinks that a high-priced radio outfit is just like his phonograph, or like his player plano. Given a few instructions, he thinks he will be able to receive concerts from Paris and Honolulu, never stopping to think that so far few outfits have been perfected to such a degree where it is safe to place them in the hands of a total novice who has no idea whatsoever as to radio or electricity. The dealer is to blame because he, wishing to make a large sale, always urges his prospect to buy an expensive set, never thinking of the mischief he is doing all the while. If every dealer or manufacturer could afford to send a man with an outfit and instruct the owner in all the intricacies of radio, all would be well. Unfortunately, in the very nature of things, this is impossible, as it would take weeks of instruction, and even then the owner would not know all about it. The trouble is that the public, with few exceptions, do not care to' learn. They wish to get results overnight, and if they do not obtain them, they blame the outfit, and, as usual, radio gets a black cyc.

How much better it would be for the dealer to sell the novice a good crystal outfit. This would do several things. In the first place, as far as clearness of sound is concerned, if you are within range, there is certainly nothing better than a crystal outfit. Given a good detector and a good pair of phones, broadcasted radiophone entertainment comes in, as a rule, with wonderful clarity. There is practically no distortion to speak of, and while it is necessary to wear a set of receivers, the perfect condition of the entertainment amply repays the man who owns a crystal set, and makes him forget a noisy loud talker. On the other hand, nine out of ten vacuum tube sets, where several stages of amplification are used, in the hands of a novice, as a rule give poor results. How much better it would be, if a man insists upon a vacuum tube set, to sell him an outfit with a single tube, which certainly will give him results where the big outfit will not. And in the end, the dealer will be the winner, for a satisfied customer will come back and try to get a better set after he has become familiar with the operation of the simple one.

It is ever so much better, for the radio art right now, that every novice should be urged to buy a crystal set to start out with, for in the long run it will benefit the entire trade. It has been proven in the past that if you get a man really interested in the radio art he will stick to it for at least five years, on an average. Can this much be said of a man who rushes out to buy an expensive set and then, fails to get satisfaction?

Since the advent of the vacuum tube, the crystal set seems to have sunk lower and lower in the estimation of the public, as well as the dealer, for no reason at all. Unless one wishes to receive from long distances, and receive an entertainment that is loud enough to be heard all over the house, the advantages lie with the crystal set. A good crystal outfit does almost everything that a vacuum tube set can do, is much easier to adjust, if it is designed properly, reproduces better, as a rule, is less expensive in operation, requires no batteries and is low in price. Also, the owner of a crystal set will get used to radio and will believe in it, whereas the novice owner of a vacuum tube set becomes easily discouraged and very often drops out of the game for good, after a few attempts. Following that, he denounces radio as a swindle, or worse. That is the problem which confronts us today and the sooner this is climinated the better it will be for all concened.

Another thing that our manufacturers neglect sadly is instruction. We have seen very few instruction booklets that are given away with radio outfits. Few crystal-set manufacturers, as well as few vacuum tube-set manufacturers, take the trouble to instruct the public. The manufacturer knows all about the outfit, while the public knows nothing. Complete instructions should be given with every outfit and these instructions can not be too explicit. The construction of an aerial for the set should be described, as well as the size of the wire, length, number of insulators, etc.

Detailed illustrations showing the handling of the controls and all other vital parts should be given. An illustration is better than a thousand words of printed matter. Very few people like too lengthy instructions, and here is where the illustration fits in nicely. If every manufacturer of radio outfits would follow the example of the Kodak people, they would find that there would be much less dissatisfaction on the side of the public than exists today.

H. GERNSBACK.

Autumn safety tips

Continued from page 6

Change smoke alarm and carbon monoxide detector batteries

Furnaces, fireplaces, and scented <u>candles</u> are MVPs all autumn long, which means you need smoke alarms that are armed and ready. Replace batteries in your <u>smoke detectors</u> and <u>carbon monoxide</u> <u>detectors</u>.

Make this a habit each year when you turn the clock back for daylight savings time. If you live in a time zone without daylight savings, make this a must-do task on the first day of autumn.

In your garage

It's easy to turn the garage into a depository of all the things you plan to do later. There's no time like the changing of the season to clean up and clear out what could become dangerous clutter.

Fall is also a great time for upgrades. Consider adding a few accessories to <u>keep</u> <u>thieves out of your garage</u>.

Throw out old papers

Stacks of old magazines and newspapers in your garage are <u>fire hazards</u> waiting to happen. Gather these up and drop them off in a recycling bin. If you need to hold on to some old papers, store them in a plastic or metal storage bin—not a cardboard box away from heaters, furnaces, and other heat-producing appliances.

Clean out chemicals

Leftover chemicals also tend to pile up in the garage. Check with your local <u>Environmental</u> <u>Protection Agency</u> branch to find out the proper way to dispose of hazardous chemicals like pesticides, fuels, and cleaning supplies.

If you have flammable or poisonous materials that you need, store them out of reach of children, in clearly-marked containers, and away from your furnace and water heater.

Autumn is a great time to gather with family and friends to enjoy the colors of the season or warm up inside with a nice fire and cup of cocoa. Follow these fall tips to make sure you can safely enjoy all the perks of this special season.

Don't forget the shed

All those valuable power tools and gardening goodies that live in your shed may be retired for winter, but one last sweep will set them up for safe and clean winter hibernation. Be sure to <u>add locks</u> and <u>secure your</u> <u>shed</u> before the first snow hits. End





It's that time of year again to nominate RCARC Board members for 2023. Nominations will be accepted at the November 8, 2022 RCARC general meeting. Nominations will continue to be received until the December 2022 meeting where voting will take place.

Newly elected candidates will be seated at the January 10, 2023 meeting.

Volunteer Radio Network Takes Shape

San Rafael, CA - During an emergency, being able to quickly send or receive accurate information can make all the difference. However, most standard communication devices require electric power, rendering them ineffective during planned outages, such as the ones that Marin County, California, endured in October 2019.

The newly established Marin Radio Communications Volunteers (RCV), a pilot program under <u>Marin County Department of</u> <u>Public Works</u> (DPW), is working toward a solution: organized ham radio communications.

The need was identified by several local amateur radio enthusiasts during the Pacific Gas and Electric Company's <u>Public Safety</u> <u>Power Shutoffs[External]</u> (PSPS) in October 2019. During the PSPS, Marin County's branch of Voluntary Organizations Active in Disaster (VOAD) noted that various community-based organizations had technological problems communicating between each other and several local government agencies.

The issues included supply logistics and general assistance, which could have been improved by having a structured network of backup communications, specifically for local organizations.

Continued next column



Skip Fedanzo, KJ6ARL, is the lead operator of the Marin Radio Communications Volunteers. Photo from the press release.

The Marin Amateur Radio Society (MARS) designated ham radio operators who could provide backup communications for the vulnerable community-based organizations. Utilizing mobile radio equipment, the ham operators began looking into effective ways to implement the support network. Soon afterward, the Marin County DPW sponsored the initiative as a pilot program for improving public safety during future PSPS events.

A seven-person planning team is collaborating with 16 ham radio volunteers to develop a structured operational system for the pilot program. The guidelines would serve the needs of Marin County's community-based organizations, facilitating basic communications pathways for them to provide their respective services.

RCARC October Monthly Breakfast Picture's



Members Conversing and enjoying breakfast.



Addition photo from opposite end of table.



George (AL7BX) and Brian (KG7OOW) probably talking about repeaters and mountain sites.

Continued next column



Dick (K7ZI) assisting Sylvia ((N7SIY) with getting her breakfast items.



Ron (K7HDX) and Brian (KG700W) with Sylvia & Dick in the background looking over the great breakfast selections.



Brody (K7VXV) making a selection. Continued on page 11

RCARC October Monthly Breakfast Picture's

Continued from page 10



Ed, KK7ZL enjoying his breakfast.



Tony (KC6WFI) and Wife Sonia (KD6HYH) enjoying breakfast

Items for Sale

Yaesu FT 818ND HF/VHF/UHF 6-watt portable transceiver. \$575.00

LDG Z817 Auto Tuner for the 817/818ND Transceiver. \$110.00

Kenwood TS520 Transceiver w/built in inverter, includes a Kenwood MC50 desk mic. \$350.00

MFJ Versa Tuner II. \$80.00

Contact Larry Bell (N7SND)

435-559-2017

RCARC EComm Group Meets

On October 20th the RCARC E-Comm Group met at the Cedar Center Heritage Center.

Brad (WA7HHE) brought the meeting to order.

Business included the election of Officer's for 2023.

However, before that could occur Ron (K7HDX) made a motion to table the elections until a complete review of the Current RCARC Bylaw and the MOU with Iron County's Office of Emergency Management OEM) could be reviewed.

In addition, review the requirements for being an E-Comm member such as training, skills, knowledge to perform emergency communications, having the necessary equipment and other.

The motion was seconded by Dennis (W6DLW).

After lengthy discussion it was suggested that a committee be formed to address these and other issues. The motion was put to a vote and passed with a yes vote with one abstention.

The following members volunteered to be part of the RCARC/E-Comm Planning Committee;

Dennis West (W6DLW), Ron Shelley (K7HDX), Darlene Shelley (N7WWB), Fred Govedich (KI7TPD), Bonnie Bain (WI7WEX), Linda Shokrian (KG7PBX) Larry Bell (N7SND).

On October 25, 2022 the first meeting of the planning committee took place.

A draft proposal framework was submitted by Ron (K7HDX) for review by the committee. The proposal covered the following area's – Purpose, Membership, Meetings, Nets and Exercises.

In addition, EComm Group as part of the Club should operate with recorded minutes along with EComm board authorization for responsibility and accountability. The board should meet bimonthly prior to EComm meetings.

Emphasis on training for minimum standards repeated and completed on regular basis. We should strive to build a well-trained membership. Training and qualifications should be documented. The board needs to be aware of the skills, abilities, capability, and equipment of each EComm member.

Monthly Meeting RCARC October General Pictures



Pledge of Allegiance



Fred (KI7TPD conducting club business



Linda (KG7PBX) giving treasurer's report Continued next column



George (AL7BX) giving repeater update



Bruno (KG7VVN) reporting his findings on the Iron County Emergency AM 1610 Radio



Dick (K7ZI) updating the group on the upcoming Iron Mission Days

Volunteer Radio Network Takes Shape

Continued from Page 9

"We're going for simplicity and functionality," said Skip Fedanzo, KJ6ARL, ham radio operator with Marin RCV. "We want to help local community organizations operate and communicate in an emergency, while letting them focus on doing what they do best: serving vulnerable residents." The pilot program is going through structured tests and simulations to determine which radio frequencies and communications protocols are most efficient and dependable under different situations. Such decisions are being made in conjunction with best practices developed over the 100-year history of worldwide ham radio usage.

The volunteers have been running scenariobased drills with the selected organizations to provide proof of concept. The results of the drills and the general operational protocols are expected to be presented to the Marin County Board of Supervisors. If the pilot is successful, the program could scale up to accommodate other community organizations in more locations around Marin County.

-- Andrew LeBlanc, Telecommunications Manager and Marin Emergency Radio Authority (MERA) Operations Officer, Department of Public Works

Call for Instructors

ARRL is embarking on a journey of training for club officers and members. The new club development webinar series will include live Q&A, and the live sessions will be available to everyone. The webinars will be recorded and available to ARRL members through the ARRL Learning Center. We're looking for ARRL members to help us produce, create, and deliver the webinars.

The purpose of this program is to offer a series of short webinars that offer training for the skills needed to build and run a successful club. Topics will include leadership, activities, finance, and recruiting. Envisioned is a series of 10 or more webinars, all lasting from 20 to 30 minutes.

The hope is that club officers and members will view the series as an opportunity to learn from others that have been able to put those skills to use. To do this, we need the help of membership. We're looking for instructors to help with building the training. We're also looking for members that can present in a standard format and have the skills necessary to do the training. If this sounds like something that you are interested in, please contact Mike Walters, W8ZY, at <u>mwalters@arrl.org</u> for further details. We hope to start this series in late January 2023.

Looking Back: 1960's Ham Operator and his assistant.





Decoding on page 15

RCARC now Has 4 New Evolve III Note Book PC's

RCARC is now in possession of 4 new Evolve III note book PCs. The recent purchase greatly enhances the ability of our Volunteer Examiners (VE's) in the testing process of new Ham Radio License Applications. Before club VE's would bring in their own PCs and loan them to applicants for checking in and testing.

These PCs are Windows based and while not high-end units, they will be able to handle other club activities such as Fldigi, Winlink and other digital programs. Logging programs for Field Day contacts, radio frequency masks for programming and much more.

A nice feature of the Evolve III is that with a 12-volt adapter it can be used off grid or in the field.

For additional information Contact Ron (K7HDX).



RCARC EComm Group Meets

Training may include (repeated about every two years):

Online Courses: ICS 100, ICS 200, ICS 700 & 800. EC-001, ICS Forms and Recordkeeping.

Served Agencies and their expectations.

Handling Traffic (Radiograms).

Net Control Principles along with experience. Creating, utilizing, and maintaining Go-Kit. CERT training.

EComm Training Net participation (monthly training Net.

EComm Exercise participation (offered quarterly) NBEMS with FLDIGI.

Winlink.

EComm Trailer Deployment and Maintenance.

A motion was made by Fred (KI7TPD) to accept this first draft along with a few changes that were made in the draft discussions. Resend it to the committee for additional review. Motion was seconded by Linda (KG7PBX).

The motion was put to the committee for a vote and passed with a yes vote with one no vote.

The Committee is scheduled to meet again on November 3rd to review the revised draft and move the development process forward.

See Picture of EComm Members at the October 20th Monthly Meeting.





Monthly Meeting RCARC October General Pictures

Continued from page 12



Fred (KI7TPD) going over the items needed to make to make 2-meter direction finding antenna.



Ron (K7HDX) taking the first step in building his antenna.



Fred (KI7TPD) making his first cut Continued next column



Fred (KI7TPD) starting to assemble his antenna)



Ron's (K7HDX) antenna is coming together.



Fred (KI7TPD) continuing the building of his antenna The program for the meeting was to bring the items needed to build the antenna. Elmer's were available to assist.

> Answer to Turkey's Message on page 13 "Eat more Ham"

DIY 2 Meter Tape Measure Yagi Antenna

Instructions 2 meter Tape Measure Yagi Antenna

What you will need

Parts List

1 25 foot 1 inch wide steel tape measure (to make into the antenna elements)
1 10 foot piece of 3/4 inch Schedule 40 PVC Tube
2 3/4 inch PVC Cross connectors
2 3/4 inch PVC T connector
6 3/4 to 1 1/2 inch stainless Hose Clamps
1 5 inch piece of 14 ga wire
1 length of coax (RG-58, RG-8X, etc.), approx 6-8 foot
1 connector to connect to your radio (N, BNC, SMA, PL-259, etc. depending on your radio)
Solder and Flux
Electrical Tape

Tools

Soldering Iron Tin Snips Wire Cutter Screw driver or nut driver PVC cutter or fine tooth saw Sand paper or Dremel tool with sanding disk Ruler or tape measure (not to cut up) Antenna analyzer/SWR meter

Construction of antenna

Step 1: Cut three pieces of PVC tubing. Two will be for the support boom of the antenna with the first 11 1/4 inches long and the second 6 7/8 inches long. The third will be the handle and you can cut this long or short and you can add a handle grip if you wish.

Step 2: Once you have cut your pieces you will fit the pieces together with the cross and T connectors. You can dry fit or use PVC cement to fix your pieces together. The distance between the first cross and the middle cross must be 8 inches and the distance between the middle cross and and the T has to be 12 1/2 inches. Measurements are taken from the center points of the connectors.

Step 3: Cut the tape measure into four pieces. The reflector piece will be 41 3/8 inchs, the director will be 35 1/8 inchs. The driven element is made up of two pieces, so cut two 17 3/4 inches long pieces.

Step 4: For the two driven element pieces, sand or grind away the paint from one end. This is point where the coax and hairpin match will be soldered. Apply flux and use your soldering iron to tin this area. It's easier to tin this area now before attaching the elements to the support boom.

Step 5: Assemble the director (shorter element at front) and reflector (longer element at the back) elements. Making sure the elements are centered and then use hose clamps to attach the elements to the Cross and T connectors.

Step 6: Assemble the driven elements (middle element). Using the hose clamps, attach each half of the driven elements to the Cross connector. Leave a one inch gap between the two pieces.

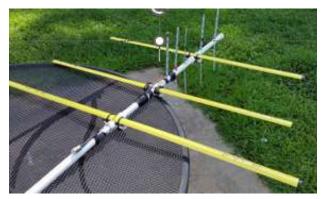
DIY 2 Meter Tape Measure Yagi Antenna

Continued from page 16

Step 7: Attach the hairpin match using a 5 inch piece of wire with 1/4 inch stripped off each end. Bend the wire so it is in a U shape with a 3/4 inch gap. Solder this to the tinned ends of the driven element.

Step 8: Attach your coax. Remove the insulation and shielding so that you have each end separated so that you can attach them to the ends of the driven element. You will solder these two ends to the driven element of the antenna. If you want your coax to run down the PVC you can drill a hole in your boom and thread the coax inside the pipe or you can attach your coax to the outside of the boom using cable ties or electrical tape.

Tuning: The antenna should be resonant at around 146.5 Mhz. You can use your antenna as a receive only antenna (fox hunting) without any further tuning. If you plan on using your antenna for transmitting you will need to tune it by adjusting the gap between two parts of the driven element. You will need an antenna analyzer/SWR meter to do this.



2 Meter Tape Measure Yagi Antenna.





Brant (KJ7LTQ) winner of the "Understanding Ham Radio propagation" book giveaway. With him is Maddie (KK7FLL).

Club Members involved in other Community Programs

Power In Pink

Power in Pink-Iron County was founded by breast cancer survivors nine years ago. The group raises funds for those battling breast cancer. The local nonprofit fundraises primarily off of event-based fundraisers in the month of October to coincide with Breast Cancer Awareness Month.

On October 22, 2022 Dennis (W6DLW) and his wife Terry participated in the 10th annual 5k Walk/Run fundraiser held at West Canyon Park in Cedar City. The course went east from the park up Cedar Canyon along the river to the waterfall and back which equals 3.1 miles. See Pictures below:



Dennis (W6DLW) and Terry showing off their Medallions and T-Shirts after participating in the Iron County "Power in Pink" 5k Walk/Run.



Dennis (W6DLW) standing behind photograph of Breast Cancer Survivor and Warrior Tammy Nesmith (KI7LVB) RCARC club member. Continued next column

Hildale Utah holds its first Medieval Days Renaissance Faire.

From spectating an armed combat group's battle to participating in a quest for the Holy Grail, Hildale held its very first Medieval Days Renaissance Faire.

The MMA-style sport includes combatants who wear real medieval armor and use real medieval weapons to defeat opponents in individual or team battles. All armor and weapons must be accurate to historical records of various countries around the world between the years 1200- 1599 CE.

All vendors, volunteers and entertainers dressed up to match the Medieval Days Renaissance theme.

Club members Fred (KI7TPD), Bonnie (KI7WEX), Craig (KK7BNZ) his wife Rita along with Fred's parents Steve (KI7YCE) and Penny (KJ7AHL) participated in the weekend event.

See Pic's below:



Craig (KI7BNZ) in Costume. Continued on page 19

ARRL Foundation Accepting Applications for Grants and 2023 Scholarships

The ARRL Foundation is now accepting applications for grants to amateur radio organizations and for its 2023 Scholarship Program.

The grants program awards limited funding to organizations for eligible amateur radio related projects and initiatives, particularly those with a focus on educating, licensing, and supporting amateur radio activities. Youth-based projects and initiatives are especially encouraged. The ARRL Foundation grants program accepts proposals on a cyclical model three times a year, in February, June, and October. Proposals for the October grant period are being accepted through October 31. Awardees will be notified approximately one month after the closing of each cycle.

Additional information and a link to the grant application can be found at www.arrl.org/amateur-radio-grants.

The ARRL Foundation Scholarship Program will award more than 100 scholarships to deserving radio amateurs pursuing higher education. Individual scholarships range from \$500 -\$25,000. All applicants must be active, FCClicensed amateur radio operators and submit a completed online application by noon on January 4, 2023. Active foreign amateur radio operators are eligible for the Amateur Radio Digital Communications (ARDC) scholarships.

For the 2023 scholarships, the ARRL Foundation will be utilizing the same Scholarship Management Platform that was used for the 2022 scholarships. *Transcripts and additional required documents must be submitted with the application* and not emailed separately. A number of scholarships require additional documents, such as a letter of recommendation from a sitting Officer of an ARRL Affiliated Club. *Applications without accompanying transcripts and additional required documents (if applicable) will not be considered.*

Hildale Utah holds its first Medieval Days Renaissance Faire.

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Faire Vagabonds #1: L-R Penny (KI7AHL), Steve (KI7YCE) Wendy Coulter, Jack (KG7VEJ) Bonnie (KI7WEX), Dennis (W6DLW) and Craig (KK7BNZ). Picture by Terry West.



Same as picture above with the deletion of Wendy and the addition of Terry West. Picture taken by Wendy Coulter.



Fred (KI7TPD) demonstrating to the young visitors how to make jewelry. Continued on page 21

ARRL Foundation Accepting Applications for Grants and 2023 Scholarships. Continued from page 19

The ARRL Foundation Scholarship Committee will

review all applicants for eligibility and award decisions. Scholarship recipients will be notified in May 2023 via USPS and email. Awards are mailed directly to recipients' schools.

Additional information and a link to the application can be found at <u>www.arrl.org/scholarship-program</u>.



Hey everyone, on page 13 you will see where some of our club member participated in community events outside of our Ham Radio Club.

So having stated that I know the RCARC Newsletter Editor is looking to print additional articles on our club members who are involved in other community programs, charities and hobbies etc.

Please don't be shy If you or your family are involved in other activities, please let me know.

Send your name, short article on what the activity is, how long you've been involved with the activity and is this your thing or a family program. Oh, and don't forget to send along a few pictures of you or your family in action.

Send information to:

Buzz, rcarcnewsletter@gmail.com



Additional Hacks & Hints

HACK

A Repurposed Banana Keeper

I have seen all sorts of ways to deal with headsets when they are not in use, from shoving them into drawers to putting them on foam dummy heads. Here is a solution that will let you keep your headphones in easy reach and away from harm.



Figure 2: A banana keeper can do double duty as a handy place to hang your headphones. At a discount store one day, I noticed a stack of so-called Banana Keepers. A keeper consists of a plastic base and upright that is formed into a hook.

They were only \$1 each, so I bought two. I put one in my ham station where it keeps my headset out of harm's way (see Figure 2). The other went into the kitchen to serve a similar function for bananas!

Bob West, WASYCD

HINT

Battery Leakage Remover

At one time or another, most of us have left batteries in a device for too long, only to open the device and find a mess. This happened to me recently and I tried a product called CLR (an acronym for calcium, lime, and rust). It is available as a liquid or foam (see Figure 3). I sprayed CLR on the battery holder and the mess went away in less than 5 minutes. After a quick rinse and air dry, the battery compartment was clean.

I then used CLR on the battery-negative contact spring, which was covered with battery drainage and rust. Again, in 5 minutes it was clean. I lightly sanded the contact point and reassembled the device. It works fine. The repair was cheap, quick, and effective!

Dave Routzon, W5GT



Figure 3: CLR (an acronym for calcium, lime, and rust) is available from home stores and elsewhere as a liquid and as a spray foam.



Student Radio Contact with the International Space Station Inspires Hurricane-hit Community

10/28/2022

Students from Canterbury School in Fort Myers, Florida, were able to spend a few minutes on Monday, October 24, 2022, talking with Astronaut Josh Cassada, KI5CRH, onboard the International Space Station (ISS) using ham radio.

The radio contact, arranged by the Amateur Radio on the International Space Station (<u>ARISS</u>) program, provided hope for a community devastated by Hurricane lan. School officials estimated that 30% of the school's faculty, staff, and families were left homeless after the hurricane passed through their area.

The contact was made just after 1:30 PM EDT, and students were able ask Astronaut Cassada questions ranging from, "Is the sun brighter in outer space?" to "What's your favorite meal?" The contact lasted just over 10 minutes, when the ISS was over the Caribbean Sea. Members of the Fort Myers Amateur Radio Club, an ARRL Special Service Club, supported the school by providing students with technical instruction and radio equipment. The club's call sign, W4LX, was used to operate the ground station that established and maintained the contact with the ISS. The school used a Kenwood TS-2000 transceiver for the event. Several students built a satellite tracking antenna system capable of locking onto and tracking a satellite while in range to receive the ISS signal.

An ARISS news release described that as the students were preparing for the big day, "they saw the first pictures of Hurricane Ian, as seen from the ISS, bearing down on the coast of Florida. Evacuations were ordered in advance of the catastrophic winds and storm surges, which eventually affected many of the homes of students, faculty, and staff. In the wake of this destruction, it was uncertain whether the ARISS contact could occur. However, if only for a moment of reprieve from their loss and destruction, the entire Canterbury school community, including the school's staff/faculty, amateur radio operators, students and students' families, decided to pull together to support the ARISS contact and thereby renew their sense of hope and inspiration in human space exploration."

The <u>Fort Myers Amateur Radio Club</u> website has a link to a video of their entire contact with the ISS.

Hildale Utah holds its first Medieval Days Renaissance Faire. Continued from page 19



Craig (KI7BNZ) demonstrating the technique on how to build a fire.



RCARC Christmas Party is in the planning

You are absolutely right it's not even Thanksgiving yet and we are talking about a Christmas Party.

But the reality is that these functions take time to organize and bring to a successful conclusion. Therefore, The RCARC Board (known as the Board) is asking for your input and thoughts.

The club party will take place at the Cedar City Senior Center at 489 E. 200. S on Tuesday December 13, 2022 at 6:00 pm.

The Board is looking for donations for the gift giveaway, your thoughts on what the club should purchase for the major giveaway prizes, a few volunteers to help set the room and the bring it back to the way we found it.

Please let us know either by email at <u>rcarcnewsletter@gmail.com</u> or in person at the November 8th club meeting. End.

A Plug in Adapter for Vehicle Radios

Scanner Laws and Mobile Radios

We've all heard it before — a friend or family member borrows our vehicle and gets ticketed for speeding or some other infraction. One infraction you probably haven't thought about involves scanner laws.

You may be thinking: what does this have to do with me? I'm a licensed ham, and the FCC preempted all restrictive state and local laws. FCC PR 91-36 rules that it is legal for licensed amateur radio operators (who have a copy of their license in their possession) to operate a transceiver capable of receiving police and public service frequencies in their vehicle. However, it does not cover that family member or friend who borrowed your car and is not licensed, even if the radio is off when they're pulled over. Here in Minnesota, state law covers any radio capable of receiving emergency frequencies.

I asked a state trooper about the law regarding amateur radio equipment. He referenced Statute 299C.37, stating it is illegal for non-hams to operate a vehicle with such equipment installed, even if the radio is turned off. In some states, the equipment can be confiscated and destroyed, not to mention the additional fine. But what if you have a plug-in connector, making it impossible to be operated unless it's plugged in? If the officer can plug it in from inside the car to turn on the radio, it's still illegal. What if the connector is outside or under the hood, therefore not connected when you loan out your car? That is allowed because the radio can't be powered from inside the vehicle — hence, it would not be "installed" according to the law.

I devised a simple plug-in adapter using an old threepronged extension cord (see Figure 1). A two-pronged extension cord would work, but I don't recommend it. I cut one end off for the radio, and the other end for the battery in my truck. Check the polarity of the prongs and holes for each wire, and then solder them to your radio and battery. I used the female end on the radio. The ground prong acts as the ground for the radio, and the other two prongs act as the positive; with a three-pronged plug, you're less likely to reverse polarity and short out your radio.

In my work truck, I have the plug-in just outside the passenger door, tucked under the cab and within my reach. At



Figure 1 — A simple plug-in solution with a three-pronged extension cord.



Figure 2 — An example of a twoway keyed switch.

the end of my shift, I pull the plug. This way, should I have a day off and someone else uses my truck, they can't use my radio. If they get pulled over, they can show the officer that it cannot be used. Those who don't drive a truck can tuck in the plug under the hood.

If opening the hood every time is inconvenient, you can add a keyed switch inside the car that can disengage the radio's power source. I have a lawn mower ignition switch with a key and positions for on and off (see Figure 2). It is soldered to the negative wire going from the battery to the vehicle. When I am not using it, I simply turn the key, pull it out, and keep it with me. This way, I am still the only one who can turn on the radio. It is also visibly marked for officers to see that it cannot be tampered with. But if in doubt, check your local laws and loan out your vehicle at your own risk. — 73, Matthew Koscielski, KDØJZI, kd0jzi@live.com