RAINBOW CANYONS AMATEUR RADIO CLUB NEWSLETTER

CEDAR CITY, UTAH

Club Websites: www.rcarc.info OR www. rainbowcanyons.com Number 3 – Vol. 11 – November 2021

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.

2021 Club Officer's

President:
Fred Govedich
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Vice President
Ron Shelley
K7HDX
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KG7PBX
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Newsletter Editor
Dennis L. West
W6DLW
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CQ, CQ, Happy Halloween

Presidents Message

Greetings fellow HAMs!

Winter is coming! We have had our first snow storms and plenty of cooler temperatures! Even with the change in weather we do have some hopeful signs! The sun has been quite active and the bands are opening up. Remember with a Technician license you can still make contacts around the world as 10 meters opens up. You may also be able to make distant contacts with 6 meters and 2 meters SSB. Have fun, and play on your radio.

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.

Cont. 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.

Local Repeaters:
146.980 MHz – Tone 100.0 Hz
146.940 MHz – Tone 100.0 Hz
146.760 MHz – Tone 123.0 Hz
147.160 MHz + Tone 100.0 Hz.
448.800 MHz – Tone 100.0 Hz
146.680 MHz – Tone 100.0 Hz

Remote Bases:
449.500 MHz – Tone 100.0 Hz
449.925 MHz – Tone 100.0 Hz

ILRP/Echolink
449.900 MHz – Tone 100.0 Hz

Save The Date

November 9, 2021

RCARC Club Meeting.
7:00 pm. Cedar City Senior Center, 489 E. 200 South. Program: Presentation on Emergency Communications.

December 14, 2021

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

January 11, 2022

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

February 8, 2022

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 would also like to thank all of our net controls for the nets and everyone who participates! Also, if you are interested in helping with emergency communications (EComm) please get in touch with WA7HHE Brad. We need more skilled people.

We will have our next monthly meeting November 9th starting at 7:00pm at the Cedar City Senior Center. This month we will have a presentation on Emergency Communications. Hope you can all make it!

Cheers!

Fred (KI7TPD)

RCARC Club Breakfast

Come join us the first Saturday of every month at 9:00 a.m. for breakfast at the Pastry Pub located at 86 W. Center Street, Cedar City.

Daylight Savings Time

Daylight savings time ends on November 7, 2021 at 2:00 am.

Don't forget to fall back 1 hour.

Happy Birthday and Anniversary to those celebrating in November

Happy Thanksgiving

Breakfast & Friendship Net Awards
October 2021

Breakfast Net		Friendship Net	
First Place	**Second Place**	**First Place**	**Second Place**
N7SIY - Sylvia	K7ZI - Dick	K7WEP - Paul	KI7SXJ - Isaiah
N7SND - Larry	KK7ZL - Ed	KG7VEJ - Jack	K7NKH - Lee
	Third Place	KA7J - Lance	K7HDX - Ron
	KG7PBX - Linda	N7SYI - Sylvia	K7ZI - Dick
			N7WWB - Darlene
			Third Place
			N7SND - Larry
			N7TCE - Merlin

Rainbow Canyons Amateur Radio Club
Treasurer Report as of Sept 30, 2021

Bank statement balance - Sept 1, 2021	$2,510.68
Donation SUU Emerti Fund for Don Blanchard	- 80.00
Rocky Mountain Power	- 17.70
Bank statement balance - Sept 30, 2021	$ 2,412.98

Submitted by
Linda Shokrian KG7PBX
2021 RCARC Treasurer
435-867-5914

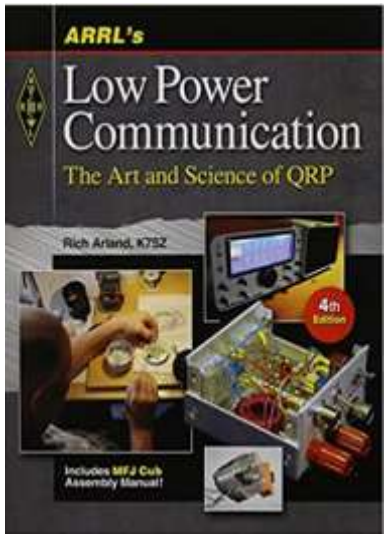
It's that time of year again to nominate new RCARC Board members for 2022.
Nominations will be accepted at this month's RCARC Club meeting on November 9, 2021. Nominations will be accepted throughout the month and until we vote at the December meeting.

Elected candidates will be seated at the January 2022 Meeting.

In This Issue

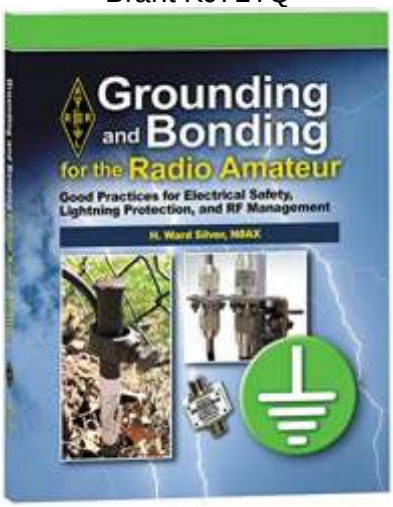
RCARC November Meeting Book Giveaway

The book shown below will be awarded to one of our RCARC members at our club meeting on November 9, 2021. This book is being donated by Linda Shokrian (KG7PBX).



RCARC Book Giveaway Winner.

The winner of the October 12, 2021 Book Giveaway was Brant KJ7LTQ



Congratulations

Brant

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/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

Buzz's November Safety Tip(s)

Safety Tips to Help Prevent Home Fires.

Fires in your home can devastate your family and property alike. Increase your fire preparedness with these basic fire safety and prevention tips.

Is your fire preparedness plan up to date? Home fires are dangerous and can result in devastating property damage. It is important to prepare for the unexpected by planning and practicing steps to protect your family in the event of a fire.

Protect your home with smoke alarm and carbon monoxide detectors.

What are the different types of fire alarms?

- Battery-powered alarms may use a nine-volt battery or 10-year lithium battery.
- Hard-wired smoke alarms operate on the home's electrical system and include a battery backup in case of power failure.
- Combination smoke and carbon monoxide detectors may be a good choice for certain locations such as the garage, and near heat sources such as furnaces, water heaters, dryers and fireplaces.
- For the hearing-impaired, smoke alarms with an audible alarm and bright flashing lights are available.
- Make sure your alarm is listed or approved by an independent testing laboratory, such as Underwriters Laboratories (UL).

Continued on next column

- Follow manufacturers' recommendations on when to replace smoke alarms.

How do you install smoke alarms?

- To install a battery-powered alarm, all you need is a drill and screwdriver. Always follow the manufacturer's installation instructions.
- Hard-wired alarms should be installed by a qualified electrician. All hard-wired smoke alarms should be interconnected: If one alarm is activated, all alarms will sound.
- Install a smoke alarm in each bedroom.
- Never install a smoke alarm too close to windows, doors, vents or ceiling fans where drafts could blow smoke away from an alarm.
- If you have questions about where to install your smoke alarms, contact your local fire department. Many departments will conduct home smoke alarm inspections for free or a minimal fee.

When should I test smoke alarms and carbon monoxide detectors?

- If you have standalone battery-powered alarms, test them once a month and replace the batteries once a year.
- Make sure that everyone in your household knows the sound of the alarms.
- Never paint any part of a smoke alarm.

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RCARC EComm Meeting

On October 14, 2021 the RCARC EComm members met to discuss the future of the unit and elect new Board Members.

The new Board members are:

Name	Call Sign	Position
Brad Biedermann	WA7HHE	Comm. Leader
Linda Shokrian	KG7PBX	Secretary
Dennis L. West	W6DLW	Board Member
Ron Shelley	K7HDX	Board Member
Fred Govedich	KI7TPD	Board Member
Bruno De Backer	KG7VVN	Board Member
Larry Bell	N7SND	Board Member

Listed are few of the items discussed:

- Utilizing more effective simplex type communications when repeaters are out of service.
- Check out the Law/Fire radios in the CERT trailer.
- Put a team together to be responsible for keeping the EComm/CERT Trailers in response condition. Deal with issues when they arise.
- Reach out to Washington, Beaver, Kane, Garfield counties to see if we may assist with their EComm. readiness.
- Add radio license classification to the EComm. Call out tree.

See meeting pictures below:

New EComm Board Members. Left to right – Fred (KI7TPD), Bruno (KG7VVN, Larry (N7SND), Ron K7HDX), Dennis (W6DLW) and Brad WA7HHE). Linda Shokrian (KG7PBX) not shown in picture. Photo taken by Terry West.

Continued next column

Brad (WA7HHE) addresses the EComm. members.

Additional members listening to Brad (WA7HHE).

The other side of the room
Above pictures taken by Dennis (W6DLW).

Safety Tips to Help Prevent Home Fires. Continued from page 5.

- Follow the manufacturer's instructions when cleaning your alarms. Dust and debris can usually be removed by using a vacuum cleaner attachment.

Have a fire extinguisher handy.

To operate a fire extinguisher, remember the word PASS: **Pull** the pin and release the locking mechanism. **Aim** the nozzle low and at the base of the fire. **Squeeze** the lever slowly and evenly. **Sweep** the nozzle from side to side.

- Select a multi-purpose Class ABC extinguisher that is large enough to put out a small fire, but not so heavy as to be difficult to handle.
- Read the instructions that come with the fire extinguisher and become familiar with its parts and operation before a fire breaks out. Local fire departments or fire equipment distributors often offer hands-on fire extinguisher training.
- Install fire extinguishers close to an exit.
- Keep your back to a clear exit when you use the device so you can make an easy escape if the fire cannot be controlled. If the room fills with smoke, leave immediately.
- Know when to go. Fire extinguishers are one element of a fire response plan, but the primary element is safe escape.
- Remember that each extinguisher must be serviced annually and may need to be recharged.

Review your home for potential fire hazards.

Just by being aware of common fire hazards and keeping an eye out for problems, you could save your home and possessions from serious damage.

Continued next column

- **Examine the electrical cords:** Look for any fraying of the cord. If you see any, replace the cord or appliance immediately. And always remember to grasp the plug, not the cord to prevent future fraying.
- **Review your extension cords:** Avoid using “octopus plugs”, which allow many extension cords to be plugged into a single receptacle and don’t plug many extension cords together.
- **Examine the light switches:** Replace buzzing or sparking switches. Also, have an electrician review your wiring as these may be signs your home needs to be rewired .
- **Review your light bulbs:** Do not use light bulbs with a higher wattage rating than recommended on the fixture.
- **Examine the clothes dryer:** Cleaning the lint trap should be part of your regular laundry routine. Left untouched, lint can build up in your dryer duct with every load of laundry. Have a professional inspect and clean your dryer at least once a year to help eliminate a fire hazard.
- **Glassware:** When sunlight passes through some kinds of glassware, the concentrated ray can ignite flammable materials such as stacks of papers. Play it safe by moving all glass accessories, such as vases, away from windows.
- **Loose batteries:** Nine-volt batteries, which power smoke detectors, are designed with both posts on the top. Bits of metal, including other batteries and loose change, can create a bridge between the posts that causes a heat-creating charge. To prevent this, keep unused batteries in their original packaging and cover the posts of expired batteries with the black electrical tape before properly disposing of the batteries .
- **Electric blankets:** Keep your blanket flat while using it. And make sure your electric blanket is certified by a national testing laboratory, such as UL. Read more tips for electric blanket safety .

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RCARC October 2021 Pastry Pub Breakfast Pic.

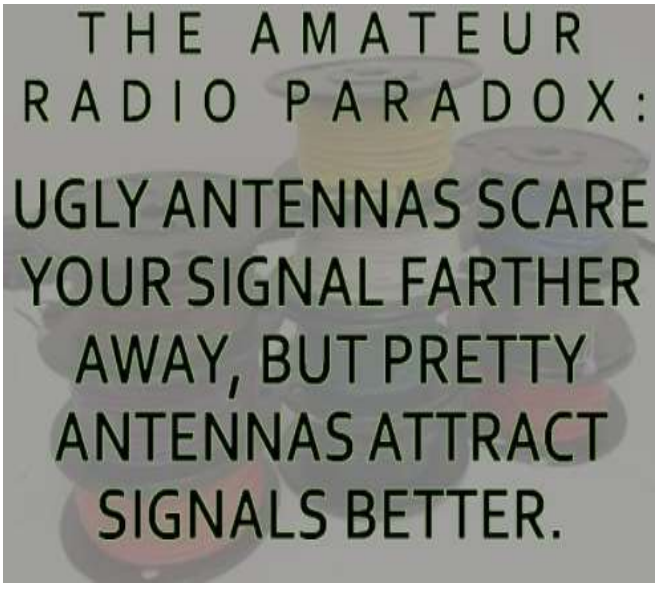
Members posing for the picture.
Photo by Linda (KG7PBX).

Congratulations are in order:

On October 12, 2021 Craig Miller tested for the Technician License and passed. Congratulations Craig. See pic's below:

Craig Miller Testing

Bill (K6QOG) standing and Dick (K7ZI) grading and completing Craig's necessary testing paperwork.



RCARC October 2021 General Meeting Pic's.

Members conversing with each other before the meeting starts.

Fred (KI7TPD) calling meeting to order.

Members citing the Pledge of Allegiance.

Continued next column.

Sylvia (N7SIY) presenting a 2 meter/70-centimeter Jpole Antenna that she is selling. Contact her for additional info.

PowerPoint picture of tonight's program presenter on "Cyber Security for Amateur Radio" Jeri Brummentt (W7WJB).

Jeri (W7WJB) starting her presentation.

Pictures taken by Dennis (W6DLW).

Safety Tips to Help Prevent Home Fires. Continued from page 7.

Some communities offer a home fire inspection through their local fire department. They will inspect your home and recommend steps for improving fire safety. During the inspection, they should review all fire hazards in your home, from testing smoke detectors to making sure curtains and other flammables are a safe distance from heat sources. Electrical factors they might inspect include:

- **A proper ground:** "One thing a home fire inspector should check is to make sure your home is grounded," says Bill Burke, division manager of electrical engineering for the National Fire Protection Association. Grounding diverts excess current that may result from an electrical surge and helps to keep electrical systems, devices and humans safer.
- **Electrical panel:** "There should be air space around the main panel," Burke says. Inside, there shouldn't be evidence of overheating or corrosion, and the fuses and breakers should be the correct size.
- **Appliances:** "If you have a device that's going to cause a home fire, it's most likely going to be one that draws a lot of current ," Burke says. Inspectors might check the integrity of cords and plug-ins on fridges, stoves and other large appliances.
- **Out-of-date equipment:** A home fire inspector can suggest improvements to reduce the risk of an electrical fire. One important update would be to install arc-fault circuit interrupters, which are designed to detect fire-starting arcs and shut down power.
- **General safety concerns:** The inspector also should look for electrical hazards such as receptacles and switches that aren't functioning properly, light bulbs exceeding the maximum wattage, damaged cords and overloaded power strips.

Continued next column

And finally, practice fire safety

- Talk to your children about fire safety.
- Plan at least two ways to get out of any room.
- Agree on a meeting place outside where everyone can gather.
- Practice your fire safety plan yearly. **END**

The Storied History of the Ham Radio Callsign.

Have you ever wondered how Ham Radio Callsigns came about? Watch the video below for the details.
https://youtu.be/Su76QvChuEU

The History of Single Sideband.

In addition, checkout the following URL on the History of Single Sideband.
A You Tube Video.
https://www.youtube.com/watch?v=BBRntPJTr5Y

Cyber Security for Amateur Radio Presentation

At last month's RCARC monthly meeting the program presentation was Cyber Security for Amateur Radio presented by Jeri Brummett (W7WJB). The power Point for this presentation can be found at www.rcarc.info and selecting the Training Info icon in the menu. When the page loads select the small box under Training guides. This will load the Power Point.

RADIO NEWS

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

Vol. 3 NOVEMBER, 1921 No. 5

THE RADIO EXPERIMENTER

WE have often in these columns urged the Radio experimenter to get off the "beaten track," and do something original. Of course, a good many of our amateurs are not asleep by any means, and are doing wonderful work, but they are very much in the minority these days, and for every amateur who gets off the "beaten track," there are at least a thousand who are satisfied to plod along in the good old way.

Take for instance such a simple subject as amplification; for at least two years we have gone wild about audio frequency amplification. We pick up this journal, or any other for that matter, and on every page we are stared in the face by some outfit, or some stunt, or some hook-up containing audio frequency amplification. Every time the editor sees an article or just a mention of audio frequency amplification, he goes pretty wild these days, but still they come on, and what is worse, the manufacturers themselves aggravate the situation by developing only new styles of audio frequency amplifiers

Far be it from us to say that audio frequency amplification is not a good thing, but there certainly is something far better than low frequency amplification. We, of course, refer to Radio frequency amplification, the thing that practically remains unknown to the amateur in this country, and that the average amateur approaches with terror in his heart.

Just now it seems to be the original sealed book, with seven great big seals on it, as far as the amateur is concerned. Strange to say, in Europe where Radio is so much restricted, and where even buzzer-sending outfits are taboo, and where you must swear your soul and everything else away to the Post Office Department before you can get a license to operate a galena detector—in these countries they seem to be further advanced on the subject and are now using radio frequency amplification.

This is particularly true of England, who is leading in this way. Radio frequency amplification is superior to the audio frequency for the reason that any amount of current received in the antenna is amplified and may be then rectified by the detector, while if the current received is very weak, it cannot be rectified by the detector which has such a characteristic curve that no rectified current is noticeable in the plate circuit and cannot be, therefore, amplified even with several stages of amplification. Let us say here that all of the detector tubes on the market are only efficient for rectification of currents of a certain strength and best results are obtained if the oscillations to be rectified are amplified before.

To make a homely analogy, it is as if you were trying to pump out with a powerful pump, the water from a tank, by means of a small faucet. The powerful pump would be useless as there would be almost nothing to pump, while if the water supply was coming under heavy pressure, the pump emptying the tank would work at its full capacity.

Besides many advantages, radio frequency amplification requires only some air core transformers, which may easily be made, and makes possible radio control, operation of relays and recorders, transmission of pictures, etc.

And also, why does not the amateur who has a little machine shop get off the "beaten track," and do some experimenting in the transmission of pictures? Once in a great while, we print an article from some enterprising amateur who has had the spunk to build such an apparatus. Just the same, we predict that when five, or ten years at the most, are up, every amateur will have his radio picture machine.

Recently the signatures of General Foch, and General Pershing were sent across the Atlantic by radio on the Belin apparatus. There is no good reason why the amateur cannot do the same thing for smaller distances at any time.

In the very near future, the amateur in New York will buy the first copy of a New York evening paper, wrap it around his cylinder, and send out a whole sheet by radio. A thousand miles away another amateur will have a receiving machine that will reproduce the printed page, type, pictures and all, in less than a half hour. This is a thing impossible to do by ordinary wireless telegraphy, if every word has to be transmitted. The radio picture transmission solves all this. Thus, in time, a great piece of news "breaking" in the city, will be sent broadcast by the enterprising amateur, who will send the entire front page of the newspaper, for instance, and the radio facsimile can then be exhibited in a distant town from 18 to 24 hours in advance of the receipt of the actual newspaper.

All this is not a mere dream, but it already has been accomplished today. It is up to the amateur to make the thing popular.

H. GERNSBACK.

FEMA - A National Leader in Disaster Communications

As a national leader in the field of Disaster Emergency Communications (DEC), FEMA coordinates the federal government's response, continuity efforts and restoration of essential communications before, during, and after an incident or planned event. Working closely with federal, state, tribal, and other mission partners, FEMA helps unify the efforts of all responders around one common communication goal: the delivery of information to emergency management decision makers. Having a single, shared communications vision promotes an interagency system of interoperable communications capabilities across all levels of government to ensure mission-critical information and situational awareness. All of this is coordinated through the 10 FEMA Regional Emergency Communications Coordinators (RECC) across the U.S.

Establishing and maintaining effective disaster emergency communications and information systems is critical to FEMA's role in coordinating the federal government's response, continuity efforts, and restoration of essential services. FEMA's DEC Division, part of the Response Directorate, ensures effective communications by:

- Providing and supporting tactical operable and interoperable voice, video, and information systems for emergency response teams.
- Developing effective command and control communications frameworks.
- Supporting the coordination and delivery of secure communications solutions.
- Identifying and documenting mission-critical disaster emergency communications and information systems capabilities, requirements, solutions, and mitigation strategies.
- Promoting communications interoperability with federal, state, tribal, and local emergency response providers

ARES Resources

· Download the ARES Manual [PDF]

· ARES Field Resources Manual [PDF]

· ARES Standardized Training Plan Task Book [Fillable PDF]

· ARES Standardized Training Plan Task Book [Word]

· ARES Plan

· ARES Group Registration

· Emergency Communications Training

The Amateur Radio Emergency Service® (ARES) consists of licensed amateurs who have voluntarily registered their qualifications and equipment, with their local ARES leadership, for communications duty in the public service when disaster strikes. Every licensed amateur, regardless of membership in ARRL or any other local or national organization is eligible to apply for membership in ARES. Training may be required or desired to participate fully in ARES. Please inquire at the local level for specific information. Because ARES is an amateur radio program, only licensed radio amateurs are eligible for membership. The possession of emergency-powered equipment is desirable, but is not a requirement for membership.

How to Get Involved in ARES: Fill out the ARES Registration form and submit it to your local Emergency Coordinator. End.

Technician License Training Course Added to ARRL's YouTube Channel

10/20/2021
ARRL's YouTube channel, *ARRLHQ*, has launched a series of amateur radio Technician-class license courses. This series of videos features Dave Casler, KE0OG, *QST's* "Ask Dave" columnist, who leads viewers through *The ARRL Ham Radio License Manual*. These videos supplement the manual and provide an overview of the sections you'll be studying, along with a few videos on how things work. Share this excellent resource with those who are preparing to take their technician exam, and visit the *ARRLHQ YouTube channel* for more great amateur radio videos.

ARRL Simulated Emergency Tests Underway; Early Reports In

Strong SET Turnout in Illinois: A Guide for Future Exercises

With some 150 ham radio operators from across the state participating in the ARRL Illinois Section Simulated Emergency Test (SET) on October 2, 2021, coordinators Robert Littler, W9DSR, Illinois Section Emergency Coordinator, and John Zelz, W9ZE, the Assistant SEC who ran the Saturday morning exercise, termed it "a resounding success."

The SET, which ran from 8 AM until noon CDT began with a general "Wellness Net" to encourage participation from all areas and disciplines of the state's amateur radio community, with an emphasis on those operators who participate in ARES activities throughout the year.

Approximately 150 HF/VHF/UHF/Echolink stations checked in during the Wellness Net. The SET HF Net was in session from 9 AM to noon with more than 50 stations checking in. There were also 45 VHF/UHF stations with formal traffic listed. The individual ARES Districts reported a similar number of VHF/UHF stations with traffic.

"We were extremely pleased with the response in this modified exercise that followed the plan of another exercise we conducted in the spring as part of an ongoing effort to hone the system used to train amateur radio operators in the event of a catastrophic emergency in Illinois and their interaction with counterparts in nearby states," said Zelz. Plans are already in motion for a spring 2022 version of the SET to further expand and enhance the exercise's operating efficiency. -- *Vicky Whitaker, KD9BAU, Illinois Section Public Information Coordinator. End.*

Northern Florida County's SET Brief, Thinking Out of the Box, Successful Exercise

An ARRL Northern Florida Section County group held its SET on October 2, based on the scenario of using non-traditional alternative power sources, with formal situation reports and survivor outbound messaging. Using the DHS Homeland Security Exercise Evaluation Protocol (HSEEP), the Alachua County ARES group created an exercise to test the ability of funneling neighborhood situational reports through the local EOC in the event of a disastrous cyber-attack. Coordinators added an additional twist -- the simulated emergency environment had all the volunteers with no electricity and having exhausted "normal" backup fuel and batteries, forcing them to use a nearby vehicular battery or a portable solar power system to provide power. (Pre-wired, already existing vehicular mobiles were not allowed). The objective was to have team members develop techniques and assets to allow them to leverage *any* available battery.

Communications Planning was objective #1 of the written HSEEP objectives, so local ARES Emergency Coordinator Jeff Capehart, W4UFL, conferenced to work through the thorny issues of what frequencies and techniques would work with literally no remaining repeaters, digipeaters, or Winlink RMS stations operable within 1,000 miles. Members began to grasp that the EOC would be a bottleneck if all traffic had to go through that well-equipped but tiny facility -- and the exercise called for participants to send a simulated outbound "survivor message" (Health and Welfare) to some friend or relative. After a lot of ideas were evaluated, Capehart came up with a workable ICS-205 frequency list that included voice and data avenues on both VHF and HF,

Continued on page 16

RCARC EComm Unit Lends Support to the Community Emergency Response Team (CERT) Program.

In the afternoon hours of October 20th several members of the EComm Unit gathered at the County EOC to provide some maintenance to the CERT Trailer.

The generators were serviced and checked out to make sure they are running order. It was determined that the Fire Extinguisher were out of date and a request was submitted to remedy the situation. A list of other needs was submitted to the Iron County Emergency Manager for review.

In addition, the CERT trailer is a backup for the Iron County Sheriff's Office Communications Center. The radios were checked to make sure they were working and programmed. **See Pictures below:**

Bruno (KG7VVN) and Larry (N7SND) checking and running the generators.

Fred (KI7TPD) testing one of the expired Fire Extinguishers

Continued next column

Ron (K7HDX) talking with George Colson (Iron County's Emergency Manager about the needs of the trailer.

Brad (WA7HHE) speaking with red (KI7TPD) about the condition of the generators.

Bruno (KG7VVN) and Larry (N7SND) servicing one of the generators as Brad (WA7HHE) looks on.

Pictures taken by Dennis (W6DLW).

Can an Amateur Radio Handheld Stop a Train? Texas Club Averts a Train Disaster

Every year in the city of Weatherford (Parker County), Texas, the Peach Festival is held. As part of the festival, a bicycle ride - the Peach Pedal -- is conducted, supported by the cooperative efforts of local amateur radio clubs and their volunteers. This year, the Tri County Amateur Radio Club of Azle, Texas, performed the pre-event legwork and organized the net control operators, rest stop operators, and the SAG (support and gear) vehicle operators. The Amateur Radio Club of Parker County and other clubs' members were signed up for other various radio positions to support the bicycle ride event. The forecast was fine.

The net control plan also called for a Parker County RACES operator to work the radios in the Parker County Emergency Operations Center (EOC). This operator would be able to help with radio traffic between the Fire/EMS Dispatchers, the bicycle ride amateur radio net control, and the county Sherriff's deputies performing traffic control at busy intersections. The usual ride starts up radio traffic came and went, and then the calls for SAG began to increase for flat tires, broken chains, muscle cramps, and exhausted riders.

And then, cutting through the steady amateur radio traffic between the net control, rest stops, and SAGs, a SAG radio operator's voice could be heard transmitting, "Emergency, Emergency, Emergency." Mike Burns, KE5NCS, SAG 3 was sweeping the 61-mile course northbound on Bennett Road, following a pilot car and tractor/lowboy trailer with a large piece of equipment. The tractor-trailer high-centered and stopped on the Union Pacific Railroad Road crossing. And then Burns heard an eastbound train blowing its horn for the road crossing.

Continued next column

Net control Jon Diner, N5JLD, issued a standby, hold all radio traffic order, and transmitted, "Go ahead with your Emergency traffic, SAG 3."

Burns then transmitted: "Yes, there is a lowboy heavy equipment hauler with a bulldozer on it that just got high centered on the railroad tracks at Bennett Road and Goen Road; it can't move, and there is a train coming." In the EOC, the Fire/EMS dispatcher said, "What did he just say?" just as net control N5JLD transmitted, "Please repeat your emergency traffic."

The EOC Ride Control operator, Thad Weikal, KG5ATD, turned up the radio audio to near maximum so the dispatcher could hear the radio traffic clearly. As SAG 3 KE5NCS was repeating his emergency traffic, the dispatcher said, "I am getting Union Pacific Railroad on the phone right now." Weikal at the EOC used a Fire/EMS radio to make a county-wide call to the county law enforcement dispatcher: "County, this is EOC Ride Control with Emergency traffic." The county dispatcher replied, "Go ahead with your Emergency traffic, EOC." "County, the railroad tracks at Bennett and Goen Roads are blocked by a tractor-trailer hauling a bulldozer, and there is a train approaching." The EOC dispatcher said, "UP has put out an all stop on all trains on that track." A County Deputy asked, "EOC, what was that location?" "Bennett Road and Goen Road." "Copy, I am enroute," followed by radio silence.

When the EOC dispatcher's phone rang, the dispatcher answered and relayed, "UP says that they are showing all trains at full stop on that track." Weikal made a radio call to the County dispatcher, saying, "County, this is EOC Ride Control, Union Pacific is reporting all trains at full stop on that track at Bennett Road." "County copies that, EOC." Weikal then made a radio call to the ride net control, N5JLD: "Net control, this is EOC." "Go ahead, EOC." "Net control, Union Pacific is reporting all trains on that track at full stop."

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Northern Florida County's SET Brief, Thinking Out of the Box, Successful Exercise. Continued from page 13

due to the size and geography of the county, which made simplex VHF unlikely to span the distances without "human relays."

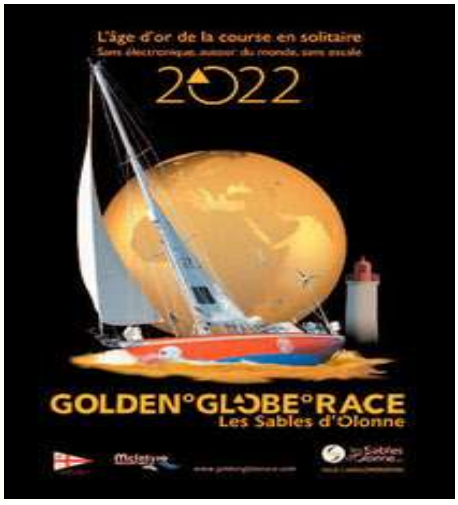
Despite all these daunting obstacles, on the day of the brief 2-hour exercise, 15 participants in various capacities examined just about every method of extracting electrical power. Two participants deployed solar panel systems. Several conquered RFI-hash from inverters by separating them with extension cords. At the EOC, participants completed two wiring upgrades to make it much easier to move the EOC radios off of the backup generator and onto polarity-protected connections to any of the ARES group's multiple lead-acid or LiFePO4 batteries, and operated not only the radios but all the computers on storage batteries. This section of the SET appeared to be a huge win for the group.

In the communications portion, participants had their choice of multiple methods to move neighborhood-structured SHARES SPOTREP-2 reports with randomly assigned local situations, including multiple simulated reports of "smoke seen" or "firefights heard." HF Data (both peer-to-peer local Winlink and distant-RMS Winlink) was the runaway winner in this dire scenario, with 18 total formal messages moved, followed by VHF voice with seven pieces of traffic moved, HF voice with six, and VHF (packet) data moved one message.

A news release to a local high school club resulted in three families (seven total persons) visiting the EOC, who stayed for over an hour observing the three busy ham volunteers handling simulated emergency traffic. Others visited one of the neighborhood volunteers to observe. Thus, the SET was judged to be a phenomenally successful outreach opportunity by the SET group. Participants enthusiastically reported their trials and successes at the half-hour hotwash Zoom session that immediately followed the exercise. End.

Golden Globe Sailing Race Entrants Banned from Using Amateur Radio

The use of amateur radio by participants in the 2022 - 23 Golden Globe Race (GGR) -- an around-the-world sailing competition -- has been banned. Race organizers put the restriction in place because of unlicensed use of amateur radio equipment in the 2018 - 19 event, *Yachting Monthly* reported. In the 2018 - 19 race, Estonian skipper Uku Randmaa, ES1UKU, was penalized after seeking weather routing (the best route according to wind and weather conditions) via ham radio.



While he escaped disqualification, he did receive a 72-hour penalty. Randmaa received weather routing information from Bob McLeod, VP8LP, who advised Randmaa, "The more north you go, the quicker you get out of the wind hole.

The race rules say, "Entrants are free to speak to media, family, friends, and sponsors by radio at any time during the event, but must not be given any form of weather routing." But in the next sentence, the rules allow competitors to "communicate freely (by radio or by hailing) with other competitors, or other mariners on vessels at sea, requesting or giving any verbal information/advice whatsoever, even if this is considered weather routing."

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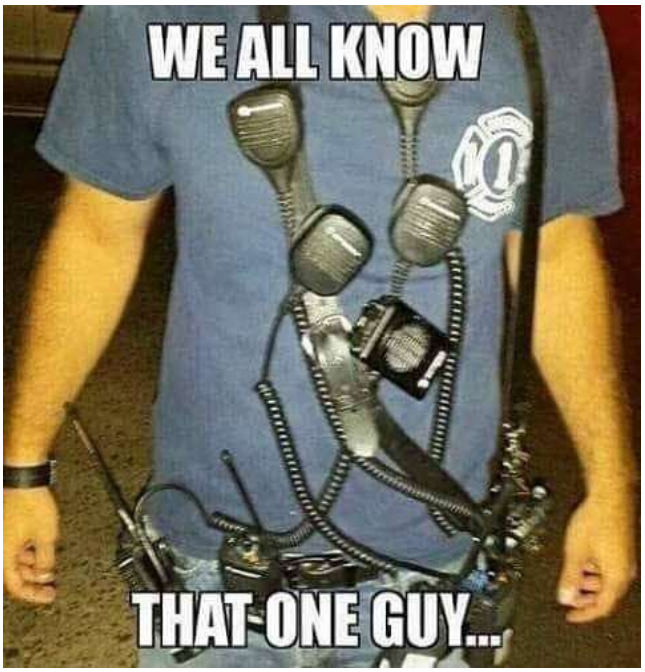
Can an Amateur Radio Handheld Stop a Train? Texas Club Averts a Train Disaster

Continued from Page 15

"Copy that, EOC." "SAG 3, net control." "SAG 3, go ahead." "SAG 3, EOC is reporting that Union Pacific is showing all trains at full stop on that track at Bennett Road." "Uh...yeah...I can see...that...." -- the eastbound train had stopped 30 yards short of the tractor-trailer. There were no injuries or equipment damage. Weikal reported the road crossing clear 1 1⁄2 hours later. Yes, an amateur radio handheld can stop a train.

Thanks went out to all amateur radio volunteers and fire/dispatch operators for their quick effort to help narrowly prevent a disastrous collision between a train and a tractor-trailer hauling a bulldozer with a gross weight of 186,000 pounds. -- *Thad Weikal, KG5ATD, Amateur Radio Club of Parker County (Texas) Director. End.*



Hints and Hacks DIY

HACK

Workbench Tool Holder

Here's an easy way to keep your small tools organized, visible, and always at hand. Best of all, it's free!

Use a block of Styrofoam, which is commonly used as packing for computer printers and many other products. Try to find a block that is about 2 or 3 inches thick and cut it to a size that's convenient for the spot you choose.

Just stick your screwdrivers, pliers, wire strippers, cutting tools and miscellaneous tools directly into in the Styrofoam, as shown in Figure 5. They'll make their own holes and remain right where you place them.

Russ Peck, KG6CLA

Figure 5: It takes just minutes to turn a Styrofoam block into a tool holder.

RCARC EComm Unit Looking to Recruit more Volunteers.

If you are a ham operator and want to give back to the community in times of disaster by using your Ham Radio experience then the RCARC EComm Unit is looking for you.

Whether you are experienced in Emergency Communication or not if you have a willingness to participate, are willing to attend training classes in person or online please contact our EComm Unit Coordinator Brad Biedermann (WA7HHE) at 435-586-7033 for additional information.

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

136.7 kHz — 137.8 kHz

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**

472 kHz — 479 kHz

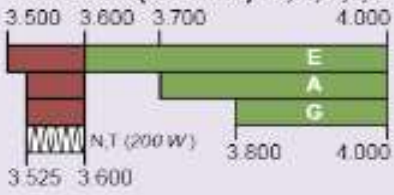
160 Meters (1.8 MHz) E,A,G

1.800 — 1.900 — 2.000 MHz

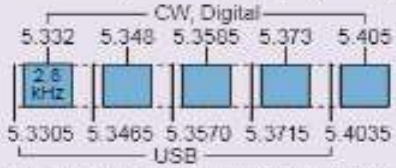
Amateurs wishing to operate on **2200 or 630 meters** must first register with the Utilities Technology Council online at **https://utc.org/pic-database-amateur-notification-process/**. You need only register once for each band.

HF – High Frequency bands

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

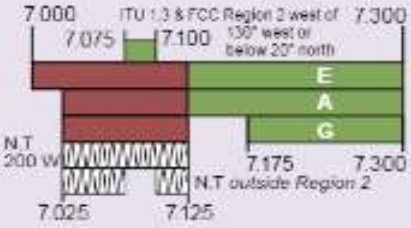


60 Meters (5.3 MHz) E, A, G (100 W)

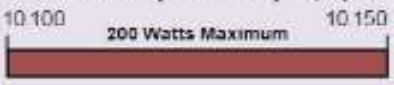


Gen, Adv, and Extra licensees may operate on a secondary basis with a maximum ERP of 100 W maximum.

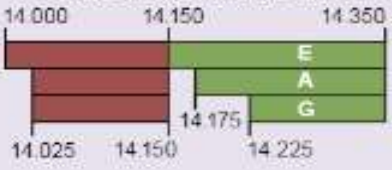
40 Meters (7 MHz) E,A,G,T,N



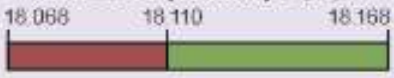
30 Meters (10.1 MHz) E,A,G



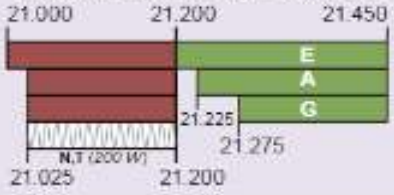
20 Meters (14 MHz) E,A,G



17 Meters (18 MHz) E,A,G

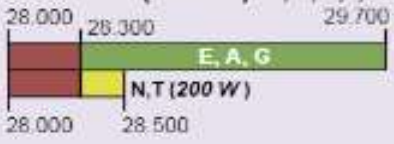


15 Meters (21 MHz) E,A,G,T,N



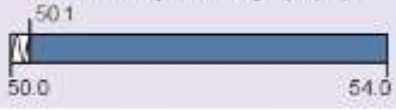
12 Meters (24 MHz) E,A,G

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

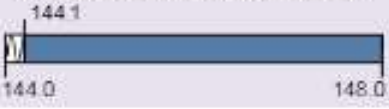


VHF – Very High Frequency bands

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



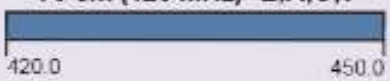
2 Meters (144 MHz) E,A,G,T



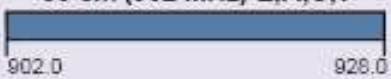
1.25 Meters (222 MHz) E,A,G,T,N

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

OTAbands **rev. 1-22-20**

Golden Globe Sailing Race Entrants Banned from Using Amateur Radio.

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The GGR rules that were spelled out in the *Notice of Race* require at least a 125 W marine MF/HF radio transceiver with a frequency range of at least 1.6 to 29.9 MHz, "fitted in a 100% watertight enclosure (able to be sealed in any storm) with permanently installed antenna and [ground] and an emergency antenna when the regular antenna depends upon the permanent Backstay."

The rules make clear that, "Any proven breach of International radio telecommunication regulations, such as transmitting on illegal maritime frequencies, may result in a time penalty. Ham Radio transmissions are specifically banned."

According to *Yachting Monthly*, the change has caused concern within the race community, "with some of the 2018 entrants highlighting difficulties in picking up Global Maritime Distress and Safety System (GMDSS) frequencies in the Southern Ocean due to the shrinking of the broadcasting network as more mariners rely on satellite communication."

"This is a retro race with skippers restricted to using a sextant [a navigation instrument used to measure altitudes of celestial bodies], paper charts, and wind-up chronometers, just as Sir Robin Knox-Johnston used in the first *Sunday Times* Golden Globe Race 50 years ago," Race Chairman Don McIntyre has explained.

In the 2018 race, some GGR skippers who operated on ham radio frequencies using bogus call signs were asked to stop operating.

GGR monitors all severe weather with winds over 40 knots and, if appropriate, provides both forecasting and routing information to assist entrants in sailing safely.

Radio Amateurs Invited to Participate in the Antarctic Eclipse Festival in December

The HamSCI Antarctic Eclipse Festival in December is seeking amateur radio participation. As the shadow of the moon passes across Antarctica on December 4, it will generate traveling ionospheric disturbances that will, in turn, affect radio propagation. The unusual geometry of this year's eclipses will give researchers an opportunity to investigate complicated ionospheric dynamics over the poles as the long daytime of polar summer is briefly interrupted by the eclipse.

During this and other HamSCI eclipse festivals, hams and citizen-scientists are asked to collect Doppler-shift data from time-standard stations, such as WWV. All that's needed is an HF radio connected to a computer. A GPS-disciplined oscillator is helpful for collecting data, but it is not required. Data collection will run from December 1 through December 10, and the results will be made available for scientific analysis.

All radio amateurs and shortwave listeners are invited to join in, even those located far from the path of totality. In 2020, more than 100 individuals from 45 countries took part in eclipse festivals. The instructions are available in multiple languages.

Continued on Page 20

Radio Amateurs Invited to Participate in the Antarctic Eclipse Festival in December.

Continued from Page 19

HamSCI is an initiative of ham radio operators and geospace scientists dedicated to advancing scientific research and understanding through amateur radio activities. Eclipse festivals are pilot campaigns for the Personal Space Weather Station (PSWS), HamSCI's flagship project. The PSWS team seeks to develop a global network of citizen-science stations. Participants monitor the geospace environment to deepen scientific understanding and enhance the radio art.

For more information on the Antarctic Eclipse Festival and how to participate, visit the HamSCI website. -- *Thanks to Kristina Collins, KD8OXT. End.*

Some More Ham Humor

"Sorry OM, I can only work QRP at the moment!"

Field day Unit

Continued next column

The picture above and below needs no caption or make your own.