RAINBOW CANYONS AMATEUR RADIO CLUB NEWSLETTER

CEDAR CITY, UTAH

Club Websites: www.rcarc.info OR www. rainbowcanyons.com Number 4 – Vol. 6 – June, 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

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CQ, CQ, - Happy Father's Day

Presidents Message

Greetings Everyone,

Hope everyone is having a wonderful spring and that you enjoyed our annual swap meet! June is the month for Field Day. We will be setting up at Three peaks at 9:00am on Saturday June 25 with Field Day contacts starting at noon and running until noon on Sunday June 26 when we will take everything down. We have a good batch of new members so we may have some new HAMs needing our help of the upcoming months so please make sure to introduce yourself and offer a friendly hand! We will be talking about radio direction finding at our next meeting so come ready to play outside!

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 0n 7.272.
8:30 p.m. Tuesday's - ORCA Digital Net. Using FLDIGI, FLMSG AND FLAMP – 3.581 +, 1500/MFSK32.
8:00 p.m. Wednesday – Panguitch Net – 147.160.
7: pm. Thursday– Morse Code Net- This is a Zoom Meeting.
8:30 p.m. Thursday's - WDN Digital Net. Using FLDIGI, FLMSG AND FLAMP – 3.581 +, 1500/MFSK32.
8: p.m. Saturdays – SSTV – 449.925.
9:00 p.m. Daily – Friendship Net – 146.760.
11: a.m. Saturdays (Mtn. Time) QCWA – 160 Net, Utah Chapter,
12: p.m. Freq. 7.272.
7:30 pm. Sunday's – New Harmony Valley Net – Bumblebee Repeater. – 146.680 with a minus offset – PL 100.

Local Repeaters:

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

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

Bumblebee/New Harmony:
146.680 MHz – Tone 100.0 Hz

Rowberry:
449.925 MHz – Tone 100.0 VHF Remote

Dutton:
147.160 MHz + Tone 100.0 Hz.

Save The Date

June 14, 2022

RCARC Club Meeting.
7:00 pm. Cedar City Senior Center, 489 E. 200 South. Fox Hunt Direction finding demo.

July 12, 2022

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

August 9, 2022

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

September 13, 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 encourage you all to play, share, and have fun on the radio! We have some newly minted HAMs so let's show them what they can do! If you are interested in any aspect of HAM radio please explore the topic, experiment, and share what you have done with the group! That is what makes this such a fun hobby! Don't be shy, we are all friends here!

In service,

Fred Govedich (KI7TPD)

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.

Save the Date

RCARC Annual BBQ

When: Tuesday August 9, 2022.

Where: Main Street Park, N. Main Street @ 200 N. In the Large Pavilion at the Southeast corner of park by Lin's.

Time: 5:00 pm to 9:00 pm.

Stay tuned for additional information as we get closer.

Happy Birthday and Anniversary to those celebrating in June

ARRL Field Day
June 25th & 26th

Breakfast & Friendship Net Awards
June 2022

Breakfast Net		Friendship Net		
First Place	**Third Place**	**First Place**	**Second Place**	
KK7ZL - Ed	KI7TPD - Fred	K7HDX - Ron	K7ZI - Dick	
KC6WFI - Tony	Ki7WEX - Bonnie	N7WWB - Darlene	K7NKH - Lee	
N7SIY - Sylvia		K7WEP - Paul	WA7GVL -Paul	
		KG7VEJ - Jack	KI7LUM - Bruce	
Second Place		W6DLW - Dennis	KJ7OGZ - Ann	
KE6ZIM - Johnny		N7TCE - Merlin	KI7SXJ - Isaiah	
KG7PBX - Linda		KK7CEE - Bruce	**Third Place**	
N7SND - Larry			N7SND - Larry	
K7DVP - Vernile				

Rainbow Canyons Amateur Radio Club
Treasurer Report as of May 10, 2022

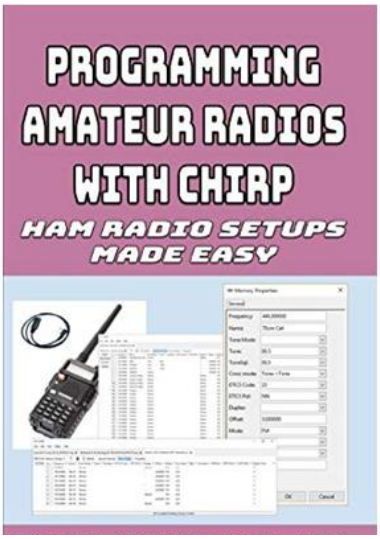
Bank balance (unreconciled) April 12, 2022	$2,200.16
Checks/expenses	
Rocky Mountain Power Paid 4/15	- 20.20
Income	
Memberships	+ 45.00
Electricity Donation	+ 50.00
Funds in bank as of May 10, 2022	$2,274.96
Outstanding Deposit	
membership/KK7FLB	+15.00
Outstanding Payment -	
Rocky Mountain Power due 5/16	-20.83
Funds available after May 16, 2022	$2,269.13

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

In This Issue

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

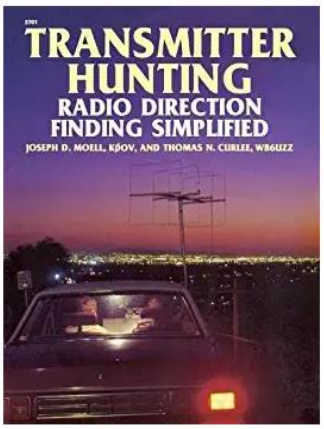
Shown below is the book that will be given away at the June 14, 2022 meeting.



RCARC Book Giveaway Winner.

The winner of the May 10, 2022 book giveaway (pictured below) is:

Steve K6NPA



Congratulation Steve

See Pic on page 19

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

CQ, CQ Happy Father's Day

Buzz's June Safety Tip(s)

10 Tips for Spring Storm Preparedness to Protect your home and Property

What Can You Do to Prepare for Severe Spring Storms?

We can't change the weather, but we can prepare ourselves to better handle it when it comes. Follow these 10 spring storm preparedness tips to protect yourself, your family, and your property from severe spring weather.

1. Trim Shrubs and Branches Near Home and Powerlines.

Make sure no trees or bushes hang over the roof or any windows. During spring storms, these hanging limbs might damage glass and roof shingles and cause other harm. A strong spring storm may easily rip away a loose branch and hurl it through the air. Remove all dead and broken branches. As well, make sure trees and bushes are cleared away from powerlines.

2. Check the Gutters.

If your gutters are clogged water can back up into your roof, meaning spring storm damage to your roof is much more likely. This often happens when the ice melts after accumulated winter debris blocks gutters. Keep drains and gutters clean and clear to ensure proper drainage. Also, check to ensure gutters are securely attached to the house to safeguard against strong winds.

4. Caulk Windows & Doors

The windows and doors in your house may be susceptible to fractures that create the opportunity for spring storm damage that wouldn't have occurred otherwise.

Continued next column

Seal all cracks and gaps around doors with caulk, protecting them from spring storms. Caulking windows and doors help prevent leaks, which can lead to water damage.

5. Inspect the Roof

No matter the type of roof your home may have, be sure to inspect it in the springtime for signs of anything that may have been weakened over winter. Spring storms are usually turbulent and gusty, so any sort of weakness will most likely be taken advantage of.

6. Prepare an Emergency Kit

In case of spring storm emergencies, it's a good idea to have an emergency kit ready in your house. Include in your kit non-perishable foods and water bottles to last 3-5 days minimum, important prescription and non-prescription medicines, and first aid supplies. Blankets and warm clothes, along with personal hygiene products are also recommended. If you have a pet, make sure you have a spring storm emergency kit prepared for them as well. You should also have a working fire extinguisher handy.

7. Create a Disaster Preparedness Plan

Create a disaster preparedness plan. Establish an outside meeting place and escape routes from each room in your house. Also, practice the plan with family members. Include your pets in the plan and make sure they wear an ID tag. Make sure you and your family know how to turn off utilities and how to use a fire extinguisher.

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RADIO NEWS

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

Vol. 3 JUNE, 1922 No. 12

Radio and the Beginner

AN editorial for the special benefit of the Radio novice is most important today. Thousands and thousands of people are becoming interested in this new art every day, nay, every hour, and nearly all of these people are, as a rule, lost in a wilderness of technicalities. Most of the "wise ones," the experts, the radio engineers *et al* are so busy these days, making money in radio that they have only contempt for the novice and his "foolish questions." It is like asking a professor of mathematics for the best method of adding 2 and 2!

To start at the beginning. The art of radio was invented by the German, Professor Heinrich Hertz in 1887. His were laboratory experiments. The Italian, Guglielmo Marconi then stepped in and took the laboratoy experiments out into the open. To him belongs the credit of making radio *practical*. Hertz transmitted no messages, *only impulses* over a few yards. Marconi was the first to send wireless messages over miles.

The radio telephone, contrary to general belief is not a new invention. It was invented by the "Danish Edison," Valdemar Poulsen in 1902. Sending the human voice through space has been in practice for over two decades now, but as with other inventions, the public refused to be interested.

As for the recent new word, coined by the public: the Radiograph—don't show your ignorance by repeating it. A radiograph is a picture taken by X-rays, surely no radio here.

As to outfits. Unless you have money to burn, start with a crystal outfit. Learn to creep before you walk. A beginner can, of course, start with a vacuum tube outfit if he has friends who can guide him, and answer his questions, but as a general rule *if you really wish to learn* all about radio, start with a good crystal set. Select one that is easy to operate and that will stay put. The chances are that a carefully built apparatus will work better than one that looks like the home-made variety, now flooding the market.

Ninety-nine out of one hundred people when they start in radio wish to hear the broadcasting stations that send out hourly entertainments. If you live within 25 miles, *as the crow flies*, from such a station, you may be reasonably sure of hearing it clearly with your crystal set. Fifty miles have been covered with such a set, but that is an exception, only realized under certain ideal conditions.

Phones. Use a good set of 2,000 or 3,000 ohm phones with a crystal set. With such a set the music or other signals are never *very* loud; for that reason it is best to use two receivers—a regular head set. A single 1,000 or 1,500 ohm receiver can be used if desired, in a room where there is absolutely no noise, but two phones are always better.

A 75-ohm receiver—the kind used on the house or public 'phone is of no use in radio. Don't waste time with it.

Loud talkers. At the present time there exists no device on the market that will make the music, received from a crystal outfit, loudly audible in a room. Loud talkers, or amplifiers, at present, can only be used with vacuum tubes.

Aerials. Use a single wire stretched taut, about 100 feet long. Such a wire may be of copper, or copper clad (iron core with copper surrounding it), not a *copper plated* iron wire. The wire may be bare or covered with insulation. It makes no difference. The wire (diameter) should not be less than No. 14 B & W, wire gauge. If anywhere possible make the wire point in the direction of the broadcasting station. In other words, if, let us say, you live in New York and wish to hear WJZ at Newark, (which is west from New York), run your aerial wire from west, due east. The lead-in from the aerial (the wire connecting the aerial to the outfit), should be connected to that end of the aerial *nearest* to Newark. The free or open end of the aerial, therefore, *points away* from Newark. This is correct. The lead-in wire should be soldered to the aerial or better, *much better*, have aerial and lead-in a single un-interrupted piece of wire. Use good aerial insulators for the suspension of the aerial. Any radio store supplies them. Remember, the electrical energy collected on even a good aerial is less than one-hundredth of a fly power. Therefore, the *very best* insulation is none too good. Keep the aerial as far away from buildings, walls, trees as possible, never less than one foot. If you live in a steel building, keep aerial and lead-in even further away. It is immaterial if the aerial runs parallel to the ground. Thus the writer used an aerial with ideal results as follows. A single rubber-covered, stranded automobile cable 100 feet long was attached to the highest point of the water-tank on the roof of a 10-story apartment house. The wire ran down at an angle of over 45° where it was hooked with insulators near the cornice of the building. Thence it ran down to a window into the apartment. Total of aerial, plus lead in, 100 feet.

Grounds. The best ground connection is made on any cold water pipe, nearest to the receiving set. Insulation of the ground wire is not necessary. A bare wire will do, of the same size as that of the aerial. Be sure to use a ground-clamp or else solder the wire to the pipe. Wrapping the wire over a clean-scraped water pipe is all right for temporary use, but it will give trouble without fail in due time. Therefore, avoid it. If a water pipe cannot be had the next choice is a gas pipe. It is, however, not satisfactory and is condemned by fire underwriters. Connection on the radiator is the third choice. It is, however, not at all efficient. If you live in the country, the best ground, if no water pipe is available, is a metal rod or pipe driven to a depth of 6 feet or more into *moist* ground (near a well or creek). Ground connection to be made with ground clamp, or soldered.

Lightning danger. Fire rules provide that an extra wire must be connected to the aerial by means of lightning switch or lightning arrester. This extra wire *must* be grounded outside of the building. Thus connected an aerial becomes the *very best* protection against lightning a building could have, because it acts as a lightning rod. Landlords should welcome such aerials, unless they are stupid and refuse free insurance to their building.

Finally. If you wish to be successful in radio, be patient. Don't blame the apparatus. Hunt for the trouble. Use your head. Think. Think again. Usually he who seeks finds.

H. GERNSBACK.

ARES Activated in Oklahoma for Tornado Clean-Up Communications

05/12/2022
To help with emergency communications support following an outbreak of tornadoes that hit this past week, the Oklahoma Department of Emergency of Management and Homeland Security requested support from the Oklahoma Amateur Radio Emergency Service® (ARES®).

During the first week of May, 12 tornadoes touched down in the central and eastern parts of Oklahoma. The tornado that struck Seminole, Oklahoma, on Wednesday, May 4, left EF2 damage, according to the National Weather Service. That tornado was a mile wide, and its path totaled 31 miles.

The request for amateur radio emergency communications support from the Oklahoma ARES was made on Thursday, May 5, 2022. ARES was activated on Saturday May 7, 2022. Seven amateur radio operators were active, providing voice communications between chainsaw and debris removal teams from their base at Seminole State College's volunteer center.

ARRL Oklahoma Section Emergency Coordinator Mark Conklin, N7XYO, said the clean-up crews worked quickly, and ARES was needed for 8 hours until cellular and wired communications were restored.

There were no deaths or injuries during the tornado outbreak, but clean up continues. END.

Snap Quiz

In relation to amateur radio, what was Dr. Owen K. Garriott W5LFL famous for?

Answer on Page 19

RCARC General Meeting an Elmer Night Pictures

Club members arriving and waiting for the meeting to start.

Ron (K7HDX) bringing the meeting to order.

Linda (KG7PBX) talking about the club membership due's structure.

Continued on page 8.

RCARC General Meeting an Elmer Night Pictures continued from page 7.

George (AL7BX) giving the group an updated repeater report

Ron (K7VXV) introducing Elmer night to the attendees and explaining what the VHF Society Intertie is.

George (AL7BX) introducing his topic for tonight's Elmer Night.

Continued next column

Dick (K7ZI) discussing how to make quick and simple 2 Meter Ground Plane Antenna's.

George (AL7BX) demonstrating HF Digital communications and the use of SDR.

Ken Munford (N7KM) showing attendees how to make a Toroid Coil.

Continued on page 10

RCARC May Breakfast Pic's at the Pastry Pub.

Kevin (K2MFK) and George (AL7BX) Hanging out at the Pub.

Ed (KK7ZL), Jan his Wife and Brody (K7VXV) pausing their breakfast for the picture.

Save the Date

RCARC Club BBQ

August 9, 2022 at Main Street Park.

Cedar City Fire Road Race

August 20, 2022

Cedar City Half Marathon

September 10, 2022

More info to follow as it becomes available

Hints and Hacks

HACK

A Solution for Wayward Setscrews

I became frustrated when adjusting mobile whip antennas because I frequently lost the tiny setscrews. The problem was doubly frustrating because my antenna used two setscrews.

My solution was to drill a #29 hole through the whip holder and then "tap" the hole (create threads in the hole) with an 8-32 tap. I did the same to the other setscrew hole.

You can purchase a Bosch BDT832 8-32 tap and #29-bit combo from Amazon and other vendors for less than $10. Just be sure you fill the holes with 3-in-One® oil when you're using the tap. This makes the process easier and reduces potential overheating.

With the taps complete, I used 8-32 thumb screws on opposite sides, as you can see in Figure 2. Problem solved!

Charlie Bowen, KB1KHD

Figure 2

Continued on page 19

10 Tips for Spring Storm Preparedness

Continued from Page 5

8. Review Insurance Coverage

When you're planning ahead for spring storm preparedness, be sure to review your insurance coverage with your agent and make sure you understand what's covered and what isn't. It's generally a good idea to obtain flood insurance, which isn't included in standard homeowners' policies. But don't wait – flood insurance policies take 30 days to go into effect.

Take a home inventory in case you need to file an insurance claim. Also, secure critical information, such as documents, personal numbers, and insurance policies in a waterproof container. After a spring storm passes, take note of any damage to your home so you can follow up with insurance companies who may need proof of spring storm damage. This includes photographing anything that was damaged such as broken windows, fallen trees/branches, etc.

9. Prepare the Garden Shed

Make sure your garden shed and all your tools and equipment are secured. You may not need to go into this during a spring storm but having an idea of what needs protecting is better than nothing. Don't forget to include the garden shed and any other outbuildings in your inventory.

10. Check Your Sump Pump

If your home has a sump pump, it's important to ensure that it's working properly. A sump pump that doesn't work can contribute to flooding in your home when it fails to remove the incoming water, leaving water damage. Be sure to run through a basic maintenance checklist ahead of time to verify that everything is running smoothly. End.

RCARC General Meeting an Elmer Night Pictures continued from page 8.

Additional, Ken Munford (N7KM) demonstrating how to Wrap a Toroid Coil.

Ken (KR7KR) and Larry (N7SND) adjusting Dennis (W6DLW) CW Code Keyer.

Bruno (KG7VVN) Showing how to use a tripod and pizza pan for a portable HT antenna. In addition, how to build a small carrying container for your HT and accessories, mic, antenna, radio, charger and user's manual.

Amateur Radio License Plate Information for Utah.

If you are interested in getting a Vanity Ham Radio License Plate, please read the information below for the State of Utah.

About This Plate

Recognition Special Group

This plate is issued to identify those with a current Federal Communications Commission (FCC) license to operate a fixed radio station in the State of Utah. The assigned call letters determine the license plate number.

Requirements

- Completed TC-817, *Application for Personalized and Replacement License Plates*
- Copy of FCC license
- $17 Special Plate Fee
- No Annual Contribution
- $4 Postage and Handling

Obtaining this Plate

To obtain this plate by mail, please submit a copy of your current registration, any documentation required for the special plate, a check that includes the cost of the special plate and donation fee, plus $4.00 for postage to:

Continued next column

Utah State Tax Commission
Motor Vehicle Division
P.O. Box 30412
Salt Lake City, UT 84130
For express services (FedEx, UPS, etc.), use zip code 84116

For more information, please call 801-297-7780 or 1-800-DMV-UTAH (800-368-8824).

In addition, please check out the following URLs for more information on Utah and other States.

https://dmv.utah.gov/plates/amateurradio

http://www.arrl.org/amateur-license-plate-information

""I don't care if it is FM - I want one that plays in the Pm.

From November 1947 Radio Craft magazine.

RADIO PROCEDURES DURING NORMAL OPERATING CONDITIONS
CALLING AND COMMUNICATING TECHNIQUES

The secret to working quickly and efficiently in an emergency net is to use standard procedures. The techniques presented herein are the most common. It doesn't take much analysis to see that standards and guidelines must be established and then utilized.

Before you key your mike, gather your thoughts about what you are going to say. Many people with radios have a tendency to talk and/or repeat too much. Say what you need to say without unnecessary repeats. Keep in mind that you must strive to get your message through the first time.

In general, there are five parts to Calling/Communications. The more serious or complex the situation, the more important these procedures become. The information contained herein MUST be practiced until it is second nature.

Practicing proper day-to-day radio procedures will make emergency radio procedures automatic and reduces confusion. Another way of saying this is that the secret to working quickly and efficiently in an emergency is to use common approved radio communication procedures and guidelines and practice, practice, practice.

1st, you MUST give the radio callsign of the station you are calling. This alerts that station that they are being called and that they should listen to determine who is calling.

2nd; say "THIS IS". The called station knows your tactical call follows. This is extremely important in cases where there is a lot of confusion or poor signal conditions.

3rd, give your radio callsign. Don't give your first name. Radio callsigns are important and first names are not, egos notwithstanding. Remember, we are licensed for radio to radio NOT person to person communications.

You WILL create confusion if you reverse the first three steps, especially during emergencies and when you are communicating with a dispatcher or people who do not know you. If your practice is the reverse of the "norm", you will not be able to change "on the fly" especially during the added stress brought on by an emergency situation.

4th, give your message. Speak clearly. Don't speak too fast especially if the message needs to be written down. Pause after logical phrases. Do not use the word "break" when you pause. It is confusing, wastes time and has other connotations. Merely unkey and pause. If the other station has questions, they should key up and make their request known. This also permits other stations to break in if they have emergency traffic.

5th, you can end your conversation with “CLEAR” however it isn’t required.

EXCEPTIONS OR VARIATIONS

1. It is sometimes permissible to omit the radio callsign designator of the station you are calling, BUT only after communications have been established and no confusion will occur. Don't waste time, by using superfluous tactical callsign.

Continued on page 13

2. The term "THIS IS" is used to separate the FROM and TO callsigns. If, and only if, confusion will not result, omitting the "THIS IS" phrase is permissible.

3. If you are the calling station and you omit your own radio callsign, you can create confusion. In certain situations, such as quick replies between operators, it can be accomplished without confusion. You must NOT use this simplification where messages can be interpreted incorrectly.

4. Elimination of the words "OVER" and "OUT" is possible where it doesn't introduce problems. Unkeying after your message implies "OVER". To comply with FCC regulations, you must give your radio call sign when you first start to talk and when you finish your communication. Giving your radio callsign can imply an "OUT" ending. Should giving your callsign cause any confusion, do not hesitate to add the word "CLEAR".

RADIO PROCEDURES DURING EMERGENCIES

1. Identify yourself at the beginning of each transmission especially where confusion may result if omitted.

2. Identification is a requirement of the FCC. According to the FCC, radio users must give their callsign when they first start to talk and when they finish their communication.

3. Listen before transmitting. Be sure you are not on the air with someone else.

4. Know what you are going to say before you push the mike button; in other words, engage your brain before you put your mouth in gear.

5. Hold the transmit button down for at least a second before beginning your message to insure that the first part of your message is not cut off.

6. TALK ACROSS THE FACE OF YOUR MICROPHONE. This technique makes the communications more understandable. In other words, hold the face of the microphone almost at a right angle to your face.

7. Speak slowly, distinctly, clearly, and do not let your voice trail off at the end of words or sentences. Give each and every word equal force. For some this takes a lot of practice and conscious effort but do it.

8. Never acknowledge calls or instructions unless you understand the call or instructions perfectly. If you do not understand, recontact and “say again” the missed traffic.

9. When you have understood the message, acknowledge the receipt with the words "copy", "received" or "acknowledged." The word "copy" is preferred.

10. The word "break" is never used UNLESS there is an emergency. Give you callsign to gain access to a net.

11. Always acknowledge calls and instructions. Nothing is more disruptive to the smooth flow of communications than dead silence in response to a message. If you cannot copy or respond to the call immediately, then tell the caller to “repeat” or “stand by.” Otherwise, acknowledge each call immediately.

12. Under stress, many operators have a tendency to talk too fast. ACCURACY FIRST, SPEED SECOND.

Continued on page 17

RCARC Holds May 2022 Ham Radio Gear Swap Meet

On Saturday morning May 21, members, friends, family and others gathered at the Cedar City, Main Street Park Octagonal Pavilion to buy, sell, or swap new and used Ham Radio gear. See Pic's below.

Terry West staffing the West table while Dennis (W6DLW) was taking pictures.

Keith Morris (KC6ZGG) and his wife Robin from California were visiting Dennis & Terry and brought a few items to sell.

Continued next column

Jack (KG7VEJ) with a few items on display.

Swap meet just getting started as people are arriving.

Equipment and other misc. items for sale. Sylvia (N7SIY) sitting on right at her table.

Continued on page 15

RCARC Ham Radio Gear Swap Meet Pic's Continued.

Additional equipment for sale.

Attendees making their rounds and checking out the gear.

Sylvia (N7SIY) right and Ann (KJ7OGZ) setting up Sylvia's table.

Marconi's Yacht will be back on the air with the special event call sign IY4ELE, June 4 - 5, 2022.

For the past 8 years, the ARI Fidenza Radio Club (Italian Amateur Radio Association), has celebrated a technical and cultural event at the Guglielmo Marconi Foundation at Villa Griffone in Pontecchio Marconi, Bologna, Italy (Guglielmo Marconi's birthplace). The purpose of the event is to highlight, at an international level, the historical value and meaning of Marconi's yacht, *Elettra*, which was the moving laboratory of the great Italian scientist. Several important radiocommunications experiments were conducted on board the yacht by Marconi during the interwar period. Over the event weekend, amateur radio operators from around the world will have a chance to contact IY4ELE, operated by club members from a radio station located near the keel of the *Elettra*. For more information, visit www.arifidenza.it.

The Independence Amateur Radio Club (IARC) will launch a high-altitude weather balloon from the lawn of the Oval at Riverside Park in Independence, Kansas on Saturday, June 4, 2022, at 9:30 AM.

The balloon carries a payload of radios and equipment that will ascend to 80,000 feet.

Continued on page 16

Hi Altitude Weather Balloon

Continued from Page15

When the balloon bursts, the payload will freefall to approximately 1,000 feet and a parachute will deploy for a safe landing. Guests are invited to watch the setup, filling of the balloon, and balloon release.

The altitude and position of the balloon will be displayed on a computer map at the park base station by monitoring an amateur radio geo-positioning transmitter in the balloon payload.

The payload will carry two onboard cameras -- one recording the entire flight and one that will send live video back to the park base station. Amateur radio operators will communicate with the balloon's radio equipment as it ascends toward the stratosphere, initially with local operators, but at higher altitudes, the balloon will reach operators hundreds of miles away.

There will be an operator at the park base net control, who will talk to these hams and record the contacts for name, location, and call sign. The flight path is unknown because the wind on the day of the launch will determine the direction. A chase team will follow the flight using the balloon's geo-positioning transmitter and drive to recover the payload.

Once the team is close to the landing site, a location transmitter beacon within the payload will give the exact position. The team will use radio finding antennas and techniques to recover the payload. If weather conditions prevent launch, the event will be rescheduled. For more information, go to the IARC website at www.n0id.org.

Field Day Safety

Here are few tips to get you thinking about a few of the many aspects of Field Day safety.

Lightning Safety

- If you hear thunder, lightning is close enough to strike you.
- No place outside is safe when thunderstorms are in the area.
- When you hear thunder, immediately move to safe shelter: a substantial building with electricity or plumbing, or an enclosed, metal-topped vehicle with the windows up.
- Stay in safe shelter for at least 30 minutes after you hear the last sound of thunder.
- Stay away from objects that conduct electricity (antennas, power lines, windmills, etc.).
- Power down and disconnect your radios and generators.

Antenna Safety

- Be aware of and avoid electrical power lines.
- Don't climb towers that use temporary guys.
- Don't climb ladders being used for antenna supports.
- Erect antennas far enough away from operating positions so there is no possibility of the antenna and structure falling on operators and observers.
- Regularly inspect guy ropes and stakes throughout the weekend.
- Ensure that your Field Day station complies with all of the FCC RF exposure requirements. See arrl.org/rf-exposure

Generator and Electrical Safety

- NEVER move or add fuel to a running generator.
- Fuel should be stored in approved containers away from generators and ignition sources, in well-ventilated areas away from direct sunlight.
- Centrally locate the generator to keep all branches to stations equal.
- Use an earth ground at the generator and at each station.

Physical Safety

- Avoid tripping hazards. Use fluorescent safety tape to mark guy ropes, stakes, and cables.
- Secure hazardous areas with caution tape to keep people away.
- Escort visitors around your Field Day site.

Medical Safety

- Avoid overexposure to sun. Stay hydrated — drink plenty of water.
- Know the signs of heat exhaustion and heat stroke (cdc.gov/disasters/extremeheat/warning.html).
- Keep a First Aid kit on hand.

Radio Procedure (Continued from page 13)

13. At times, radio conditions are poor and words must be overly exaggerated to be understandable. In general, speak very slowly and distinctly to carry through static and weak signals.

14. If you are relaying a message for another person, be sure you repeat the message exactly, word for word as it is given to you. If it makes no sense to you, get an explanation before you put it on the air. If necessary, refer the message back to the originator for clarification.

15. There is no place for Ham radio "Q" signals or signals from any other radio service during official and emergency communications. They are too easily misunderstood, rarely save time, and often result in errors. Use signals from the Local Government Public-Safety Radio Service or "plain English" only.

16. Do not act as a relay station unless Dispatch, or another radio station, asks for a relay -- and you can fulfill the requirement with your station.

17. When transmitting numbers (house numbers, street & telephone numbers, etc.), always transmit number sequences as a series of individual numbers. Never say numbers in combinations.

18. If a proper name needs to be transmitted, try to spell it out using the recognized radio phonetic alphabet. Do not use cute or self-invented phonetics. There is no place for them in official and emergency communications. Avoid using the phrase "common spelling" to reduce confusion.

19. ONLY TRANSMIT FACTS. If your message is a question, deduction, educated guess, or hearsay, identify it as such. Do not clutter up the air with non-essential information. Be careful what you say on the air. There are many ears listening. Many facts will be taken out of context even when carefully identified.

20. If you do not understand the whole message given to you or if you missed a word out of the transmission, reply with "Say again. "Do not say "please repeat" because it sounds too much like the word "received" when conditions are poor.

21. Chewing gum, eating, and other activities with items in the mouth tend to clutter up the clarity of your speech. Don't.

22. Avoid angry comments on the air at all costs. Obscene statements are not necessary and are out of place in all communications.

23. Sound alert. Nothing destroys confidence as much as a bored or weary sounding radio operator. If you are tired, get a relief operator.

24. During an incident, communications suffers enough confusion without wisecracks and jokes. When providing emergency communications you must remember that it is serious business and should be treated as such at all times.

25. Stay off the air unless you are sure you can be of assistance. It does no good to offer advice, assistance, comments or other input to a net unless you can truly provide clarification. It is better to remain silent and be thought a fool than to open your mouth and remove all doubt!

26. Always know your location. If you are mobile or portable and moving around, always keep a sharp lookout for landmarks. You must be able, if called upon, the accurately describe your

Continued on page 18

Radio Procedure (Continued from page 17)

location at any time. This is particularly important if you with a search team or other mobile units.

27. When you are on the fringes of communications, (such as in a building or at end communications boundaries edge) look for a receiving "hot spot" site and use it. Don't walk around talking while in a communications fringe area. Repeaters have much more power than your handheld. Even if you have a good signal from a repeater, it does not mean you are good going into the repeater.

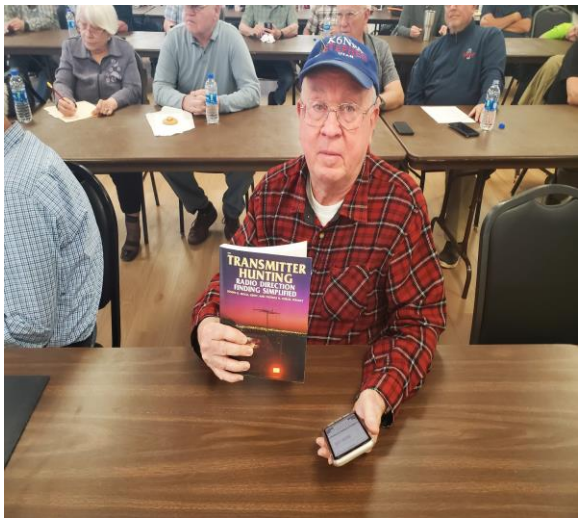
28. If you check into an emergency net, you must monitor on the net talkgroup. If you must leave the talkgroup, ask permission from the NCS (Net Control Station). Report to the NCS when you return to the net. It is vital that the NCS know the availability of each station on the net and it is up to YOU to keep the NCS advised. However, if the NCS is very busy and you must leave the net, do so without interrupting the net.

29. Net Control Stations frequently are very busy with work that is not on the air. If you call the NCS or dispatcher and do not get a reply, be patient and call again in a minute or two. If you have an emergency, say you have "Emergency traffic" after you identify yourself when you call the NCS. Be patient with the NCS and other stations.

30. A mobile radio (that is one that is mobile, portable, or airborne) has priority over any other type of radio station AND other forms of telecommunications. This is true in all radio services. Fixed station operators must recognize that a call from a mobile station takes precedence over telephone calls, personal conversations, and other activities. Respond promptly to any call from a mobile station -- even if it is to advise the caller to standby.

In conclusion, these few rules and suggestions are intended to help you become a better radio operator. Analyze your present operating methods and try to polish each element so your participation in radio communications is professional and worthwhile.

MAY BOOK GIVE AWAY WINNER



MEET STEVE K6NPA

RCARC Calendar

Did you know that the RCARC has a calendar of all upcoming events, nets, meeting and other? If you are looking to see when the next meeting might be using your computers browser type in the following URL www.rcarc.info when the web page loads select **"Club Info"** from the menu. When the next page loads select **"Calendar"** for access to the information. As you scroll through the items listed each day place your cursor over the time of the event and left click your mouse button. This will bring up detailed information on that event if available. Have fun.

Field Day 2022 Has Arrived

When

This year on June 25th & 26 RCARC members will be broadcasting from the Iron Counties 3-Peaks recreation area in the Pavilion starting at 12 noon Saturday and continue until 12 noon on Sunday

Field Day is ham radio's open house.

Every June, more than 40,000 hams throughout North America set up temporary transmitting stations in public places to demonstrate ham radio's science, skill and service to our communities and our nation. It combines public service, emergency preparedness, community outreach, and technical skills all in a single event. Field Day has been an annual event since 1933, and remains the most popular event in ham radio.

HISTORY OF ARRL FIELD DAY

The first ARRL Field Day was held on the second Saturday in June 1933. The winner the contest was the W4PAW team who scored 1876 points. The initial event, organized by F. E Handy, was such a hit with the amateur radio community that it became an annual tradition, with 1942 through to 1945 being the only years that Field Day hasn't been held, due to World War II.

For many, the big draw of Field Day is the competition–a high-frequency dash to make contact with as many stations as possible. The rules state that if setup commences before the contest starts then participants have 24 hours to chase their contacts, whereas those who commenced set up as the contest started have 27 hours. In 1968 the rules were changed and it became mandatory for everyone to set up within the 27-hour timeframe, but the change proved unpopular and it was readjusted again in 1969 to the rules that are used today. End

Hints and Hacks

Continued from page 9.

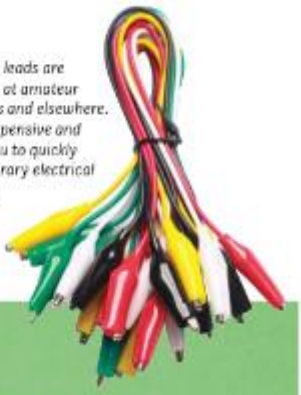


Figure 3: Clip leads are popular tools at amateur radio stations and elsewhere. They are inexpensive and they allow you to quickly create temporary electrical connections.

HACK

Fixing Alligator Clip Test Leads

Most hams have sets of cheap test leads like the ones shown in Figure 3. After a while, however, they can become faulty. The good news is that they can be repaired.

Slide the plastic boot off the clip and you'll often see that the wire is just crimped onto the clip. Using small needlenose pliers, open the crimped portion and remove the wire. Cut off the end of the wire and remove about 1/4 inch of insulation to expose the copper.

Now you can simply re-crimp the wire onto the clip using your pliers, or even solder the wire onto the clip (see Figure 4). Slide the boot back over the clip, and it is as good as new! You may want to place a marking on the boot with a black marker just to remind yourself that this clip has been repaired.

Donald Dodge, W6SNX

Figure 4: In most clip leads, the wire is simply crimped onto the clip. This connection can become faulty over time. In this example, the original wire has been removed, re-crimped into place, and then soldered.

Answer to Snap Quiz from Page 8

Dr. Owen K Garriott was an astronaut who made the first ham radio contact from space using a Motorola handheld 2-meter radio from the Space Shuttle Columbia.

ARRL RF Safety Committee Members to Be Honored by The Radio Society of Great Britain

*05/06/2022*Chairman of the ARRL RF Safety Committee (RFSC) Gregory D. Lapin, N9GL, Ph.D., P.E., will receive an award at the 2022 Dayton Hamvention® from the Radio Society of Great Britain (RSGB). He will receive the Founders' Trophy, recognizing his outstanding service to the society. He will also be accepting awards for committee members Kai Siwiak, KE4PT; Ric Tell, K5UJU, and Matt Butcher, KC3WD.

Along with members of the RSGB, the ARRL RFSC members formed an EMF Oversight Group, which has been meeting since August 2020 to help develop tools and procedures for complying with the new RF Exposure regulations for amateur radio operators in Great Britain. The new rules in the UK are similar to those already in effect in the United States. The new rules will be phased in over a 2-year period and are currently in effect for high band frequencies only.

RSGB members of the EMF Oversight Group are John Rogers, M0JAV (RSGB Director); Peter Zollman, G4DSE, and Ian White, GM3SEK, who received their awards at the society's annual general meeting on April 23, 2022, during an online ceremony.

To learn more about the Radio Society of Great Britain visit rsgb.org.

Please welcome the Hams that tested at the RCARC VEC Testing on May 10, 2022

See list of new Hams below:

Name	Callsign	License
Stephanie Blackburn	KK7GBA	Tech
Gayle D. Cichocki	KK7GAD	Tech
Ruby A. Cichocki	KK7GAW	Tech
Sheri M. DeMott	KK7GAN	Tech
Aaron D. Moore	KK7GAX	Tech
Amalia R. Well	KKGGQ	Tech

The importance of Ham Radio in disasters.

Craig Fugate KK4INZ was FEMA Administrator during hurricane Katrina and saw firsthand how important radio amateurs are in a disaster

He gave this talk to the Coastal Plains Amateur Radio Club.

Watch Importance of Ham Radio in Disasters

Please check out the Video of Mr. Fugate addressing the Coastal Plains Amateur Radio Club below.

http://www.southgatearc.org/news/2022/may/the-importance-of-ham-radio-in-disasters.htm#.YoasgKjMKUk

Congratulations to the RCARC EComm Unit

THE BIG PICTURE

Mapping Your Way to Field Day Success

Keep track of the Sections you've contacted with this handy map.

ARRL Field Day — June 25 and 26 — is different things to different people. Despite the way it may sound on the air, ARRL Field Day is not a contest. Instead, it is an exercise to test your ability to get on the air and communicate in what could be an emergency. Some groups treat it as a genuine exercise, while for others it's a social event that involves whole families.

No matter how you approach Field Day, one of the key requirements is to communicate two bits of information with each contact: Your ARRL Field Day entry classification, and the ARRL or Radio Amateurs of Canada (RAC) Section in which your station is located.

Your entry classification depends on several factors, and they are spelled out in the complete rules online at arrl.org/field-day-rules. Your Section is a different matter, and this is why the map on the next page can come in handy.

Understanding Sections

Both ARRL and RAC divide their respective countries into administrative districts known as *Sections*. Each Section encompasses a specific geographic area. Some Sections can be quite large, covering entire states or provinces. The largest state-wide ARRL Section is Alaska. Other states are divided into several Sections. California, for example, has a total of nine ARRL Sections. It is interesting to note that Hawaii, Puerto Rico, and the US Virgin Islands are each separate Sections.

Every Section has an abbreviation. The map includes the abbreviations of all ARRL and RAC Sections that count for Field Day.

Including Your Section in the Field Day Exchange

Let's say you're sitting in a park somewhere southeast of San Francisco, perhaps near the city of Fremont, California, and you have one battery-powered transceiver. Your Field Day entry classification would be 1B (one transmitter, battery power), but what about your ARRL Section? According to the map, your Section is "East Bay."

When making a voice contact, you'd say, "This is W1BXY, one bravo, East Bay." (It's clearer to say "bravo" rather than "B" in this case.)

When operating CW or digital, you'd send: W1BXY 1B EB ("EB" is the abbreviation for East Bay).

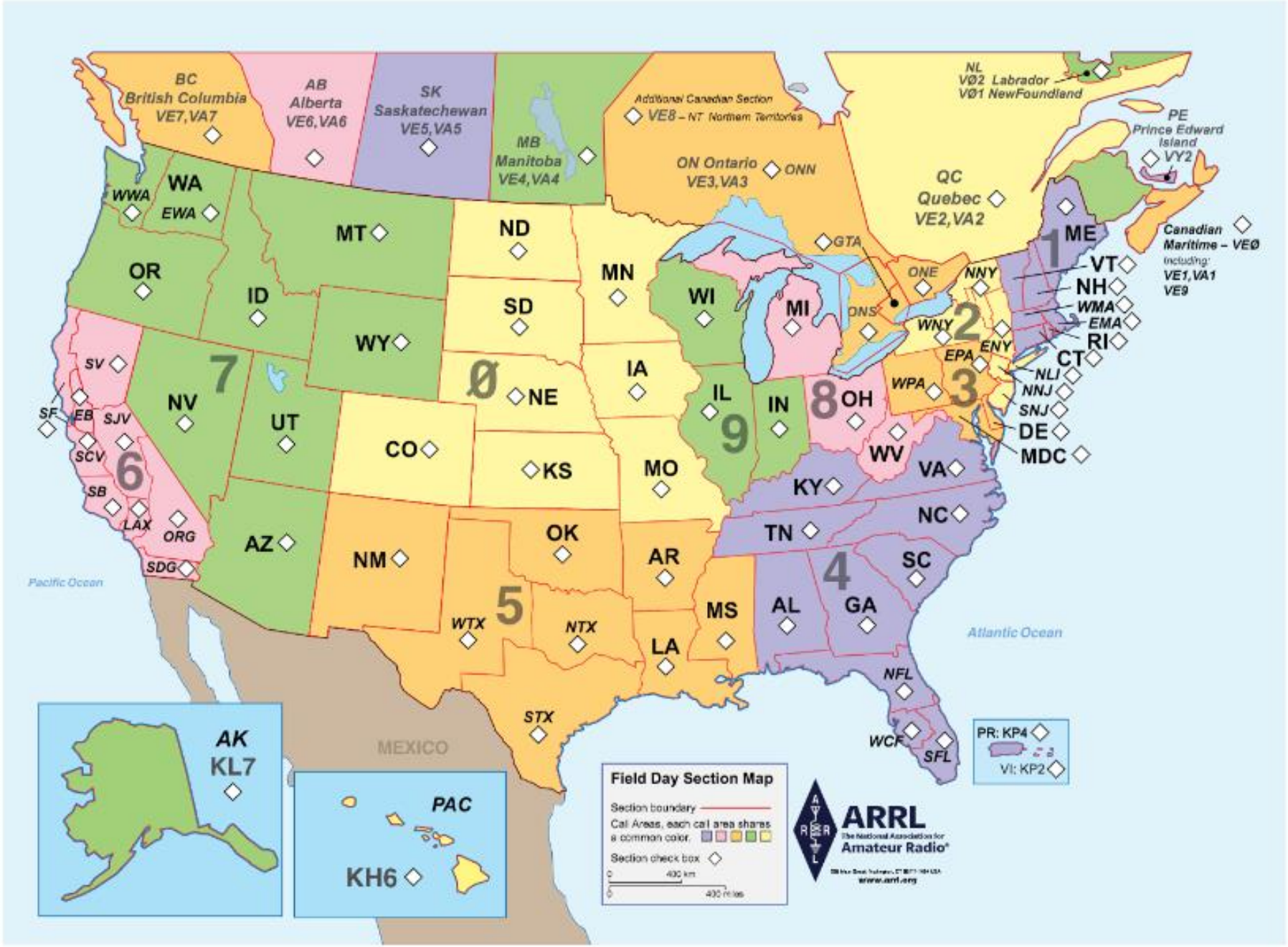
Using the Map

Keep this map at your operating position on Field Day weekend and use it as a reference for call areas and Section abbreviations. We've included checkboxes for each relevant Section, so you can check off Sections as you make contacts with them and have a visual reference for which ones you still need.

A Word About Call Signs

Both the United States and Canada are divided into specific *call sign districts*, as you'll see on the map. The number in a call sign indicates which district the call is from. Decades ago, the Federal Communications Commission in the US required that an amateur's call sign number match the district within which he or she lived. That's no longer the case, and it can cause confusion at times. In our previous example, W1BXY was operating in California, but her call sign might lead you to think she was somewhere in New England. That's another reason to make sure you listen (or read) carefully when a station sends its Section.

Continued on page 22


BC
British Columbia
VE7,VA7
AB
Alberta
VE6,VA6
SK
Saskatechewan
VE5,VA5
MB
Manitoba
VE4,VA4
Additional Canadian Section
VE8 – NT Northern Territories
ON Ontario
VE3,VA3
ONN
QC
Quebec
VE2,VA2
NL
VØ2 Labrador
VØ1 NewFoundland
PE
Prince Edward
Island
VY2
Canadian
Maritime – VEØ
including:
VE1,VA1
VE9
WWA
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Pacific Ocean
Atlantic Ocean
MEXICO
AK
KL7
PAC
KH6
PR: KP4
VI: KP2
Field Day Section Map
Section boundary
Call Areas, each call area shares a common color.
Section check box
ARRL
The National Association for Amateur Radio
www.arrl.org

Ariel Picture of Blowhard Mountain (10,708 Feet)

By Dennis L. West (W6DLW)

Where is Blowhard Mountain?

Blowhard Mountain is a high mountain peak at an elevation of 3.264m (10,708ft) above the sea level, located in Iron County, Utah. It's one of the highest mountain roads of Utah. The road to the summit, located within the Dixie National Forest, is gravel, rocky, tippy and bumpy at times.

It is also home to the Blowhard Repeater which is part of the Utah VHF Societies Intertie System (https://utahvhfs.org).

On Monday May 23, 2022 friends Keith (KC6ZGG) is wife Robin who were visiting from California and my wife Terry decided to head up Cedar Canyon (SR14) on an adventure which would eventually bring us to Blowhard Mountain.

Keith being the technical type brought his drone. After making sure it was legal to fly and we weren't in a restricted fly zone the drone took to the air.

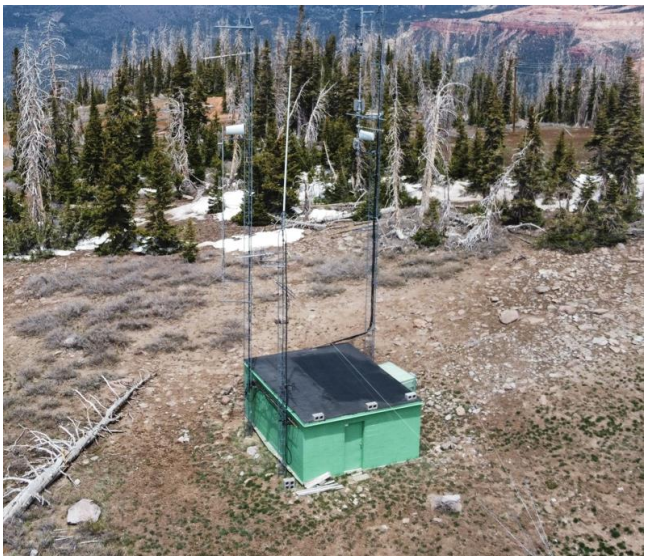
As you view the photos taken by Keith you will see two Radomes one at the FAA Site (Large One) and (Smaller One) at the Doppler Weather Radar site.

Continued on next column

What is a Radome?

A Radome is a structural, weatherproof enclosure that protects a radar system or antenna and is constructed of material that minimally attenuates the electromagnetic signal transmitted or received by the antenna. Radomes protect antenna surfaces from weather and/or conceal antenna electronic equipment from public view. There are specialized Radome manufacturers who provide Radomes for all types applications including for weather radar, air traffic control, satellite communications, and telemetry.

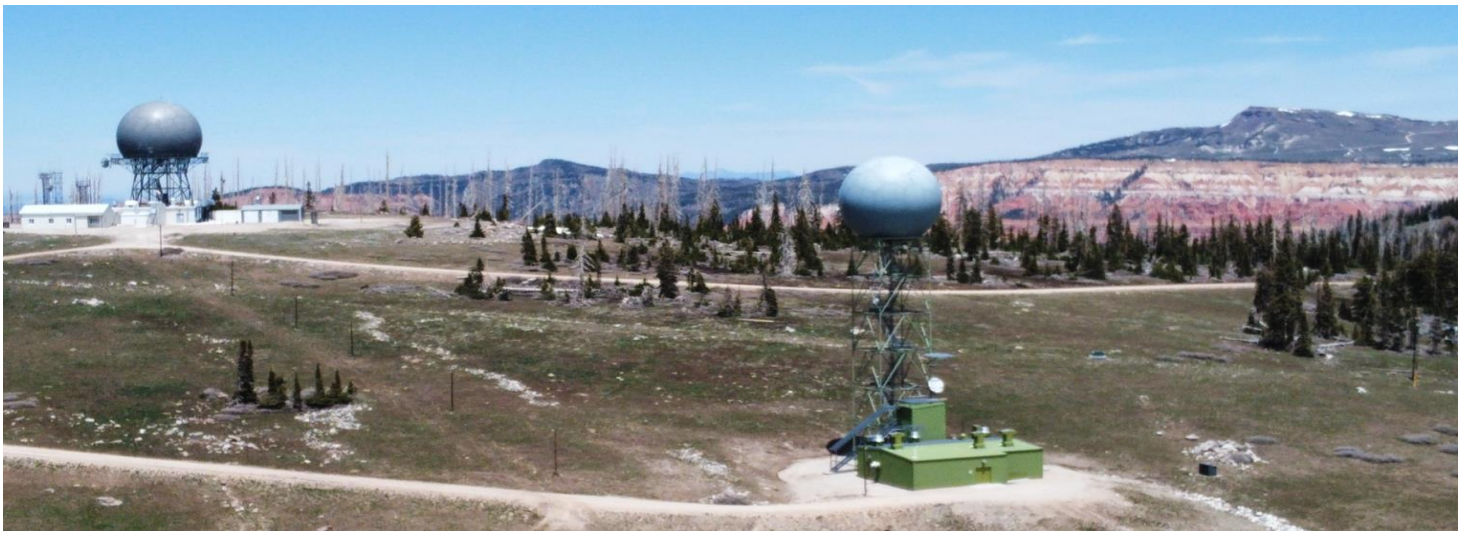
Enjoy the pictures:



Utah VHF Society Vault at Blowhard Mountain.

Photo by Keith Morris.

Continued on page 24



Larger dome on left is the FAA Facility structure and dome on right is the Dopplar Weather Radar structure. Photo by Keith Morris.

Additional structures at Blowhard Mountain with FAA Radome in background. Photo by Keith Morris.

HAPPY FATHER'S DAY
The Origin of Father's Day

Many people assume Father's Day (and Mother's Day for that matter) is a holiday designed by greeting card makers to turn a profit. But that couldn't be farther from the truth. The story behind how this day became a holiday is actually a tale of determination by one woman and a decades-long fight to get fathers the recognition they deserve.

Some attribute the first Father's Day observance to the 1907 Monongah, West Virginia mining disaster that killed 361 men—250 of them fathers— and which left more than a thousand children without a dad. Grace Golden Clayton, whose father was killed in the tragedy, suggested a service of commemoration to the pastor of her local Methodist chapel. But it never really caught on as an annual observance.

Two years later, in May of 1909, a woman named Sonora Louise Smart Dodd of Spokane, Washington, heard a Mother's Day sermon by Reverend Dr. Henry Rasmussen in her hometown church and thought a similar day should be set aside to honor fathers. Her own father, William Jackson Smart, a Civil War veteran, raised six children as a single parent.

Continued on page 25

The Origin of Father's Day

Continued from Page 24

The Struggle to Make Father's Day A Holiday

On June 6, 1910, Dodd approached the Spokane Ministerial Association and the local Young Men's Christian Association (YMCA) with her petition outlining the idea for an annual observance, and she received overwhelming support. Spokane's held its first Father's Day celebration on Sunday, June 19, 1910, with moving speeches by her own pastor and those from other area churches.

The first U.S. President to celebrate it was Woodrow Wilson in June of 1916, who opened the church services by telephone to Spokane from the Oval Office. Wilson liked the idea so much of a day of observation for fathers that he pushed to make it a national holiday (he had just made Mother's Day official in 1915), but members of Congress resisted, fearing that such a day would take away support from the Mother's Day holiday, and commercialize the day for fathers, causing more harm than good.

Undeterred, Dodd took her mission on the road and spoke publicly to fathers to gain their support. But she was met with hard criticism. According to *The Spokesman-Review,* they laughed at her and said they didn't want a Father's Day. "A national fishing day would be better," they told her.

The effort to formally recognize a day for fathers met with even more hurdles over the years.

Continued next column

In 1924, President Calvin Coolidge urged states to observe the day nationwide but refused to issue an official proclamation for the holiday, and by the 1930s there was an effort to combine Mother's Day and Father's Day into a single "Parent's Day" holiday. Even the newly formed "Father's Day Council," made up (and funded by) of members of men's clothing retailers, couldn't get the holiday recognized by 1938, only succeeding in getting calendar makers to mark the third Sunday in June with tie and pipe illustrations. And the general public had no interest in buying cards or gifts for dad that he probably didn't need.

A Maine Senator's Harsh Words

Maine's U.S. Senator, Margaret Chase Smith, had her own thoughts on the matter. When the holiday efforts reached another stalemate in Congress, Chase-Smith penned a harsh memo in which she declared, "Either we honor both our parents, mother and father, or let us desist from honoring either one. But to single out just one of our two parents and omit the other is the most grievous insult imaginable."

More than 50 years after Dodd's initial efforts, Father's Day was recognized as a holiday to be celebrated on the third Sunday of June by President Lyndon Johnson's Executive Order in 1966. But it was still not officially recognized as a federal holiday until six years later, in 1972 when, during his re-election campaign, Richard Nixon signed an official proclamation setting Father's Day permanently on the third Sunday in June

So, when you're picking out that special gift and card for dad, remember Sonora Smart Dodd and her efforts to get fathers the recognition they deserve.

In 1978, Mrs. Dodd died at the age of 96. Her grave at Greenwood Cemetery in Spokane reads:
Sonora Smart Dodd
Founder of Father's Day
1882-1978