

# RAINBOW CANYONS AMATEUR RADIO CLUB NEWSLETTER

CEDAR CITY, UTAH



Club Websites: [www.rcarc.info](http://www.rcarc.info) OR [www.rainbowcanyons.com](http://www.rainbowcanyons.com) Number 1 – Vol. 11 – December, 2019

## Club Meeting Information

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

## 2019 Club Officer's

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CQ, CQ, Merry Christmas



## President's Message

Greetings fellow HAMs!

Winter is definitely here! What a storm we had at Thanksgiving! I hope all of your antennas survived the high winds and that you did not suffer any damage. Despite the weather I hope everyone has been getting out on the radio and keeping busy as the weather cools. Had a great time at the last meeting and I hope everyone learned more about passwords and how to secure your accounts! It is sad that we have so many cyber-criminals that we have to worry, but it is the world that we live in. Our Christmas party is coming up fast! We have lots of cool radio gear to give away and we should have some really good food and companionship to start out this festive season! I am really looking forward to seeing everyone.

January 25 and 26 is Winter field day. We are going to hold our field day activities at Three-Peaks and we should have the ECOMM trailer to help keep us warm. For those who are interested in participating please let me know! Be prepared for cold weather.

Continued on page 2

## RCARC Club Nets:

7:00 a.m. Breakfast Net - Monday – Saturday – 146.760.  
12:30 p.m. Daily – Utah Beehive Net On 7.272.  
7:00 p.m. Tuesday's Southwestern Utah Digital Net. Using FLDIGI, FLMSG AND FLAMP – 146.680, 1500/MT63-2KL  
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.  
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.  
7:00 p.m. Thursdays – RCARC CW Net on 146.980.

## 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

## 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

**December 10, 2019**

**RCARC Club Meeting &**

**Club Christmas Party.**

**Election of new 2020 officers.**

**January 14, 2020**

**RCARC Club Meeting**

**Program: TBD**

**February 12, 2020**

**RCARC Club Meeting**

**Program: PODS (Point of Dispensing). Presented by Paulette Valentine, Director of Emergency Preparedness and Response Division of the Southwest Utah Public Health Department. (SWUPH).**

**See additional page 3**

## Presidents Message Continued from page 1.

Thank you to everyone who participates in club activities, including nets! 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! Remember you can always pick up the mic and see who is listening! As always, I would like to thank everyone who makes our meetings great by asking questions, providing food and drinks, and by agreeing to lead a presentation or discussion. I would also like to thank all of our net controls for the nets and everyone who participates!

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. Check out their website at:

[www.cedarcitypastrypub.com](http://www.cedarcitypastrypub.com)



## Decoder Brain Teaser

Using the letters and numbers on phone as kind of a code in which each number stands for one of its three corresponding letters, what RCARC member would answer the phone if you called the following number?

**227-6596**

**Answer on page 6**



What? Quartzfest© is an annual HAM Radio Rears Boondocking event which is held in late January every year with dates coinciding with the Quartzsite Arizona "RV Show".

When? January 19th thru 25th of 2020 (make sure you add these important dates to your 2020 calendar)

Where? 7 miles south of Quartzsite Arizona - on US 95 at La Paz Valley Road

Who Can Attend? ANYONE! If you don't have your Amateur Radio Operators License yet, you'll be able to take your Amateur Radio Operators License Exams at Quartzfest©Cost? FREE!!!!

**For more information check out [www.quartzfest.org](http://www.quartzfest.org)**





Happy Birthday and  
Anniversary to those  
celebrating in  
December



### Breakfast & Friendship Net Awards

Breakfast Net	Friendship Net
<b>First Place</b>	<b>First Place</b>
KI7SDA - Jerel	KI7LUM - Bruce
KI7WEX - Bonnie	N7TCE - Merlin
<b>Second Place</b>	W6DLW - Dennis
KK7ZL - Ed	<b>Second Place</b>
KG7PBX - Linda	KA7J - Lance
KI7JUA - Daniel	KI7TPD - Fred
<b>Third Place</b>	KI7WEX - Bonnie
KI7TPD - Fred	<b>Third Place</b>
KE6ZIM - John	K7HDX - Ron
	KI7WEZ - Darleen

### Save the Date Coming to RCARC in 2020

January 2020	Extra class study group (Ed, KK7ZL). Actual date & time TBD.
January 25 & 26, 2020	Winter Field Day (24-hour event). Will be at Three Peaks.
January RCARC Meeting Program	To be determined.
February Meeting Program	Paulette Valentine - PODS
March 5, 12, 19 & 26, 2020	Technician Class at the Senior Center. Detailed information to follow in the January 2020 Newsletter.



## Want to feel old?

Just when you think that you're really not that old something comes along and puts everything in to perspective. Bonanza premiered 60 years ago. The Beatles split 50 years ago. Laugh-in premiered nearly 50 years ago. The Wizard of OZ is 80 years old. Elvis is dead 42 years. He'd be 84 today. The Thriller Video is 36 years old. Jim Hendrix & Janice Joplin dead 49 years. John Lennon died 39 years ago. Mickey Mantle retired 51 years ago. Back to the Future is 35 years old. Saturday Night Fever is 42 years old. The Ed Sullivan Show ended 47 years ago. The Brady Bunch premiered 50 years ago. The triplets on My Three Sons are 50. Tabatha from bewitched is 55. The Corvette turned 66 this year. The Mustang is 55. If you were born in the 50's you've had 12 Presidents.



**Hello everyone, Buzz here with a reminder that RCARC members will be voting for the coming year's 2020 club officers at the December 10, 2019 meeting.**

**I'm encouraging each and every one of you to attend and be part of the election process.**

**See the position nominees running for office on page 12. Please attend this month's meeting and vote for the person of your choice.**



### Top signs that you may need an Elmer.

**An Elmer is the person you go to, to ask questions about topics in Ham Radio that you don't understand. In that vein, you know it's time for you to find an Elmer if...**

Your friend tells you he has a new two meter radio and you figure one of the meters must be for swr and the other for power out.  
You hear a conversation on the low bands about CW and you think they're referring to the cold war.  
You hear someone sign this is N8XXX mobile 4 and you think it's because he has three other radios  
You hear that someone won a 40 meter radio at a Hamfest and you wonder how they're going to get something that large in their house.  
You build a Morse code key out of plexiglass and can't figure out why it won't key your radio.  
You think the difference between short wave and long wave is the speed at which you move your wrist back and forth.  
You're thinking about joining your other ham friends in the local ATV group because you own a four wheel drive vehicle that will go just about anywhere.  
You won't use a repeater because you've heard that using a repeater could be dangerous. You've heard an alligator could get you.  
You think a colinear antenna can only be used with two amplifiers.  
You think FM is the modulation type that came after em, dm, cm, bm and am.  
You wouldn't mind getting into packet radio but no matter how much you practice you can't get the hang of sending those beeps and braps with your keyer.  
You wonder what sound a short wave makes and why anyone would want to listen to one.  
You think the repeater owner would be a lot happier if instead of talking about his cavities he just went to the dentist and got them filled.  
You think a CW ID is the number the army gave you on your dog tags during the cold war.



## Twass the Night Before Christmas - Ham Version

Twass the night before Christmas, and all through two meters, not a signal was keying up any repeaters.

The antennas reached up from the tower, quite high, to catch the weak signals that bounced from the sky.

The children, Tech-Pluses, took their HTs to bed and dreamed of the day they'd be Extras, instead. Mom put on her headphones, I plugged in the key, and we tuned 40 meters for that rare ZK3. When the meter was pegged by a signal with power. it smoked a small diode, and I swear, shook the tower.

Mom yanked off her phones, and with all she could muster logged a spot of the signal on the DX Packet Cluster

While I ran to the window and peered up at the sky to see what could generate RF that high.

It was way in the distance, but the moon made it gleam, a flying sleigh, with an eight-element beam, And a little old driver who looked slightly mean so, I thought for a moment, that it might be Wayne Green.

But no, it was Santa, the Santa of Hams, on a mission this Christmas to clean up the bands.

He circled the tower, then stopped in his track and he slid down the coax right into the shack.

While Mom and I hid behind stacks of CQ, this Santa of hamming knew just what to do.

He cleared off the shack desk of paper and parts and filled out all my late QSLs for a start.

He ran copper braid, took a steel rod and pounded it into the earth, till the station was grounded.

He tightened loose fittings, resoldered connections, cranked down modulation, installed lightning protection.

He neutralized tubes in my linear amp. Never worked right before. Now it works like a champ.

A new, low-pass filter cleaned up the TV, he corrected the settings in my TNC.

He repaired the computer that would not compute and he backed up the hard drive and got it to boot.

Then, he reached really deep in the bag that he brought and he pulled out a big box, A new rig? I thought

A new Kenwood? An Icom? A Yeasu, for me? If he thought I'd been bad it might be QRP

Yes, The Ultimate Station. How could I deserve this? Could it be all those hours that I worked Public Service?

He hooked it all up and in record time, quickly worked 100 countries, all down on 160.

I should have been happy, it was my call he sent, but the cards and the postage will cost two month's rent

He made final adjustments and left a card by the key: To Gary, from Santa Claus. Seventy-Three.

Then he grabbed his HT, looked me straight in the eye, punched a code on the pad, and was gone - no good bye.

I ran back to the station and the pile-up was big, but a card from St. Nick would be worth my new rig.

Oh, too late, for his final came over the air.

It was copied all over. It was heard everywhere.

The Ham's Santa exclaimed what a ham might expect,

Merry Christmas to all, And to all, good DX.

by Gary Pearce KN4AQ 1996



## UTC (Zulu) Time Conversion Chart

UTC (Zulu)	PST/ALDT	PDT/MST	MDT/CST	CDT/EST	EDT/AST	ALST	HST	UTC (Zulu)	PST/ALDT	PDT/MST	MDT/CST	CDT/EST	EDT/AST	ALST	HST
0000*	1600	1700	1800	1900	2000	1500	1400	1300	0500	0600	0700	0800	0900	0400	0300
0100	1700	1800	1900	2000	2100	1600	1500	1400	0600	0700	0800	0900	1000	0500	0400
0200	1800	1900	2000	2100	2200	1700	1600	1500	0700	0800	0900	1000	1100	0600	0500
0300	1900	2000	2100	2200	2300	1800	1700	1600	0800	0900	1000	1100	1200	0700	0600
0400	2000	2100	2200	2300	0000*	1900	1800	1700	0900	1000	1100	1200	1300	0800	0700
0500	2100	2200	2300	0000*	0100	2000	1900	1800	1000	1100	1200	1300	1400	0900	0800
0600	2200	2300	0000*	0100	0200	2100	2000	1900	1100	1200	1300	1400	1500	1000	0900
0700	2300	0000*	0100	0200	0300	2200	2100	2000	1200	1300	1400	1500	1600	1100	1000
0800	0000*	0100	0200	0300	0400	2300	2200	2100	1300	1400	1500	1600	1700	1200	1100
0900	0100	0200	0300	0400	0500	0000*	2300	2200	1400	1500	1600	1700	1800	1300	1200
1000	0200	0300	0400	0500	0600	0100	0000*	2300	1500	1600	1700	1800	1900	1400	1300
1100	0300	0400	0500	0600	0700	0200	0100	2400	1600	1700	1800	1900	2000	1500	1400
1200	0400	0500	0600	0700	0800	0300	0200								

### Coordinated Universal Time, or Zulu

**PST** = Pacific Standard Time (UTC - 8 hours)  
**ALDT** = Alaskan Daylight Time (UTC - 8 hours)  
**PDT** = Pacific Daylight Time (UTC - 7 hours)  
**MST** = Mountain Standard Time (UTC - 7 hours)  
**MDT** = Mountain Daylight Time (UTC - 6 hours)  
**CST** = Central Standard Time (UTC - 6 hours)  
**CDT** = Central Daylight Time (UTC - 5 hours)  
**EST** = Eastern Standard Time (UTC - 5 hours)  
**EDT** = Eastern Daylight Time (UTC - 4 hours)  
**AST** = Atlantic Standard Time (UTC - 4 hours)  
**ALST** = Alaskan Standard Time (UTC - 9 hours)  
**HST** = Hawaiian Standard Time (UTC - 10 hours)

### Copy and place in your wallet

To Convert From:	To Zulu Time:
Eastern Standard	Add 5 hours
Eastern Daylight	Add 4 hours
Central Standard	Add 6 hours
Central Daylight	Add 5 hours
Mountain Standard	Add 7 hours
Mountain Daylight	Add 6 hours
Pacific Standard	Add 8 hours
Pacific Daylight	Add 7 hours

Answer to Decoder Brain Teaser on page 2

Carolyn - KG7YIB  
 2276596



**ICE**

# BE READY IN A FLASH

**ICE**

## CREATE A SURVIVAL FLASH DRIVE

If there were a fire, flood, or other disaster that destroyed your home, where would your important documents such as birth certificate, passport, deed, licenses, permits, etc be? Protect yourself by scanning all your important documents and storing them on a Survival Flash Drive.

- ☐ Purchase a USB Flash Drive (also called memory sticks or thumb drives due to their small size)
- ☐ Use a permanent marker, sticker, or label to put the word "**ICE**" (In Case of Emergency) on it
- ☐ Scan your important documents using a scanner, and store the files on the Survival Flash Drive

### WHAT TO PUT ON YOUR FLASH DRIVE

#### All Government Issued IDs, Licenses, Permits, and Certifications for Each Family Member

- |                         |                        |                            |
|-------------------------|------------------------|----------------------------|
| • Driver's License / ID | • Passport             | • Veteran/Discharge Papers |
| • Birth Certificate     | • Marriage Certificate | • Work Permits / Licenses  |
| • Social Security Card  | • Gun Permit           | • Immigration Papers       |

#### Important Non-Government Documents

- |                           |                          |                            |
|---------------------------|--------------------------|----------------------------|
| • Medical Records         | • Bank Accounts          | • Contracts                |
| • Vaccination Records     | • Credit Card Accounts   | • Wills                    |
| • Health Plan Information | • Insurance (Home/Auto)  | • Power of Attorney        |
| • Advance Directives      | • Real Estate / Mortgage | • Divorce / Custody Papers |
| • Business Records        | • Rental Agreement       | • Restraining Orders       |

#### Other Important Information

- Current Photos of Each Family Member and Pet
- Important Family Pictures
- Emergency Contact List with Addresses + Phone Numbers

### KEEP IT UP TO DATE

Remember to keep the information on your Survival Flash Drive current by updating it regularly.

### PASSWORD PROTECT / ENCRYPT THE INFORMATION

For an added level of security, you can password-protect the files or encrypt the drive using software like TrueCrypt. Keep in mind that emergency workers would have a hard time opening protected files.

### STORE IT IN A SAFE LOCATION

Store your Survival Flash Drive in a small sealed plastic bag to prevent damage from the elements. Attach it to your key chain, put it in your purse, put it in a fireproof + waterproof safe, put it in a drawer at work, or put it in the glove box of your vehicle. Keep a copy wherever you think it will be safe and available in an emergency away from your house (in case of fire or flood).

### SPECIAL MEDICAL CONDITIONS

Create a document on your computer that includes all the details medical personnel may need to know in an emergency. Name the document **ICE** (which stands for In Case of Emergency). Save a copy of the ICE document on your Survival Flash Drive.

This document is in the public domain. It may be copied and distributed freely.

# W1AW to Commemorate 98th Anniversary of First Amateur Radio Signals to Span the Atlantic

December 11 marks the 98th anniversary of the success of ARRL's [Transatlantic Tests](#) in 1921, organized to see if low-power amateur radio stations could be heard across the Atlantic using shortwave frequencies (i.e., above 200 meters). On that day, a message transmitted by a group of Radio Club of America members at 1BCG in Greenwich, Connecticut, was copied by Paul Godley, 2ZE, in Scotland.

While the first two-way contact would not take place until 1923, the 1921 transatlantic success marked the beginning of what would become routine communication between US radio amateurs and those in other parts of the world -- the birth of DX.

To commemorate this amateur radio milestone, Maxim Memorial Station W1AW will be on the air through the day on December 11 with volunteer operators. The goal is to encourage contacts between radio amateurs in the US and Europe while showcasing the significance of the transmissions that pioneered global communication and laid the groundwork for technology widely used today.

The event will run from 1300 until 0000 UTC. Some details are still being worked out, but operation will focus on 40 and 20 meters (SSB).

[Contact](#) Clark Burgard, N1BCG, for more information.

## How to make an Amateur Radio Complaint to the FCC

Amateur radio complaints should be as specific as possible, citing dates, times, and frequencies on which alleged violations occurred. Complaints should also include a name and telephone number where the complainant can be reached for further details, if necessary. Please submit your complaints/concerns regarding amateur radio to the Commission's on-line complaint system. The appropriate form for your complaint can be found here: [https://esupport.fcc.gov/ccmsforms/form2000.action?form\\_type=2000F](https://esupport.fcc.gov/ccmsforms/form2000.action?form_type=2000F)

## Willful or Malicious Interference Complaints

Section 97.101(d) of the Commission's Rules prohibits amateur operators from willfully or maliciously interfering with or causing interference to any radio communication or signal. 47 C.F.R. § 97.101(d).

The [Spectrum Enforcement Division](#), in conjunction with the [Regional and Field Offices](#), is responsible for responding to complaints of willful and/or malicious interference (sometimes called ``jamming'') among amateur radio service licensees.

Amateur radio service licensees wishing to file complaints alleging willful and/or malicious interference to other amateur radio service operations should follow the complaint process discussed above. Parties desiring further information may call: 1-888-225-5322.



# RCARC November Monthly Breakfast Pictures



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. Check out their website at: [www.cedarcitypastrypub.com](http://www.cedarcitypastrypub.com)

## Interesting Facts About Amateur Radio

### The oldest radio service

Amateurs have been around since the beginning of radio itself. Many individuals built, communicated and experimented with radio. They communicated using Morse code, that strange configuration of dits and dahs still holds the fascination of many operators today. Amateur's, or "hams" as we are known, have been at the forefront of radio technology. Many hams have pioneered the art of radio and provided experimentation which has led to many of today's high tech. communication capabilities. A good example of this experimentation is communicating thru a PC. Hams also communicate with computers, but instead of using the phone lines to transfer the information, we send the information over the air waves using HF or VHF/UHF radio equipment. An example of computer communication on the amateur radio bands, is called "RTTY", which stands for Radio Teletype, better known as simply teletype. RTTY is a very fun mode of communication, and much simpler to participate in w the advent of the desk top personal computer. Another example is called "packet", whereby "packets" of information are sent at the same time, arrive at their destination, then wait for a reply. There is a whole network across the country linked together via VHF/UHF repeaters to carry messages back and forth thousands of miles away.

Continued next column

### Who can become a "ham"

Anyone may receive an FCC Amateur Radio License, called a "ticket" by ham's? There are no age limits, you just need to demonstrate the ability to receive morse code at a minimum speed of five words per minute, as well as pass a written exam covering rules and regulations, electronic theory and good operating practices. There are six different "classes" or levels of amateur radio licenses, novice, technician, technician plus, general, advanced and extra. Each class has a different requirement for obtaining that level of license. The different levels of license's allow the operator different operating privileges, the higher the class, the more privileges you obtain. Recently, the FCC has created a class of license (technician) that no longer requires the ability to receive Morse code. Of course, your operating privileges are very limited with this entry level class. I won't go into what each class privileges are here. Check out the ARRL's home page for more information.

### Worldwide Communications

With the proper equipment, hams can communicate with other hams around the globe, around the clock. Propagation is a fascinating aspect to radio communication; many hams study the solar activity and try to predict the best openings for a particular band at a given time of day. This helps in setting up schedules with others in different parts of the country, or world. As well as giving you a pretty good idea what part of the world you should be hearing and on what band you should be hearing it!

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## Interesting Facts About Amateur Radio

The sun and the rays have been studied for many years, even before radio was "invented". Scientist's discovered many years ago that the sun developed spots on its face, called sunspots. They also learned that in some years the sun would develop more sunspots than in others. These sunspots are cooler areas on the sun's surface, or face. Tracking these sunspots lead to the finding that the sun goes through a cycle every eleven years (called the solar cycle or 11-year cycle). As each year went by, the sun would gain more spots. Then at the peak of the cycle, the spots would start to decline in numbers and start the whole process all over again. After the advent of radio, came the realization that as the solar cycle reached its peak, radio communication with distant stations became easier. Signals become very strong and communicating with someone on the other side of the world was just as easy as with someone across town! Furthermore, communications on bands which were once thought of as worthless were providing communications on a regular basis, during these "peaks" in the cycle. It is truly amazing how far your signal can go during the peak of the solar cycle with very little power (watts) out! Of course, during the declining years, communications become poor, if not impossible, on some bands.

### Exchanging "postcards"

One popular activity among hams includes the exchanging of postcards, called "QSL" cards. The purpose is to confirm that two-way communication was made between the two stations. These cards contain information about the operator, such as name, call sign, location, etc. As well as information about the contact, band, mode, time of day, date. Most hams have their own personal cards printed by professional printers. Some cards are very creative, some are just "plain jane", but they are always fun to receive in the mail. Some examples include: hand drawn designs, photos of the operating station and the owner, even pictures of tropical islands with crystal blue water and white sandy beaches!

Some cards are highly sought after, hams will travel to remote islands or countries which have little or no amateur radio activity, then offer QSL cards to everyone who contacts them. It is not unusual for these "DX-peditions", as they are called, to make many thousands of contacts with other hams around the world in a weekend! QSL cards are a fun way of keeping track of all the different countries or places one has talked to. They are also required for many of the awards that are offered hams.

Continued on next column

### Pick a mode, any mode...

Just about every mode of communication available today is used by amateurs. Some of them include, AM, FM, SSB, CW. Hams can even send TV pictures across the country or around the world! All forms of digital communication are used as well, computers have become a communication tool used by most of the hams today.

### Satellites

Through the efforts of the "AMSAT" organization, amateur satellite communications have been a reality since the early sixties. Hams enjoy satellite communication on a daily basis. Imagine the thrill and excitement of "working" other hams around the world using minimum power as the "bird" orbits overhead! Satellite tracking is an activity in and of itself and is very challenging, just figuring it all out has its rewards. Some amateurs even bounce their signals off of the earth's biggest satellite, the MOON!

### Space Shuttle Communication

There have been a number of Astronauts who are also "hams" that have been allowed to experiment, while on a Shuttle mission, with amateur radio. They have communicated with other hams on earth. Many hams have set up stations in schools to demonstrate to the students, amateur radios ability to communicate with the shuttle astronauts. The equipment usually is a simple VHF/UHF handheld "HT" running only a few watts of output power. Can you imagine talking with an astronaut who is orbiting the earth at 17k + MPH?

### Low Power (QRP) Operation

While many amateurs are allowed to run up to 1500 watts, there is a growing interest in low power operation. Commonly referred to as "QRP", individuals who find this aspect of the hobby challenging, enjoy building or "homebrewing" their own radios and receivers. There are many hams who have made contact with others around the world using only a few watts of power, in some cases milliwatts! The most popular mode for QRP operation is CW, due to its ability to be heard under extreme band conditions and low signal strength. The rigs sometimes can be very small in size, some have built transmitters inside of tuna fish can's (tuna removed), while others have used "Altoids" tins! Some of these radios are really creative, and can be taken just about anywhere, on camping trips, hiking, bike riding etc. Many awards are issued with the "QRP" endorsement, showing that the operator was using limited power and therefore making it harder (more challenging) on him/herself!

### Emergency communications

Amateur's provide emergency communications whenever the need arises. Hams have been the sole means of communication in many instances during a catastrophe.

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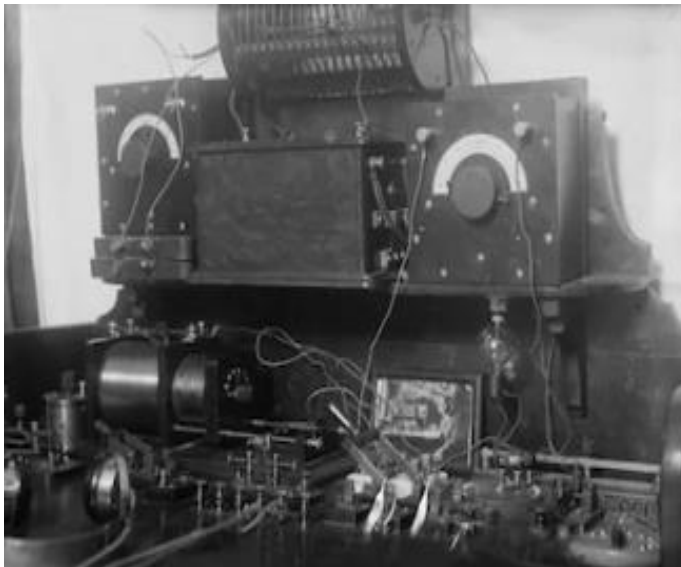
## Interesting Facts About Amateur Radio

Floods, earthquakes, hurricanes, tornadoes etc. Whenever the phone lines or power is out, hams are still able to summon help to the area that is affected with the disaster. There is an annual event called "Field-Day", where hams participate in emergency type operating conditions, such as battery powered, make shift antenna's supported in trees, operating from car's, tent's, travel trailers etc. This and other event's like it, help to prepare individuals for the real thing.

### Operating awards

Amateurs may earn various awards for different operating activities. Some of which include the "WAS" award, for Worked All States, this award is issued to ham's who make contact with other ham's in each of the fifty states. There are many endorsements available for this award, such as working fifty states on CW, SSB etc. Working fifty states on all bands, or just one band, like six meters. Most newly licensed ham's work on their WAS award as soon as they start making contacts, a new state is always fun to work and it can be quite a challenge, as some states are harder to find than others. Other awards include, DXCC, WAC and WPX to name just a few. There is even an award for working all of the counties in the U.S.! Some radio clubs even offer operating awards for working members of the club. You could spend a lifetime trying to collect all of the awards that are out there! End.

## Ham Radio Equipment from a time gone by.



Continued next column





# Communicating with Other Hams

## Contact Basics: Good Amateur Practices

### Q-Signals

Q-signals are a system of radio shorthand as old as wireless and developed from even older telegraphy codes. Q-signals are a set of abbreviations for common information that save time and allow communication between operators who don't speak a common language. Modern ham radio uses them extensively. The table below lists the most common Q-signals used by hams. While Q-signals were developed for use by Morse operators, their use is common on phone, as well. You will often hear, "QRZed?" as someone asks "Who is calling me?" or "I'm getting a little QRM from an operator receiving some interference or "Let's QSY to 146.55" as two operators change from a repeater frequency to a nearby simplex communications frequency.

Q-Signals	
Abbr.	Questions
QRG	Your exact frequency (or that of _____) is _____ kHz. Will you tell me my exact frequency (or that of _____)?
QRL	I am busy (or I am busy with _____). Are you busy? Usually used to see if a frequency is busy.
QRM	Your transmission is being interfered with _____ (1. Nil; 2. Slightly; 3. Moderately; 4. Severely; 5. Extremely.) Is my transmission being interfered with?
QRN	I am troubled by static _____. (1 to 5 as under QRM.) Are you troubled by static?
QRO	Increase power. Shall I increase power?
QRP	Decrease power. Shall I decrease power?
QRQ	Send faster (_____ wpm). Shall I send faster?
QRS	Send more slowly (_____ wpm). Shall I send more slowly?
QRT	Stop sending. Shall I stop sending?
QRU	I have nothing for you. Have you anything for me?
QRV	I am ready. Are you ready?
QRX	I will call you again at _____ hours (on _____ kHz). When will you call me again? Minutes are usually implied rather than hours.
QRZ	You are being called by _____ (on _____ kHz). Who is calling me?
QSB	Your signals are fading. Are my signals fading?
QSK	I can hear you between signals; break in on my transmission. Can you hear me between your signals and if so can I break in on your transmission?
QSL	I am acknowledging receipt. Can you acknowledge receipt (of a message or transmission)?
QSO	I can communicate with _____ direct (or relay through _____). Can you communicate with _____ direct or by relay?
QSP	I will relay to _____. Will you relay to _____?
QST	General call preceding a message addressed to all amateurs and ARRL members. This is in effect "CQ ARRL."
QSX	I am listening to _____ on _____ kHz. Will you listen to _____ on _____ kHz?
QSY	Change to transmission on another frequency (or on _____ kHz). Shall I change to transmission on another frequency (or on _____ kHz)?
QTC	I have _____ messages for you (or for _____). How many messages have you to send?
QTH	My location is _____. What is your location?
QTR	The time is _____. What is the correct time?

ITU Phonetic Alphabet		
Letter	Word	Pronunciation
A	Alfa	<b>AL FAH</b>
B	Bravo	<b>BRAH VOH</b>
C	Charlie	<b>CHAR LEE</b>
D	Delta	<b>DELL TAH</b>
E	Echo	<b>ECK OH</b>
F	Foxtrot	<b>FOKS TROT</b>
G	Golf	<b>GOLF</b>
H	Hotel	<b>HOH TELL</b>
I	India	<b>IN DEE AH</b>
J	Juliet	<b>JEW LEE ETT</b>
K	Kilo	<b>KEY LOH</b>
L	Lima	<b>LEE MAH</b>
M	Mike	<b>MIKE</b>
N	November	<b>NO VEM BER</b>
O	Oscar	<b>OSS CAH</b>
P	Papa	<b>PAH PAH</b>
Q	Quebec	<b>KEH BECK</b>
R	Romeo	<b>ROW ME OH</b>
S	Sierra	<b>SEE AIR RAH</b>
T	Tango	<b>TANG GO</b>
U	Uniform	<b>YOU NEE FORM</b>
V	Victor	<b>VIK TAH</b>
W	Whiskey	<b>WISS KEY</b>
X	X-Ray	<b>ECKS RAY</b>
Y	Yankee	<b>YANG KEY</b>
Z	Zulu	<b>ZOO LOO</b>

**Note:** The boldfaced syllables are emphasized. The pronunciations shown in this table were designed for those who speak any of the international languages. The pronunciations given for "Oscar" and "Victor" may seem awkward to English-speaking people in the US.

### Rainbow Canyons Amateur Radio Club 2020 Officer Nominees

Fred Govedich (KI7TPD)	President	Bonnie Bain (KI7WEX)	Secretary	Dennis L. West (W6DLW)	Newsletter Editor
Ron Shelly (K7HDX)	Vice President	Larry Bell (N7SND)	Treasurer	Please attend this month's meeting and vote for your candidate.	

# RCARC November Meeting Pictures



Club Members socializing before meeting start



Fred (KI7TPD) going over the meeting agenda



Fred (KI7TPD) addressing the members on coming events in 2020.



Don Blanchard (WA7GTU) reporting on repeater conditions



Gavin Hollinger (K17IHE) talks Cyber Security for Seniors



Gavin Hollinger (K17IHE) presents password's and security



# Senior Cyber Safety initiative

## What is Cybersecurity?

All the tools we use and actions we take to keep computers, networks, and information safe and available for those who need them, and unavailable for those who should not. It is important to be aware of the potential threat of cybercrimes because it affects all of us. According to a report, cybercrime is one of the toughest challenges that the world is facing today and it's set to cost us up to \$6 trillion dollars annually by 2021.

At the RCARC November monthly meeting Gavin Hollinger (KI7IHE) presented Password Safety which is part of the Senior Citizens' Cyber Safety Initiative. The initiative can be found and downloaded at the following URL.

<https://www.uscyberpatriot.org/Documents/Self%20Paced%20Guide.pdf>

Additionally, Gavin spoke on how to check if your email / password is in various breaches: The following URL's can tell you if your e-mail(s) or passwords have ever been breached.

<https://chrome.google.com/webstore/detail/password-checkup-extensio/pncabnpcfmmalkkjpajodfhijclecino>  
<https://haveibeenpwned.com/>  
<https://haveibeenpwned.com/Passwords>  
<https://haveibeenpwned.com/PwnedWebsites#Linkedin>

Use a Password Manager. There are a number to choose from. Find one that best meets your needs The URL below is one that Gavin presented during his presentation.

<https://keepassxc.org/download/#windows>

**Continued on next column**

Funny Ellen video about keeping your passwords on paper with the password minder protector minder:

<https://youtu.be/u8Rss3W4Wg>

## Note:

Gavin suggests that whatever way you chose, please use a different password on each site you create an account on.



**Reminder  
Dues are  
coming due.**

**Hello everyone, Buzz here with a reminder that both the RCARC and Utah VHF Society Dues are coming due at the end of December.**

**For more information contact Don Blanchard (WA7GTU) in regards to the Utah VHF Society and Larry Bell (N7SND) in regards to the RCARC.**





# Tips and Hacks for the DIY Ham

## Colorblind LED Hack

As a colorblind ham, one of my greatest frustration has always been color coding. Most LEDs on charger simply change color from red to green to indicate the state of charge. I got tired of asking my wife or grandchild to come to my radio room and tell me if my battery was charged, so I found a simple solution that didn't involve changing the LEDs.

I simply taped a piece of shiny transparent red cellophane paper (typically used to wrap Christmas gift's) over the LED. While the light is red, it is bright and clear to the red/green colorblind person. When the light switched to green, it disappears. Everyone else can still see it, but colorblind people can't, so I know the charge is complete. I have six chargers and it works on each one. I no longer need to ask anyone to tell me if my batteries are charged. – 73, **Ken Munford, N7KM**

**N7KM123@gmail.com**

## Labeling Coax with bread clips

The flat plastic clips that are used as closures on bread and other supermarket packages are very useful for labeling coaxial cable. They clip directly on RG-58 and other similarly sized coax.

There are a few ways to mark the clips to use as labels. First, you could simply use a label maker or felt tip pen. Second, you could implement a standard color-code system – red for 2 meters, green for 5-elements and so on. And finally, you could edge notch in Morse code. For example, on a dipole cable reading down, you could notch dah-dit-dit – “D” for dipole (see figure “A” below). This method would be useful in reduced light or for the visually impaired.

Figure “A” below



**H. Scott McCann, W3MEO**

**Congratulations are in order  
RCARC would like to  
congratulate Jerel (KI7SDA) on  
his upgrade to General Class  
status on November 12, 2019.**

## The Latest Episode of ARRL Audio News is Now Available

Listen to the new episode of ARRL Audio News on your iOS or Android podcast app, or online at <http://www.blubrry.com/arrlaudionews/>. There are no repeaters in the Cedar City area that carry the newsfeed.

ARRL Audio News is a summary of the week's top news stories in the world of Amateur Radio, along with interviews and other features. Enjoy ARRL Audio News anywhere: on your smart phone or tablet, or stream it on the go!

## RCARC Member(s) HAM Gear For sale

Name	Call Sign	Amount	Description of item for sale or trade.	Cost Dollars	Condition	Sellers contact information.
Jim McIntyre	W2ADF	1	ICOM 208 H Dual Band Radio	\$200.00		435-704-7077 or zerbert14@gmail.com
Jim McIntyre	W2ADF	2	Kenwood 2m TM – 281- A Radios	\$100.00 Ea.		435-704-7077 or zerbert14@gmail.com
Jim McIntyre	W2ADF	1	ICOM IC 740 HF Radio	\$375.00		435-704-7077 or zerbert14@gmail.com
Jim McIntyre	W2ADF	1	ICOM 208 H Dual Band Radio	\$200.00		435-704-7077 or zerbert14@gmail.com
Jim McIntyre	W2ADF	1	Kenwood Power Supply – PS80	\$75.00		435-704-7077 or zerbert14@gmail.com
Jim McIntyre	W2ADF	1	Astron Power Supply – RS20 A	\$50.00		435-704-7077 or zerbert14@gmail.com
Jim McIntyre	W2ADF	1	Fritzel Carolina Windom Wire Antenna – Series 83. 40 through 80 Meters.	\$75.00		435-704-7077 or zerbert14@gmail.com
Jim McIntyre	W2ADF	1	MFJ 941 E Tuner	\$75.00		435-704-7077 or zerbert14@gmail.com
Jim McIntyre	W2ADF	1	MFJ 949 D Tuner	\$75.00		435-704-7077 or zerbert14@gmail.com
Jim McIntyre	W2ADF	1	MFJ 949 C Tuner	\$75.00		435-704-7077 or zerbert14@gmail.com

**For our members** wishing to purchase or get further information please contact the listed seller direct. The listing will stay posted for two months and then be deleted.

**To the Seller** if you sell your item before the two-month period end, please e-mail me at [rcarcnewsletter@gmail.com](mailto:rcarcnewsletter@gmail.com) and let me know that you've sold the item.

If items do not sell in the first two months and you would like to keep them listed for an additional two months let me know.

## Radio Amateur's "Tribute to a Century of Broadcasting" Video Debuts on YouTube



Art Donahue, W1AWX, of Franklin, Massachusetts, has posted his ["Tribute to a Century of Broadcasting"](#) video in recognition of the centennial of formal radio broadcasts. The video features a complete scan of the AM broadcast band (530 - 1700 kHz), with station IDs for all 118 AM radio channels.

Donahue told ARRL he recorded these off the air using two long-wire antennas in the trees. Each slide highlights one station on each frequency with call sign, location, power, day/night/gray-line reception, distance, and year of first broadcast, accompanied by audio of an actual station identification.

"If you ever spent evenings when you were a kid trying to hear long-distance radio stations on your AM radio, this video has what they all sound like today," Donahue said. "I wanted to do something in honor of the KDKA broadcasting centennial next year and thought I'd try to get every single channel recorded. It took a lot of time, patience, and good luck. You'll hear a lot of surprises on the video." Check out the URL above.

# RCARC Members Testing Iron Counties Office of Emergency Management (OEM) Emergency A.M. Transmitter.



**Above** RCARC members Ron (K7HDX), Brad (WA7HEE) and Bruno (KG7VFN) are checking out the Iron Counties Office of Emergency Management's A.M. Radio Transmitter.

This transmitter operates on 1610 A.M to transmit pre-recorded message to the Citizens of Iron County. The transmitter is portable and can be set up and positioned to transmit emergency information where needed during disaster situations.

**Right** the guys take a break after several hour of driving around the community to determine the transmitter coverage.

This was the first test and was conducted from Ron's residence.

