# RAINBOW CANYONS AMATEUR RADIO CLUB NEWSLETTER



#### Club Website: www.rcarc.info Number 7 – Vol. 4 April 2025

#### **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. Down Stairs.

> 2025 Club Officer's President: Fred Govedich KI7TPD 1-435-559-2682 fred.govedich@gmail.com

#### Vice President

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

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CQ, CQ, Happy Easter



Presidents Message

# Dear Fellow Amateur Radio Operators,

Hope everyone is having a wonderful start to the spring and that you are looking forward to our May 3<sup>rd</sup> Swap meet with our new Go Kit Contest and Field Day at the end of June (28-29)!

The bands have been really hot with lots of active stations on pretty much all of the bands including 10 meters so get out and enjoy your radio.

We are going to have a POTA event at Three Peaks on April 19<sup>th</sup> so if you have never done a POTA activation and want to see what it is like come out and join us.

It is wonderful to see all of the new technician class students and I wish them all luck with the test in a few weeks.

We should have a 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!

**Continued on Page 2** 

#### RCARC Club Nets:

7:00 a.m. Breakfast Net - Monday – Saturday – 146.760. 12:30 p.m. Daily – Utah Beehive Net On 7.272. 8:30 p.m. Tuesday's - ORCA Digital Net.

Using FLDIGI, FLMSG AND FLAMP – 3.581 +, 1500/MFSK32.

8:00 p.m. Wednesday – Panguitch Net – 147.160.

7: pm. Thursday– Morse Code Net- This is a Zoom Meeting.

8:30 p.m. Thursday's - WDN Digital Net. Using FLDIGI, FLMSG AND FLAMP – 3.581 +, 1500/MFSK32.

8: p.m. Saturdays – SSTV – 449.925. 9:00 p.m. Daily – Friendship Net – 146.760.

11: a.m. Saturdays (Mtn. Time) QCWA –
160 Net, Utah Chapter,
12: p.m. Freq. 7.272.
8:00 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

#### April 8, 2025

#### **RCARC Club Meeting.**

7:00 pm. Cedar City Senior Center, 489 E. 200 South. Program: Go Box Challenge update and Go Box Display.

#### <u>May 13, 2025</u>

#### **RCARC Club Meeting.**

7:00 pm. Cedar City Senior Center, 489 E. 200 South. More info to follow

#### June 10, 2025

#### **RCARC Club Meeting.**

7:00 pm. Cedar City Senior Center, 489 E. 200 South. More info to follow

#### July 8, 2025

#### **RCARC Club Meeting.**

7:00 pm. Cedar City Senior Center, 489 E. 200 South. More info to follow

#### President's Message Continued from page 1.

At our club meeting on April 8<sup>th,</sup> we will be discussing GO Kits and the May go kit contest. If you want to bring and share your go kit to the meeting please do!

I encourage you all to play, share, and have fun on the radio! POTA is a lot of fun for both activator and hunters so come to our activation to get on the air and make some contacts. 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)

# Notice

At our next club meeting on April 8, 2025 the presentation will be on Go Kits.

If you have a go kit and would like to share your creation with the meeting attendees please come join us. Cedar City Senior Center at 7:00 PM. 489 E. 200 S.

### RCARC Monthly Breakfast

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





Happy Birthday and Anniversary to those celebrating in April



# **Happy Easter**

# **Breakfast & Friendship Net Awards**

March 2025

Break	fast Net	Friendship Net				
First Place	KK7UBC - Tommy	First Place	KJ7LTQ - Brant	N7SND - Larry		
K2MFK – Kevin	N7SND - Larry	K7HDX - Ron	KK7FLL - Maddie	Third Place		
K7ZI - Dick	Third Place	K7NKH - Lee	KK7UBC - Tommy	W1EPR - Austin		
KG7PBX - Linda	KE6ZIM - Johnny	K7ZI - Dick	N7WWB - Darlene			
KI7SCX - John	KI7TPD - Fred	KE8OYI - Caleb	W0KLH - Kevin			
W0KLH - Kevin	KI7WEZ - Bonnie	KI7LUM - Bruce	W6DLW - Dennis			
WA7GVL - Paul		KI7LVB - Tammy	WA7GVL - Paul			
Second Place		KI7LVC - Tim	Second Place			
KC6WFI - Anthony		KI7TPD - Fred	KA7J - Lance			
KE8OYI - Caleb		KI7WEX - Bonnie	N7SIY - Sylvia			

Rainbow Canyons Amateur Radio Club Treasurer Report Mar 11, 2025

Bank balance Feb 1, 2025	\$3,374.15
Membership KI7LVC, KI7LVB, K7ZI, KK7WNN K8SV, KD7WIX,	+ 70.00
Expenses Rocky mountain Power (98 repeater elec exp)	- 21.69
Bank Balance March 1, 2025	\$3,422.46
Mar Deposit W0KLH, KK7STC, K6QOG, KK7MPM, W1EPR, KR7KR, Ki7LUM	+ 95.00
Mar Expenses Rocky Mountain Power (due 3/18/2025)	- 19.87
membership	
Funds Available after 3/18/2025	\$ 3,497.59
Waiting to pay KR7KR for Xmas Meat expense	- ???
Submitted by Linda Shokrian KG7PBX 2023 RCARC Treasurer 435-867-5914	

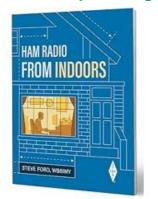
**RCARC** Upcoming Events

Tuesday April 8, 2025 RCARC Monthly Membership Meeting. Cedar City Senior Center, 489 E. 200 S. at 7:00 PM.
Saturday April 19, 2025 RCARC POTA Event at Three Peaks Regional Park at 9:00 AM. More info to follow
Saturday May 3, 2025 RCARC Annual Radio Swap Meet. 9:00 AM through 12:00 or 1:00 PM. Christ the King Catholic Church 690 S. Cove Drive in the pavilion. In addition, there will be a breakfast and Go Kit Challenge. More info to follow.
Saturday & Sunday June 28 and 29, 2025 Summer Field Day (SFD). Mark your calendars.

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RCARC Book Giveaway. Books are donated by Linda Shokrian (KG7PBX) Shown below is the book that will be given away at the April 8, 2025 Membership Meeting

The Book below was given away to Brody Johnson (K7VXV) At the March 11, 2025 Membership Meeting



Congratulations Brody Picture on page 8

### **Contact Us.**

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

Club E-mail: cedarcity.rcarc@gmail.com

Newsletter E-mail: rcarcnewsletter@gmail.com

Website www.rcarc.info

Face Book Page: https://www.facebook.com/gr oups/440325486875752/

To Join RCARC or Pay Dues:

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

Please write call sign on check.

#### Thank You





# Buzz's April Safety Tip(s)



# **Safety in the Shack**

There are two safety considerations to bear in mind when setting up a radio shack – electrical safety and RF safety.

You will no doubt be using radio equipment that is mains powered, and you will probably use 12 V supplies that can supply up to 25 A or more. Mains electricity can kill you and that innocuous looking power supply could easily cause a fire if a short circuit occurs and you don't have adequate safety precautions, such as a fuse.

Also, you will be producing radio frequency (RF) energy, which should be treated with respect.

Let's deal with each of these in turn.

#### **Electrical safety**



Firstly, every family member in your house should know how to turn the power off in your station. In the event of an emergency, and where you are still in contact with an electrically-live appliance, it could make the difference between life and death.

The wiring for your shack should ideally be controlled by one master switch and everyone in the house should know where it is. A fire extinguisher, suitable for use on electrical fires, is also a good investment. All wires carrying power around your station should of the proper size and quality for the job. Also, all equipment should be connected to a good earth.

When working on equipment you should, if possible, ensure that it is switched off and unplugged. Any capacitors should be discharged as they can store charge for a considerable time.

If you must work on live equipment only do so if you know what you are doing. Also, keep one hand in your pocket at all times and all metal jewelry should also be removed. Avoid bodily contact with any earthed object to prevent you becoming the return path for any voltage source to ground.

If possible do not work on equipment when alone and always make sure that you have the correct tools for the job.

#### **RF Safety**

Radio Amateurs should be concerned about two aspects of RF safety when planning a station and its associated antennas.

Physical contact with antennas and parts of the station, which may be RF 'hot' and where there is a risk of RF burn or electric shock, must be a primary consideration.

This might include feeders to the antennas, or ungrounded metallic objects within the station or nearby.

Always arrange your antennas and feedlines so that they cannot be touched. This may mean rerouting them or putting them out of harm's reach. Continued on page 6

# **Safety in the Shack**

#### **Continued from Page 5**

The second aspect is safety near the antennas in the so-called "near field".

This the region where the distance from a radiating antenna is less than the wavelength of the radiated energy.

This implies that on the lower HF bands, say on 160 meters (Top Band), the near field could extend a considerable distance from the antenna.

However, in practice such an antenna would also be physically large, and would result in the incident power being widely distributed over a large area. For resonant dipoles there is a significant magnetic field near the feed, and a high E field near the antenna tips – both of these need to be considered as a safety consideration.

Every radio amateur should always ensure that persons in or near the station are not within the near-field safety zone recommendation of the antenna when transmitting.

But what is that zone? This is complex and you need to read the document "RF Safety and the Radio Amateur" mentioned above.

If you read nothing else, there is a rough rule of thumb.

For example, if you use a dipole, and 400 Watts, take the frequency in MHz, and use that spacing in feet (ft). That is, on 14 MHz a spacing of 14 ft is required as a safety distance. Or ... If you use a beam with a gain of 9dB, and a transmit power of 100W, take the frequency in MHz, and use that spacing.

As you can see the higher you go in frequency the further you must keep away from transmitting antennas. End



The 2025 ARRL Rocky Mountain Division Convention will be hosted by HamCon Colorado this year; please mark your calendars now!

The dates are October 24-26, 2025 and the location is the Hilton DoubleTree in Grand Junction, Colorado. This event will also host DX University on Thursday (October 23) prior to the main convention.

Please see the HamCon Website at <u>www.hamconcolorado.com</u> for further information, tickets to the convention, sign-up for DX University, and hotel accommodations. Registration is now open!

The convention will include forums, workshops, vendors/exhibits, special events, and meals with inspiring speakers. Special Event station W1AW/0 will be active during the convention with a control operator present and guests (licensed or not) are invited to operate. There are also many non-ham things to see and do in the Grand Junction area for family members.

See the convention website: <u>www.hamconcolorado.com</u> for all the details.



**Happy Easter** 



Vol. 5

No. 10

# Radio Mysteries By H. GERNSBACK

F all the arts, radio presents more mysteries than any other. The reason is, perhaps, that the art is as yet quite young. To be sure, we have mysteries, or rather things that we cannot explain in most of the arts. But in a world where we never will know the how and why of most things, it cannot surprise us that in such a complicated science as radio, mysteries abound.

Of course, when we come right down to it, our knowledge is extremely limited. We have played with electricity for a century and a half and yet do not know what it is. We have known life and its mysteries for thousands of years and still we do not know what life really is. As a rule we only know the effects of things, but we do not know the reasons for their existence.

Turning to radio, we find that the radio expert, so-called, will talk glibly about everything connected with his art. He can give you a radio explanation for anything that puzzles you, but even be does not know and probably never will.

Take for instance, *Fiding*, one of the common radio mysteries. You listen in with your good three- or four-tube set to a station 1,000 miles away. You do not touch your set at any time, and the concert to which you listen and which comes in strongly suddenly starts to fade out, growing weaker and weaker until finally you cannot hear it at all. Soon the condition reverses itself and the concert comes in, faint at first, then loud, until it is back to normal audibility.

The radio expert will tell you that the answer to this mystery is a common, every day, garden variety of cloud. Says he, a cloud will be interposed between your radio set and the broadcast station, and while the cloud is in the way, the fading occurs. A good explanation. However, your friend sitting at your elbow is using a supersensitive outfit, let us say a super-heterodyne. He does not use an outdoor aerial as you do, but just a loop aerial. He is listening to the same station, and he does not experience any fading at all. The expert will immediately tell you: "Ah, the second set is so sensitive that the few waves that get through the cloud are picked up by the super-heterodyne." Also a good explanation, but somehow not very convincing. Next on the list are *Deed Spots*. For instance, if you are in a

Next on the list are *Dead Spots*. For instance, if you are in a large city surrounded by sky-scrapers or other large buildings, you will find that it is extremely difficult to receive from certain broadcast stations. In other words, you are located in a dead spot where receiving is extremely difficult. We know that large buildings absorb energy and tend to cast a sort of shadow for electromagnetic waves over certain sections, which then become known as dead spots. On the other hand, there are large regions free from any obstructions, and these are also dead spots. Certain parts of the Atlantic coast, which are flat and without obstructions of any kind, are notorious for poor receiving. Here the explanation of buildings as obstructions does not hold good, but these dead spots exist and even the radio expert is hard pressed for a plausible answer to save his face.

Next we come to the *Crystal Records*—a deep thorn in the flesh of every radio expert since radio began, and particularly since the advent of broadcasting. The crystal set is supposed to work only within 15 and probably no more than 25 miles from the average broadcast station. No reputable manufacturer will claim a greater distance. Hundreds and thousands of crystal sets perform well within these limits, but increase the distance to 30 or 40 miles from the broadcast station and a crystal set becomes as silent as a tomb. That is, 99.9 per cent, of them do. On the other hand, every radio paper is daily in receipt of letters from crystal set owners who receive up to 500 and 1,000 miles without any trouble. Moreover, they can cover these distances regularly at will: in other words, not because of freak atmospheric conditions. The radio editors promptly send out investigators to inquire into these extravagant statements, and to their surprise they find that the statements are true. Here, then, is an impossible situation. The radio expert steps in and says that the crystal set is simply receiving energy from some nearby vacuum tube set, but this is also investigated and found not to be so, because in certain cases investigated there was not a vacuum tube set within a 50-mile radius. Furthermore, a crystal set owner can get stations he wants *at will*, consequently there could be no question of borrowing the energy from a nearby vacuum tube set. Moreover, the crystal sets that accomplish the impossible often are very mediocre, and as a rule, are home-made, being of the same old circuit with the same old galena crystal. You put it up to the radio expert and be gnashes his teeth, looks wise and talks of more pleasant things.

We next turn our attention to *Body Capacity*: this also presents many commdrums. Body capacity, as every broadcast listener knows, refers to the howling heard in the phones or loud speaker which is produced in your set, particularly when listening in to long distance stations, when the hand is brought near certain parts of the outfit. It is not always necessary to bring the hand near the outfit. For instance, the writer has a large set which is so sensitive to body capacity that when listening to a DX station, if he walks away from the set, the station fades out, but comes in strong again when he walks toward the outfit.

Experts tell us that our bodies act as a sort of condenser plate which, having a certain amount of capacity, disturbs the very fine electrical equilibrium in a vacuum tube outfit. They also tell us that in certain cases the body acts as an acrial and collects waves which tend to upset the electrical balance in the radio outfit when the hand or other parts of the body are brought near it. But we were not convinced by this explanation, so the other day we suspended a large piece of tin sheeting on a string which was attached to a walking cane, and moved the tin sheeting close to the radio outfit while it was in operation. The capacity of this tin sheet was actually larger than that of a man, but strange to say, nothing happened, and it did not disturb the reception to any great extent. To be sure, there was a slight effect, but not at all to be com-pared with the effect produced by the human body-which causes us to question: Are there many kinds of body capacity, or does another element enter into it, when we put our hand on a condenser knob, bringing forth cat-calls and shricks in the loud talker? This statement is made with diffidence, because we may immediately start the spiritualists and other cranks to work on body capacity effects. But who knows, perhaps something will come of it if the phenomenon is really investigated by scientists and radio engineers-which so far has not happened,

Then we have our good old friend, or rather arch enemy, Static. What our experts and scientists do not know about it would fill many heavy volumes. If you look through the literature on static, you come to the following results: 1, there is no static; 2, there is static: 3, we do not know the origin of static; 4, we know it; 5, static travels in a wave form; 6, static is an electrical surge, and so on, ad infinium. In the meantime, when the conditions for static are really good, that is, in the winter time, when the air is really dry and when static electrical effects are much greater than in the summer, we have no static. But in the summer time, when electrical conditions are poor, and when we should, theoretically not have static, we have whole carloads full of it. Dry, cold air, as everyone knows, is most suitable to produce static electrical phenomena. For instance, in the winter time by rubbing your feet over the rug or carpet, as you walk over it, you can draw long sparks out of your knuckle when presenting it to a radiator or an electrical fixture. On the other hand, when the air is sultry and wet, in the summer time, this experiment does not work.

Of course, the radio expert is ready to give us an extremely good explanation on the subject, but frankly-we do not believe him.

### RCARC March 11, 2025 Membership Meeting Pic's



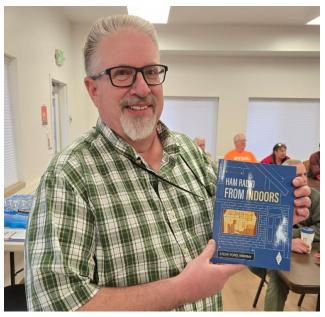
Members waiting for other attendees and for meeting to start



Ron (K7HDX) bringing the meeting to order



Ron (K7HDX) Leading the Pledge of Allegiance Continue next column



Brody (K7VXV) was the winner of the book giveaway



Ron (K7HDX) conducting an Evacuation Presentation



Ron (K7HDX) sharing information on when you evacuate what do you take with you.

### RCARC EComm Radiation Unit Attends Refresher Training

On the morning of March 22, 2025 members of the RCARC EComm Radiation Unit met at the Cedar City Heritage Center for refresher training.

Terry Meissner in picture below sitting in the front of the class provided a thorough Radiological Defense Overview. Topics like, Planning and Assumptions, Basics of Radiation and Fallout, Orientation of several different types of Radiation Meter Reading Units, Sheltering in Place, Water Supplies, Food Supplies and much more.

See pictures below:



Members listening to Terry Meissner's presentation on Radiological Defense.



Class attendee holding his Radiation Meter over some very low dosage radiation to test his meter.

**Continue next column** 



Attendees waiting their turn to test their meters.



Bonnie (KI7WEX) testing her meter while Terry Meissner looks on.



This is CDV 717 Radiation Meter. Most of the members of the unit have this meter.

# Ham Radio Word Search Antenna Types

K	Х	Т	U	R	Ν	S	Т		L	Е	V	Н	Α	Ρ
U	J	Ζ	V	S	R	Ζ	В	Ζ	L	D	Η	S	W	Α
F	Α	Т	Ζ	Е	С	Х	W	Q	L	J	U	R	Н	R
R	С		D	0		R	Е	Ρ	G	0	L	Η	В	Α
Т	Η		С	Η	Q	Q	W	Х	Ε	Y	F	Е	Ε	В
В	Α	0	В	М	R		Т	V	L	V	L	0	Α	0
Κ	Q	Х	М	Q	F	С	Х	S	0	0	Ν	L	Μ	L
Y	А	S	Т	В	F	С	В	Ζ	Ρ	В	F	-	W	
С	V	Т	D	С		W	Κ		0	Ζ	D	Ρ		С
Ζ	V	S	Х	D	L	С	D	L	Ν	С	Ν	Т	D	Е
Κ	Μ	Η	С	I	Ρ	0	R	Т	0	S		В	Т	
Н	G	0	Η	U	Т	Ρ	G	Η	Μ	U	D	Ν	Η	D
G	Ν	V	Е	R	Т		С	А	L	Т	J	V	Υ	Е
Ζ	R	А	Е	Ν		L	L	0	С	W	С	R	Ρ	W
0	М	Е	S		Μ	В	Т	0	D	Κ	W	V	G	G

Dipole	Monopole	Turnstile	Rhombic	Logperiodic
Vertical	Parabolic	Collinear	Beamwidth	Isotropic

## RCARC March Technician Class

Thursday March 6, 2025 RCARC hosted the first of Eleven Technician License classes. The additional classes will follow each Thursday with review ending on April 3, 2025. Test will be hosted on April 10, 2025

#### The first session covered:

**Sub-Elements Commission Rules -T1** - A, B, C and D with Ron Shelley (K7HDX)

**Sub Elements Operating Procedures -T1** - E, F & **T2** – A, B and C with Fred Govedich (KI7TPD)

#### The second session covered:

Sub-Elements Radio Wave Propagation - T3 – A, B, C & T4 – A, B with Dennis West (W6DLW).

Sub-Elements Electrical Principles - T5 - A, B, C, D with Ken Richter (KR7KR).

#### The third session covered

**Sub-Elements Electronic and Electrical Components T6** – A, B, C, D with Gavin Hollinger (KC7IHE).

**Sub-Elements Signals and Emissions -T7** – A, B, C, D with Lance Jackson (KA7J).

#### The Fourth Session Covered

**Sub-Elements Signals and Emissions – T8 –** A, B, C and D – James Moore (KG7VEI).

Sub-Elements Antennas and Feed Lines – T9 A and B – Ken Munford (K7KM).

The remaining class is scheduled for April 3rd with testing on April 10, 2023.



Ron (K7HDX) presenting Commission Rules. File Photo



Fred (KI7TPD) presenting Operating Procedures



Dennis (W6DLW) Presenting Radio Wave Propagation and Amateur Radio Practices.



Ken (KR7KR Presenting Electrical Principles.

Continued on page 13



As I watch our Newsletter Editor sit at his computer and work on the newsletter each month, I sometimes think that it would be great to highlight some of our club member who participate in community events, hobbies, camping and other activities outside of our Ham Radio Club.

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

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

#### Send information to: Buzz at

#### rcarcnewsletter@gmail.com





Happy Easter Everyone

#### Radio Connects is 2025 ARRL Field Day Theme



#### 03/14/2025

ARRL The National Association for Amateur Radio® has released the logo and theme for this year's <u>ARRL Field</u> <u>Day</u>, June 28 – 29, 2025.

The theme for 2025 Field Day is "Radio Connects" highlighting the many ways that wireless technology connects people across distances near and far. The event is part picnic, campout, practice for emergencies, informal contest, and most of all, fun! ARRL Field Day is the most popular ham radio activity held annually in the US and Canada. On the fourth weekend in June each year, more than 31,000 hams get together with their radio clubs, schools, or friends to operate from remote locations.

Ham radio provides a connection — both for practical communications and to form relationships with fellow radio amateurs. No matter who you are, or what your background or interests are, if you have an interest in radio and wireless technology, radio connects you with others.

The theme is universal, says ARRL Public Relations and Outreach Manager Sierra Harrop, W5DX. "Local amateur radio clubs bridge generations. Contacts made across town or around the world allow cultural exchange, right over the air. In times of crisis, radio connects those in need with information. The whole point of amateur radio is the connect, both literally and figuratively," she said. Amateur radio also inspires the next generation of technical leaders by providing a hands-on sandbox where students can gain experience in the fields of science, technology, engineering, and mathematics (STEM).

Make your plans to connect with radio for ARRL Field Day. Use the Field Day site locator to find a site near you. Clubs planning to host a site may list their event information there, as well.

#### **Continued on page 16**

# RCARC March Technician Class

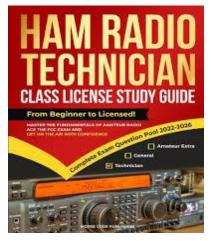




Gavin (KI7IHE) presenting Electronic and Electrical Components. File Photo.



Lance (KA7J) presenting Practical Circuits. File Photo.



## Some Different Stuff



Antennas Galore. Is this cool or what?



Vintage early day ways to hide your antennas



# Rainbow Canyons Amateur Radio Club Ham Radio Gear Swap Meet and Go Kit Challenge





### FCC Initiates Broad Inquiry on Rules to Delete or Amend

In a Public Notice titled "In Re: Delete, Delete, Delete," issued on March 12, 2025, the FCC is soliciting public input on any FCC rules in any service that members of the public believe should be deleted or modified "for the purpose of alleviating unnecessary regulatory burdens." This is the latest in a series of similar proceedings going back to 1996, when the Communications Act was amended to require the FCC to periodically review its rules.

ARRL, through its Executive Committee and FCC Counsel, is conducting a review of the provisions in Part 97 and other related rules that apply to radio amateurs. ARRL is also soliciting feedback from its members. Rules identified as outmoded, obsolete, or that for other reasons should be repealed or modified, will be included in ARRL's filing to be submitted no later than the FCC deadline of April 11, 2025. The deadline for filing reply comments is April 28, 2025. It is expected that the Commission will incorporate suggestions that it decides worthy of its consideration in a future Notice of Proposed Rulemaking (NPRM) that could be issued later this year. There will then be an opportunity for public comment on the specific rules that the Commission proposes for deletion or modification.

A PDF of the FCC Public Notice is available here:

https://docs.fcc.gov/public/attachments/DA-25-219A1.pdf.

### **ARRL Ham Radio Open House**



Momentum is building for ARRL's Ham Radio Open House — an amateur radio event for clubs to put their most technological foot forward and show the public the true modern state of amateur radio. The events will be held in April, on or close to World Amateur Radio Day (WARD) on April 18, across the United States. This year's WARD commemorates 100 years of the International Amateur Radio Union (IARU).

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The participation goal is 50 clubs from 50 states, but the more the merrier. ARRL is working with Ham Radio Science Citizen Investigation (HamSCI) and SciStarter to promote the event as part of April, which is Citizen Science Month.

### **ARRL Ham Radio Open House**

#### Continued from page 15

"We've had a lot of clubs express interest and commitment to be a part of Ham Radio Open House," said ARRL Public Relations and Outreach Manager Sierra Harrop, W5DX. "Thanks to some great volunteer outreach efforts, clubs are seeing the value of showing off the true current state of amateur radio," she said. Many other clubs in overlapping hobbies are engaged. Several astronomy clubs have agreed to partner with local ham clubs to co-host the event.

Plan your Ham Radio Open House in April using the resources and tips at www.arrl.org/worldamateur-radio-day. End.



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RCARC will participate this year on June 28 and 29, 2025. We will be broadcasting from Three Peaks Recreational Park in the pavilion.

The park is located on Mid-Valley Road approximately 3 to 4 miles West of Lund Highway.

#### See Google Maps for directions



# World Amateur Radio Day



Every April 18, radio amateurs worldwide take to the airwaves in celebration of World Amateur Radio Day. It was on this day in 1925 that the International Amateur Radio Union was formed in Paris. Amateur Radio experimenters were the first to discover that the short-wave spectrum — far from being a wasteland could support worldwide propagation. In the rush to use these shorter wavelengths, Amateur Radio was "in grave danger of being pushed aside," the IARU's history has noted. Amateur Radio pioneers met in Paris in 1925 and created the IARU to support Amateur Radio worldwide.

Just two years later, at the International Radiotelegraph Conference, Amateur Radio gained the allocations still recognized today - 160, 80, 40, 20, and 10 meters. Since its founding, the IARU has worked tirelessly to defend and expand the frequency allocations for Amateur Radio. Thanks to the support of enlightened administrations in every part of the globe, radio amateurs are now able to experiment and communicate in frequency bands strategically located throughout the radio spectrum. From the 25 countries that formed the IARU in 1925, the IARU has grown to include 160 member-societies in three regions. IARU Region 1 includes Europe, Africa, the Middle East, and Northern Asia.

Continued on page 18

**Park Entrance** 

# The World's Largest Log-Periodic Antenna

Here are some snapshots of the Huge Log Periodic Antenna at the Vatican in Rome. Besides working DX, this must be the Pope's Direct Line to God himself......!! Basic size is an 18 element Log Periodic on a 150' boom that tunes from 3 to 16 MHZ. Enjoy.





**Continued next column** 



# **World Amateur Radio Day**

#### Continued from page16

Region 2 covers the Americas, and Region 3 is comprised of Australia, New Zealand, the Pacific Island nations, and most of Asia. The International Telecommunication Union (ITU) has recognized the IARU as representing the interests of Amateur Radio.

Today, Amateur Radio is more popular than ever, with more than 3,000,000 licensed operators!

World Amateur Radio Day is the day when IARU Member-Societies can show our capabilities to the public and enjoy global friendship with other Amateurs worldwide.

#### World Amateur Radio Day 2025

IARU is very pleased to announce the theme of: "*Entering the Next Century of Amateur Radio Communications & Innovation*".

IARU is celebrating its centenary in 2025. Since its founding in Paris, France, IARU has worked tirelessly to promote innovation in amateur radio and to encourage the growth of the service in communities throughout the world.

IARU has represented the Amateur Services at international and regional regulatory bodies by relying on our volunteers who come from many countries and communities. IARU has been a sector member of the ITU since 1932 and the work of our volunteers has continued since that date with unmatched success, as was highlighted with the accomplishments at WRC-23.

During our centenary year, we should take time to reflect on the remarkable achievements of radio amateurs over the last 100 years. While the Amateur Services have been in operation for over a century, 1924 was the first year that intercontinental amateur communication became more or less commonplace. Since that time radio amateurs have made unparalleled advances in technology related to the Amateur Services that play a critical role today in sustaining world-wide communications and allow us to respond to global emergencies.

World Amateur Radio Day is an opportunity to reflect on our achievements since 1924.

We should celebrate our diverse community and the advances and innovations we have made as we look forward to celebrating the IARU centenary next year. End.





#### **Big Bear Ham Escape, ARRL Orange Section Convention**

HAMFEST/CONVENTION

04/25/2025

Start Date: 04/25/2025 End Date: 04/27/2025 Location: Holiday Inn Resort 40650 Village Drive Big Bear Lake, CA 92315 Website: http://BigBearHamEscape.com Sponsor: Activate Big Bear, LLC Type: ARRL Convention Talk-In: Public Contact: Dede Hermon , K6DDZ Activate Big Bear, LLC PO Box 2849 Big Bear Lake, CA 92315 Phone: 909 683-3231 Email: events@activatebigbear.com



Big Bear Lake California

# Drive-on Antenna Mast Mount

Craig LaBarge, WB3GCK

Telescoping fiberglass poles have become very popular as portable antenna supports. Here's a simple and inexpensive mount you can build in less than an hour using materials you can find at most hardware stores.

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## **Drive-on Antenna Mast**

#### **Continued from Page 19**

have used variations of this mount with telescoping poles to support lightweight vertical wires and dipoles for ARRL Field Day and Parks on the Air (POTA) activations. Used with a lightweight twinlead J-pole, it has also come in handy for VHF and UHF operations during ARES events.

#### Construction



Remove the end cap of your pole and measure the inside diameter of the bottom section. You'll need this measurement to determine the size of the flange and pipe you need to buy. The pole on the right is shown with the end cap in place.

#### Step One

Before purchasing the plumbing flange and pipe, remove the end cap from the bottom of your antenna mast and measure the inside diameter of the pole (see (1)). When selecting a pipe, measure the outside diameter of the pipe to ensure it will fit inside the bottom section of the antenna mast. Also, double check to ensure that the flathead machine screws you buy will work with the flange you selected.

Get the largest pipe that will fit easily inside the bottom section of the pole. If it's a little loose and wobbly, you can wrap some layers of duct tape around the pipe for a more snug fit. This can also prevent damage to the pole in windy conditions.

For example, I have a 20-foot pole that needs a 34-inch pipe. For my 28-foot and 31-foot poles, I need 1-inch and 1-34-inch pipes, respectively. To be safe, double-check the dimensions of the pole you have before heading off to the hardware store.

#### Step Two

Place the flange at one end of the board and use it as a template to mark the locations of the holes (see (2)).

#### Step Three

Drill four holes at the marked locations. Use a drill bit slightly larger than the flathead machine screws.

The holes in the board's underside need to be countersunk (see (3)), so the board will lay flat on the ground when in use. To do this, you can use a countersinking bit if you have one. Otherwise you can use a ½-inch drill bit to taper the holes just enough so that the screw heads will be flush with the surface of the board.

Continues on following page.

#### **Tools and Materials**

Note: The materials listed are what I used for my 31-foot antenna mast. The sizes of the floor flange and steel pipe will depend on the specific telescoping pole you have. (See text for further information.)

- 1-¼ inch plumbing floor flange
- 18-inch length of 1-¼ inch threaded steel pipe
- (4) ¼-20 x 1-½-inch flathead machine screws
- (4) ¼-20 nuts
- (4) ¼-inch flat washers
- (4) ¼-inch lock washers
- 18 to 24-inch length of 1 × 8 lumber (I used a scrap piece of maple. A piece of 1 × 6 lumber would also work)
- Drill with a 5/16-inch drill bit
- Countersink drill bit (you can also use a ½-inch drill bit for countersinking)
- Screwdriver
- ¥15-inch wrench
- Duct tape (optional)
- A fiberglass telescoping pole that has a removable end cap.



Place the flange at the end of the board and use it as a template for marking the hole locations.



Drill the four holes for the four flathead machine screws. On the bottom side of the board, countersink the holes, so the screw heads are flush with the surface of the board.

#### Step Four

Insert the four machine screws through the bottom of the board. Place the flange over the screws on the top side of the board. Use a flat washer, lock washer, and hex nut on each screw and tighten (see ④).

This completes the assembly.

#### Using the Mount

Position the mount on the ground behind the tire of your vehicle. Carefully back your vehicle onto the mount, ensuring that the tire is completely on the board.

Insert the pipe into the flange (see (5)). Remove the end cap and fully extend the pole. Place the pole over the pipe (see (6)), and you're ready to go.

To remove the pole, lift it off of the pipe and set it on the ground. Collapse the pole and reattach the end cap.



Remove the end cap from your pole and lower it onto the pipe.

You may be able to adapt the mount to accommodate different sized poles. For example, I built my mount using a 1-¼ inch flange for use with my 31-foot pole. Using a 1-¼ inch to 1-inch pipe reducer with a 1-inch pipe (see (7)), I can also use the mount with my 28-foot pole.

TIP This mount works with lightweight, fiberglass poles. If you need to support something heavier, like a steel mast, you may need something more robust.

#### Photos by the author.

Craig LaBarge, WB3GCK, was first licensed in 1974 after serving as a Radioman in the US Navy. He retired after a career in engineering and enjoys operating QRP while portable. Craig is also active with his local ARES-RACES organization. He can be reached at wb3gck@arrl.net.



Insert the machine screws through the bottom of the board, and securely fasten the flange on the top of the board with flat washers, lock washers, and hex nuts.



Once your vehicle's tire is on the board, screw the pipe into the flange.



You may be able to use a reducer to use your mount with smaller diameter pipes. The reducer shown is used to adapt a 1-inch pipe to a 1-14 inch flange.