

RAINBOW CANYONS AMATEUR RADIO CLUB NEWSLETTER



Club Website: www.rcarc.info Number 8 – Vol. 2 February 2026

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.

2026 Club Officer's

President:

Fred Govedich
KI7TPD
1-435-559-2682

fred.govedich@gmail.com

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Ron Shelley
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1-623-261-6555

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CQ, CQ, Happy Valentines Day
Everyone



Presidents Message

Dear Fellow Amateur Radio Operators,

We are off to a good start for 2026! Winter Field Day was a lot of fun! We may not have had a lot of contacts but part of that was the nasty winter storm and bad weather hitting most of the US. Overall, it went very well with us using battery power and portable vertical antennas. Even though it started out with snow the weather ended up being OK, but very cold so we were glad that we moved into the county garage.

This year we made 138 contacts (108 phone, 29 CW and 1 digital) and Brody (K7VXV) was our top phone operator (and really excited to get Hawaii again!) and Ben N7MZZ came in second with 26 CW contacts.

We made contacts on 40, 20, 15, 10 and 2 meters with 49 sections represented covering 39 states.

[Continued on Page 2](#)

RCARC Club Nets:

7 a.m. Breakfast Net - Monday – Saturday – 146.760.
12:30 p.m. Daily – Utah Beehive Net On 7.272.
8 pm. Wednesday – Panguitch Net – 147.160.
7:30 p.m. Thursday – Morse Code Net- This is a Zoom Meeting.
8:00 p.m. Thursday's (Mtn Time) – Western Digital Net. Using FLDIGI, FLMSG AND FLAMP – 3.581 +, 1500/MFSK32.
9:00 p.m. Daily – Friendship Net – 146.760.
11 am. Saturdays (Mtn. Time) QCWA – 160 Net, Utah Chapter, 12 pm. Freq. 7.272.
8 pm. Sunday's – New Harmony Net – Bumblebee Repeater. – 146.680.
7 pm Sunday's Southern Utah 2 Meter SSB Roundtable at 7 pm on 144.250 MHz

Local Repeaters:

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

Iron Mountain

146.760 MHz – Tone 123.0 Hz
146.980 MHz – Tone 100.0 Hz
448.800 MHz – Tone 100.0 Hz connected to Dutton.
449.500 MHz – Tone 100.0 Hz – Off Air
448.400 MHz -- Tone 100.0/FM & DMR

Bumblebee/New Harmony:

146.680 MHz – Tone 100.0 Hz

[Continued page 2](#)

Save The Date

February 10, 2026

RCARC Club Meeting.

7:00 pm. Cedar City Senior Center,
489 E. 200 South. Presentation:
Amateur Radio Television. Russ
(N7BO) and Brant (KJ7LTQ).

March 10, 2026

RCARC Club Meeting.

7:00 pm. Cedar City Senior Center,
489 E. 200 South. Presentation:
TBD

April 14, 2026

RCARC Club Meeting.

7:00 pm. Cedar City Senior Center,
489 E. 200 South. Presentation:
TBD

May 12, 2026

RCARC Club Meeting.

7:00 pm. Cedar City Senior Center,
489 E. 200 South. Presentation:
TBD

President's Message Continued from page 1.

We also had emails sent and received using Winlink. Thank you everyone who participated this year! We will be starting a technician class in March so let potential students know!

I encourage you all to play, share, and have fun on the radio! We all have strengths and weaknesses but we are all interested in radio communications and can benefit from each other. 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)

Local Repeaters continued.

From page 1

Rowberry:

449.925 MHz – Tone 100.0 VHF

Remote

Dutton:

147.160 MHz + Tone 100.0 Hz.

Winlink- Gateways

Local VHF – K7HDX-10 – 145.030

Portable VHF – K7HDX –11 – 145.050

Local VHF – KG7VEI -- 145.070

RCARC Monthly Breakfast

Please come 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 February**

Happy Valentines Day

Breakfast & Friendship Net Awards

February 2026

Breakfast Net		Friendship Net		
First Place	W0KLH - Kevin	First Place	N7SND - Larry	Third Place
K2MFK - Kevin		K7HDX - Ron	W6DLW - Dennis	KK7FFL - Maddie
KG7PBX - Linda	Second Place	N7WWB - Darlene	KI7LUM - Bruce	
KI7TPD - Fred	N7SND - Larry	K7NKH - Lee	WA7GVL - Paul	
KI7WEX - Bonnie		KA7J - Lance	Second Place	
K7ZI - Dick	Third Place	KB7QXB - Shirleen	N7BO - Russ	
KB7QXB - Shirleen	N7SIY - Sylvia	KI7LVB - Tammy	W0KLH - Kevin	
KE6ZIM - Johnny		KI7LVC - Tim	N7SIY - Sylvia	
N7BO - Russ		KI7TPD - Fred		
WA7GVL - Paul		KI7WEX - Bonnie		

Rainbow Canyons Amateur Radio Club
Treasurer Report Jan 13, 2026

Bank balance Dec 1, 2025	\$2,696.67
Membership - KF7GPZ & KF7WIY (4 years family), KD6VGL	95.00
Expenses	
Ck #203 Ken Rickter - Meat/Cheese Xmas Party	-133.92
Ck #205 Sylvia Clements - xmas antenna giveaway	- 135.00
Rocky mountain Power (98 repeater elec exp)	- 11.77
Bank Balance Dec 31, 2025	\$2,510.98
Jan Outstanding	
Deposit - Check order credit	+ 36.21
Membership	+ 370.00
KC7IHE, NL7EL, KK7FLB, K7AK, KG7VVN, W6DLW (Family), K7HDX, N7WWB, KA7J, W0KLH, K2MFK, N7SND, WB7UOZ KC6WFI, KD6HYH, N7MZZ, KM7BYA, KI7LUM (family), KN7RS, KD6ZJR, N7BO, KB7QXB, NR7T, K7ZI, N6NQX, K7NKH, KI7LVB, KI7LVC	
Expenses - Rocky Mountain Power (due 1/19/26)	-11.31
Funds Available after Jan 19, 2026	\$2,605.88
Submitted by Linda Shokrian KG7PBX 2025 RCARC Treasurer 435-867-5914	

RCARC Upcoming Events

February 10, 2026 RCARC Club Meeting. 7:00 pm. Cedar City Senior Center, 489 E. 200 S. Northside of building, Lower level. **Presentation: Amateur Radio Television – Russ (N7BO) and Brant (KJ7LTQ).**

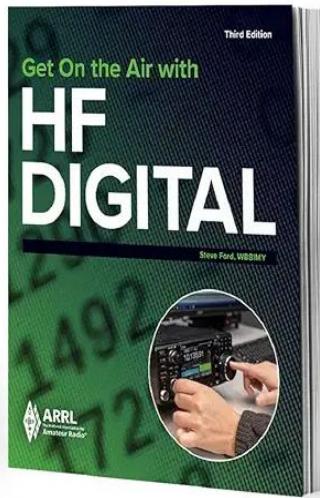
March 10, 2026 RCARC Club Meeting. 7:00 pm. Cedar City Senior Center, 489 E. 200 S. Northside of building, Lower level. **Presentation: To Be Determined.**

April 14, 2026 RCARC Club Meeting. 7:00 pm. Cedar City Senior Center, 489 E. 200 S. Northside of building, Lower level. **Presentation: To Be Determined.**

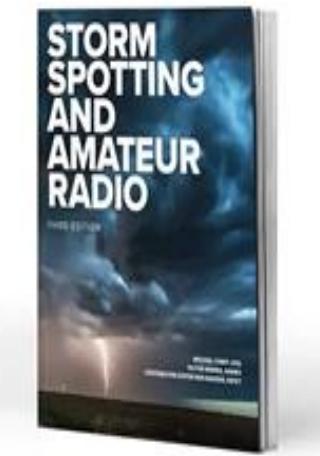
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RCARC Book Giveaway. Books are donated by Linda Shokrian (KG7PBX). The Book below will be given away at the February 10, 2026 club meeting



The Book below was given away to Tim Perry (WB7UOZ) at the January 13, 2026 meeting



Congratulations Tim
See Picture on Page 12

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/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

What Really Happened to Emelia Earhart?

Check out the URL on page 13 to access the YouTube Video.

A very informative video about her last flight and Ham Radio.

Thanks to Johnny Rauzi (K7ZZQ) for sharing this video.

Tips



Buzz's February Safety Tip(s)



The Ham Ninja's (Chris Clarborne – N1CLC)

Top 10 Safety Tips

Summits On the Air

<https://www.n1clc.com/2025/12/the-ham-ninjas-top-10-safety-tips.html>

After surviving 880+ SOTA summit activations, I wanted to share what I've learned from my experience and from others about how to lower the risk of injury and death while doing this outdoor hobby. In 2025, I published my "[Top 10 safety Tips](#)" in a weekly email series for SOTA (Summits On the AIR) operators. Later, I was asked to present my "Top 10 Safety Tips" to various Ham Clubs. This article puts all of together in one place with a little more detail. I hope you find some value here for you and your family.

Quick Links

[The 10 Essentials \(The Gear\)](#)

[Reducing Risk - Not Eliminating It](#)

[Tip #1 - Bring Plenty Of Water](#)

[Tip #2 Know Your Limits](#)

[Tip #3 - Have a First Aid Kit and The Training To Go With](#)

[Tip #4 - Check the Weather](#)

[Tip #5 - Have Backup EmComs](#)

[Tip #6 - Be Able To Communicate Your Location](#)

[Tip #7 - Tell People Where You Are Going](#)

[Tip #8 - Reduce Your Navigation Risk](#)

[Tip #9 - Layer for Safety and Comfort](#)

[Tip #10 - Avoid Sky Sparks](#)

[Bonus Tip #11! - Site Safety & Respect](#)

[Continue Learning & Teach Others](#)

Use the Control + Click on the URL above to Access the entire verbiage for each essential listed



Continued next column



Reminder RCARC 2026 Dues are Due

Hello everyone, Buzz here with a reminder that the club dues are coming due at the end of this month

For information in regards to RCARC dues contact Linda Shokrian (KG7PBX) at (435-867-5914 or fill out and submit the dues form.

RCARC CLUB DUES ARE NOW DUE

Rainbow Canyons Amateur Radio Club (RCARC)

Please fill out the below form with the applicable information. Check the individual or family membership. If family members are hams, please add their name and call signs in the space provided.

Name		
Call Sign		
Address		
City, Street and Zip Code.		
Phone		
E-mail		
Dues	\$ 15.00 Individual	\$ 20.00 Family
Family	Name: Name: Name: Name:	Call Sign: Call Sign: Call Sign: Call Sign:

Please submit payment to:

Linda Shokrian (KG7PBX) at 2438 W. Carmel Canyon Drive. Cedar City, Utah 84720.

Please write your call sign on your check. Make check payable to RCARC.



**Yuma Hamfest
and Southern Division Convention
February 17-28, 2026**

Yuma County Fairgrounds - Arizona

Get more information at <https://yumahamfest.com>



Vol. 7

FEBRUARY, 1926

No. 8

UNEXPLORED RADIO

By HUGO GERNNSBACK

ALTHOUGH Radio, as we understand that term, has been in continuous use some twenty years or more, starting with the old days of wireless, there are still many things—and as a matter of fact the majority of them—that are unexplored and that present a book with seven seals to even our best radio research scientists. The average radio man probably does not like to admit this, but if you press him hard enough and begin to ask questions, he will soon capitulate and admit that what he does not know about radio would fill a great many volumes.

While many branches of the radio art have been reduced to mathematics and to an exact science, still the greater part of the art is uncharted, even in mathematics, and most of it is based upon experimental and hit-or-miss methods. It may come as a surprise to many to learn that even such a simple thing as a double-layer coil, used in many radio sets, can not be calculated mathematically. It is a case of trying out by experiment just which coil works best.

But leaving alone mathematics, the attempt to get a correct picture of many phases in radio is a great task in itself, and we immediately come into uncharted seas. Take the radio waves of which your radio scientists speak so glibly. What we do not know about radio waves would fill whole libraries. We know that there is probably such a thing as a wave or waves that link a transmitting station to your receiver. But just what this wave consists of, no one has the slightest idea.

It was at first thought that a radio wave leaves the aerial of the transmitting station in a spherical shape, as if you had one soap bubble within another and multiplied them indefinitely. In other words, the waves were supposed to go in all directions, up, down, sideways, reaching into the sky and far deep into the bowels of the earth. Whether this picture is correct or not we do not know even today. However, we begin to doubt it.

Dr. Alexanderson, in his researches, tends to show that radio waves can not possibly have this shape. As a matter of fact, he insists that they tend to twist in a corkscrew fashion.

Furthermore, if we consider the Marconi beam projector, by which the waves are sent out in only one direction, over a narrow beam, it would seem that the spherical radio wave theory no longer could hold true. What shape a beam-wave assumes perhaps no radio scientist would venture to accurately predict. Which brings us to the question, "Is there such a thing as a radio wave at all?" and "Is it necessary to imagine that there is a wave?"

Nikola Tesla is able to explain all radio transmission without any wave formation, and the researches of Dr. Rogers, of underground radio fame, seem to get along very well without the wave idea. According to Tesla, the transmitter is one plate of a condenser while the receiving aerial forms the other plate. Electric surges take place between these two, mostly through the ground, the same as electric surges take place in an ordinary condenser. And when you

ask Tesla "How about an airship or airplane getting radio signals?" he will answer your question satisfactorily by telling you that the airplane merely constitutes another plate of the condenser, and that the entire radio transmission is based only upon a difference in potential, and not on an orthodox wave formation, as we have contended right along. All of which goes to show how little we really know about it.

We know that something happens between the transmitting station and the receiving station, but what this something is we know mighty little about.

Coming closer home and taking a peek into our receiving sets, we find a lot of interesting points to speculate upon in our ignorance as to radio matters. In the regulation radio set we have the radio frequency currents as they come in over the aerial, also called high frequency currents, and then we have another set of currents, audio frequency currents or low frequency audible currents. The average radio engineer will tell you that there is no connection between the two; but the careful radio set builder knows better, and knows that there is some interaction between the radio and the audio currents, and that unless the set is built right the audio currents will kill the radio currents, and vice versa.

Exactly what the interaction is, no one seems to know. But the experimenter does know that, unless the set is built right, it emits nothing but shrieks and howls. We do not even know the effects of radio currents upon those bodies which we call insulators. Once upon a time it was thought that certain electrical insulators were also insulators for radio frequency currents. We know something more about it today and know that electrical insulators sometimes are good conductors for radio frequency currents. But the surface has as yet not been scratched, and what we believe is true today may be entirely wrong tomorrow.

Some day some one is going to invent a new sort of lens by which it will be possible to look into a radio set and actually see the radio frequency currents, just as you can see the aurora on a high frequency Tesla coil, with its weird glow in total darkness. When that happens, whoever the investigator is, he will see weird things. He probably will see the precious currents oozing out in fine streams from the edges and points of the condensers and other sharp points or edges throughout the receiver; that is, providing that the radio frequency currents act as other high frequency currents do. If they do not, the picture may be reversed. My guess, however, is that any sharp point along the radio frequency current's path just decreases the efficiency of the set by so much.

I might go on indefinitely, pointing out and asking questions about such subjects as fading, dead spots, effect of atmosphere on radio transmission, and dozens of others. The list may be extended considerably without finding a satisfactory answer to any of dozens of different questions.

Utah VHF Society Dues are Due

If you wish to renew or join follow the below described methods or go to:

http://utahvhfs.org/uvhfs_join_renew.html

and follow the instruction there.

If you wish to mail a check, dues may be sent to:

Utah VHF Society
P.O. Box 482
Bountiful, UT 84011-0482

The PayPal account address for the Utah VHF Society is:

paypal@utahvhfs.org

- **IMPORTANT:** Please note that the above email address is pronounced "Pay Pal at Utah Vee Aiche Eff Ess dot Org"
- **PLEASE** check the spelling of the email address to which you are sending your payment and make sure that it is correct and has the word "UTAH" in it - and then check again before you send your payment!

Please note that this is not a link, but the address to which you should send your payment after you log into PayPal. At the moment, we don't have a "shopping cart" set up for PayPal - sorry.

If you have a PayPal account, follow these easy steps:

Log into your PayPal account

1. Click on the "Send Money" tab
2. Where it says "To", enter the Utah VHF Society's PayPal address: paypal@utahvhfs.org
3. The preferred way to pay is via the Hamclubonline web site - link: If you haven't been to this site and created an account, see the sidebar to the right.
 1. To minimize the fees associated with online payment, we require that you renew for at least two years at a time.

4. Select "Purchase" and select either "Goods" or "Services". Please do not select anything under the "Personal" tab.
5. Hit the "Continue" button. This will take you to a new screen.
6. Select your method of payment and hit the "Send Money" button
7. **Thank you for your support!**

If you *don't* have PayPal, don't worry - you can still pay by check/mail to the address above, or in person at the next swap meet.

When you pay via PayPal, please include the following:

- Under "Subject" please put "Utah VHF Society Dues for <your name>" - remembering to put your name in there.
- Under "Message" please include:
 - **Your name, address and phone number.** Also note if you do **NOT** want your name, address and/or phone number to appear in the Utah VHF Society booklet.
 - **Your callsign** - if you have one.
 - Whether or not you would like to be included on the net roster. If you don't say "yes" we'll assume that you don't check in on that net regularly.
 - Indicate whether or not you are a member of ARRL.

The Utah VHF Society is a non-profit (IRS501c3) organization founded in 1968 to promote the installation and use of VHF amateur repeaters throughout Utah. The Society also provides financial support for aligned repeaters and serves as frequency coordinator for the state. End.



RCARC January Club Membership Meeting and NWS Skywarn Presentation

At the January 13, 2026 RCARC Club Membership Meeting the Salt Lake City (SLC) National Weather Service (NWS) presented information about their Skywarn Program.

Skywarn is a program of the **National Weather Service (NWS)** in the United States that collects reports of localized severe weather. Its mission is to provide timely and accurate information to forecasters and local emergency managers to improve weather warnings and enhance public safety. The program consists of a network of trained storm spotters who observe weather conditions and report them to the NWS, helping to fill the gap between Radar data and ground observations. Since its inception in 1965, Skywarn has grown to include over **300,000 active trained spotters** who play a crucial role in monitoring severe thunderstorms, tornadoes, and other hazardous weather events.

RCARC would like to thank Mike Seaman and Lisa Verzella for their time in presenting this very timely and informative program to over 34 of our club members.

If you think you might be interested in becoming a Weather Service Spotter. There are a couple of versions of the slide presentation available on the NWS Website <https://www.weather.gov/slc/spotter>. Click on the "becoming a spotter" tab and click on the various links. Or access the link below to get further information.



National Weather Service Spotter Info.



Continued next column



Members arriving for the meeting socializing



Ron (K7HDX) setting up the Google Meets Program which allows us to interface with SLC/NWS.



A great Big Happy Birthday to Fred (KI7TPD) and Tammy (KI7LVB)

Continued on page 12

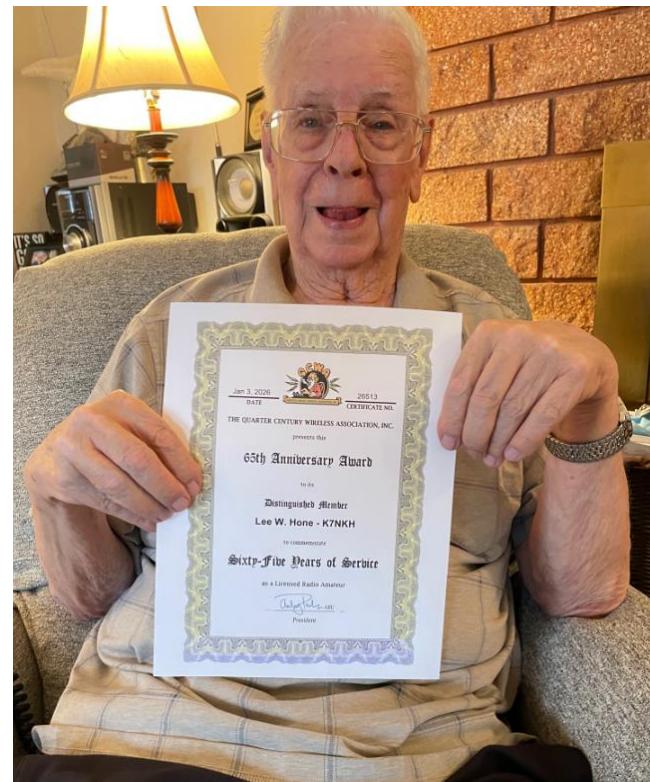
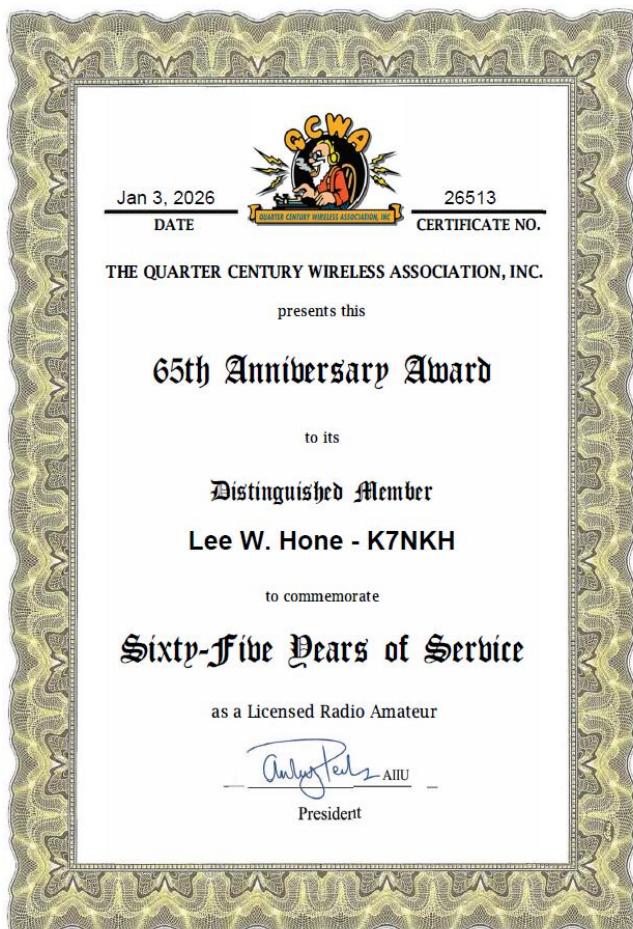
Ham Radio Terminology Word Scramble

See page 18 for Word Scramble Answers

#	Scramble	Hint	Word
1.	RMACTMEE	Test instrument	
2.	HUPTOTCAA	Phone calls	
3.	RDEXULEP	Use a single antenna	
4.	FSEU	Thin metal strip	
5.	TLEIRF	Signal to pass through	
6.	UTLREIMTEM	Test instrument	
7.	AKHCS	Your place	
8.	SSO	Emergency	
9.	LAPTSTER	Type of Interference	
10.	NAIETRSCVER	Combined in one unit	

Congratulations Are in Order

Lee Hone (K7NKH) received recognition from the Quarter Century Wireless Association for being a ham for 65 years.



Congratulations
Lee
Well Done

Both Articles are a reprint from
the RCARC February 2021
Newsletter

Ker-chunking

The practice of briefly keying a microphone (hitting the push-to-talk/PTT button) to see if a repeater responds with a courtesy tone is commonly known as ker-chunking (or ker-chunking) in ham-speak.



Don't do it! Don't be a kerchunker, even though it's often a quick and convenient way of verifying that you can hit a repeater. For one, it is technically illegal. All transmissions must be identified (with rare exceptions).

Just because you hear it happening and the probability of getting caught is very low doesn't make it right.

However, the main reason not to key a mic without identifying yourself is that it is both annoying and disruptive. It's bad etiquette and almost always discouraged in published guidelines by the repeater owner.

If you really want to test your connection to a repeater, take the extra second to speak your call sign into the mic. Or say "testing", followed by your call sign. Or ID and ask for a signal report, which will give you even more info than just to hear a courtesy tone.

On a related note, if you want to test transmit power or SWR or something like that, consider using a simplex frequency to avoid tying up a repeater.

Where did the term Roger, or Roger, Roger come from?

Roger that or usually simply Roger (nowadays also often spelled in lower case) is a phrase used in aviation and the military to confirm that a message has been received and understood. It was popularized by radio transmissions of NASA's Apollo missions and by military fiction and is now sometimes used jokingly in everyday contexts. But how did it come into existence?

It all started with the big bang, then the dinosaurs... Fast forward a little bit, in the 1940s, the American military and British RAF used a spelling alphabet different from the current well-known Alfa, Bravo, Charlie. If you don't know what a spelling alphabet is: It is a set of easily distinguishable names for the letters of the alphabet used in conditions where misunderstandings (such as mistaking "M" for "N") could be fatal.

The letter "R" was used as an abbreviation for "received" back in the times when messages were sent via telegraphy (in Morse code), and the practice of confirming that a transmission was received by sending an "R" back was extended to spoken radio communication at the advent of two-way radio during World War II.

Continued on page 20

RCARC January Club Membership Meeting and NWS Skywarn Presentation

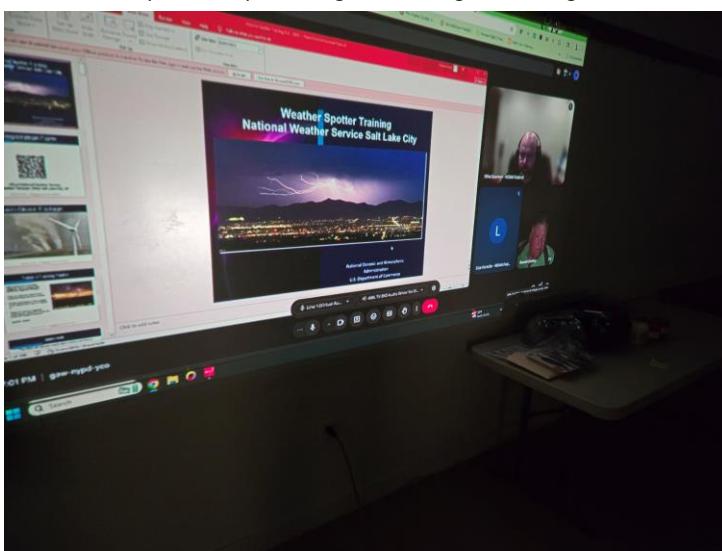
Continued from page 9



Fred (KI7TPD) bringing the meeting to order.



Fred (KI7TPD) leading the Pledge of Allegiance.

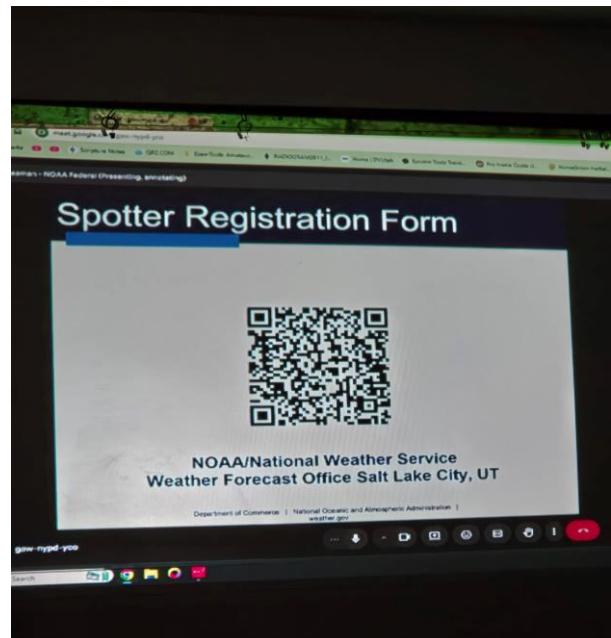


SLC/NWS Skywarn presentation underway.

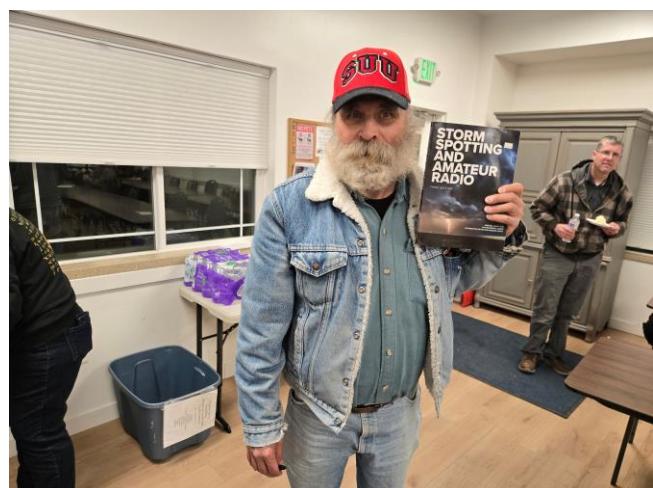
Continued next column



Members sitting in the dark watching and listening to the Skywarn Presentation.



Use your QRZ reader to get more information on the NWS Skywarn program.



Tim Perry (WB7UOZ) was the book winner. "Storm Spotting and Amateur Radio"

DIY Project

Adding a Counterpoise to an HT

Thought you might like this helpful fix for your HT to increase its performance.

This simple addition of a counterpoise can be used on many of the older HTs or newer ones as long as there are metal screws connecting to the ground side of the antenna.

I did some studying on how to get an old Radio shack HT model HTX-420 to TX and RX better. I added a counterpoise for the HT antenna and now I can at least get into and talk on the local repeater from my home. Before the addition of the counterpoise, to the HT, I could key the repeater but no audio. I did some research and decided to try the counterpoise. A counterpoise is a conductor used as a substitute for ground in an antenna system.

This is a very simple fix to help the HT to TX and RX better. You need a small connector (one with the hole in it) and about 19" of small wire (wire from an old discarded wall charger works great or use most any wire you have laying around). [See typical connectors here](#). Strip a small amount from the end of the wire, and insert into the connector...crimping the connector to the wire gives a good electrical connection.

Remove the antenna. Next take a multi-meter and with one probe on the ground of the antenna and check for a screw in the chassis that has continuity with the antenna ground. Connect the wire to this screw. Make sure to test continuity after securing the wire/connector with the screw. [See pictures next column](#).

Continued next column



Photo above shows counterpoise wire connected to a screw on the back of the HT.



Checking continuity between screw and ground side of antenna. That's all there is to it. 73, K5LUO

What really Happened to Amelia Earhart

This is a very informative YouTube Video about her last flight and Ham Radio. See the URL below to access the video.

There will be some commercials but you can select the skip button to resume.



<https://www.youtube.com/watch?v=zTDFhWWPZ4Q>

Ham Radio Word Find

SSB vs. FM Communications

F	T	X	H	E	F	F	I	C	I	E	N	C	Y	M	
A	B	A	N	D	W	I	D	T	H	Z	P	E	E	R	
U	M	X	A	T	F	C	R	R	X	Y	M	O	D	Z	
S	Z	Q	A	P	W	E	T	H	K	Y	S	V	Y	T	
D	N	E	I	I	M	V	W	I	Q	B	T	G	K	E	U
H	Y	V	G	I	S	F	T	H	T	I	B	J	P	O	
E	X	M	E	B	E	F	U	L	Z	R	E	S	P	A	
R	V	C	O	M	M	U	N	I	C	A	T	I	O	N	
I	E	R	T	M	P	U	O	V	M	L	E	A	P	E	
R	L	J	L	V	T	X	R	K	E	C	Z	C	Y	Q	
J	N	O	I	T	A	L	U	D	O	M	I	T	C	Q	
R	E	T	T	I	M	S	N	A	R	T	S	N	Y	Z	
C	H	N	O	I	S	S	I	M	S	N	A	R	T	X	
Z	U	P	C	A	W	D	P	P	L	A	N	G	I	S	
Y	T	I	L	A	U	Q	Z	P	S	X	W	C	A	L	

COMMUNICATION	MODULATION	TRANSMISSION	RECEIVER	TRANSMITTER
BANDWIDTH	QUALITY	EFFICIENCY	SIGNAL	CLARITY

FINANCIAL TRADERS RENEW PLEA FOR USE OF HF BANDS

Our top story, A group representing seven financial trading firms is pressing the US Federal Communications Commission to respond to their petition, submitted almost three years ago, asking for permanent allocation of HF frequencies for data transmissions.

The Shortwave Modernization Coalition is pressing the FCC for an answer to its petition, which was filed in the spring of 2023. The group is seeking the authorization to transmit on the bands between 2 MHz and 25 MHz under Part 90 of the FCC rules. A number of the bands being sought either include or are adjacent to amateur radio bands.

The coalition's original filing drew substantial opposition from amateur radio operators and the ARRL, citing the potential for interference. The ARRL said that in 2024, the IARU's monitoring system detected what was believed to be HF trading interference on the amateur portion of 20 meters.

The US Coast Guard also objected to the petition, saying additional traffic would raise the noise floor for everyone.

Last year, three of the firms were given FCC approval as experimental licensees. They were prohibited from charging fees or receiving payments for anything related to their on-the-air operations. The coalition believes that granting permanency will solidify their status in business and will not create interference, as feared, because the technology exists to locate open channels. End.



FCC READY TO ELIMINATE FOUR HAM-RELATED REGULATIONS

Four rules covering the amateur radio service in the United States are marked for elimination by the Federal Communications Commission unless the agency receives objections filed no later than the 2nd of January -- objections that it considers worthy of consideration. The FCC plans to otherwise remove the four rules, three of which it called "obsolete," and one that it says duplicates an existing provision.

The FCC published its intention in the Federal Register and identified the rules. They are provisions 97.27, 97.29, 97.315 (b)(2), considered out of date by the FCC. The fourth provision is 97.521 (b), which relates to Volunteer Examiner Coordinators.

The FCC has scheduled the removal of the four rules on the 10th of February. The agency's action is part of its broader 2025 initiative to remove regulations that it considers burdensome or no longer necessary.

To see each of the rules relevant to ham radio in depth, visit federalregister-dot-gov (federalregister.gov). There you will also find information on how to file a comment, if you wish to do so. End



AMATEUR RADIO ANTENNA LENGTH CHART

FREQUENCY (Mhz)	1/4λ (Feet)	1/2λ (Feet)	1λ (Feet)	1/2λ, Inv Vee 90° (Feet)
160 METERS	1.800	130' 0"	260' 0"	558' 4"
	1.850	126' 6"	253' 0"	543' 3"
	1.900	123' 2"	246' 4"	528' 11"
	2.000	117' 0"	234' 0"	502' 6"
80 METERS	3.500	66' 10"	133' 9"	287' 2"
	3.750	62' 5"	124' 10"	268' 0"
	3.900	60' 0"	120' 0"	257' 8"
	4.000	58' 6"	117' 0"	251' 3"
40 METERS	7.000	33' 5"	66' 10"	143' 7"
	7.150	32' 9"	65' 5"	140' 7"
	7.300	32' 1"	64' 1"	137' 8"
30 METERS	10.100	23' 2"	46' 4"	99' 6"
	10.150	23' 1"	46' 1"	99' 0"
20 METERS	14.000	16' 9"	33' 5"	71' 9"
	14.150	16' 6"	33' 1"	71' 0"
	14.300	16' 4"	32' 9"	70' 3"
	14.350	16' 4"	32' 7"	70' 0"
17 METERS	18.068	12' 11"	25' 11"	55' 7"
	18.168	12' 11"	25' 9"	55' 4"
15 METERS	21.000	11' 2"	22' 3"	47' 10"
	21.200	11' 0"	22' 1"	47' 5"
	21.450	10' 11"	21' 10"	46' 10"
12 METERS	24.890	9' 5"	18' 10"	40' 5"
	24.990	9' 4"	18' 9"	40' 3"
10 METERS	28.000	8' 4"	16' 9"	35' 11"
	28.500	8' 3"	16' 5"	35' 3"
	29.700	7' 11"	15' 9"	33' 10"
6 METERS	50.000	4' 8"	9' 4"	20' 1"
	54.000	4' 4"	8' 8"	18' 7"
2 METERS	144.000	1' 8"	3' 3"	7' 0"
	148.000	1' 7"	3' 2"	6' 9"
Antenna length calculations are based on the following formulas: 1/2 wave dipole (feet) = 468/frequency in MHz Full wave loop (feet) = 1030/frequency in MHz Inverted Vee at 1.5° degree included angle is 60% the length of 1/2 wave dipole				
Note: Cut wire slightly longer to allow for connecting insulation and grounding. Height above ground, nearby trees, trees, etc. will change tuning slightly.				
MILLENNIA ASTS				

Antenna length calculations are based on the following formulas:
1/2 wave dipole (feet) = 468/frequency in MHz
Full wave loop (feet) = 1030/frequency in MHz
Inverted Vee at 1.5° degree included angle is 60% the length of 1/2 wave dipole

Note:
Cut wire slightly longer to allow for connecting insulation and grounding.
Height above ground, nearby trees, trees, etc. will change tuning slightly.

MILLENNIA

ASTS



RCARC Winter Field Day 2026

This year's RCARC's Winter Field Day Operations was held at the Iron County Emergency Operations Center (EOC) facility at 1302 Kitty Hawk Drive between Bull Dog Road and Airport Road across from the Cedar City Animal Control Office.

Set up commenced at 9 am. on Saturday January 24, 2026 and Winter Field Day was underway at 12 pm. and continued for 24 hours until 12 pm. on Sunday January 25, 2026.

Field Day demonstrates ham radio's ability to work reliably under any conditions from almost any location and create an independent communications network.

Ham radio functions completely independent of the Internet or cell phone infrastructure, can interface with tablets or smartphones, and can be set up almost anywhere in minutes.

This year we operated as 5 Mike set up with call sign N7U.



Just off-loaded Fred (KI7TPD) vehicle radio equipment. Ron (K7HDX) assisting Brody (K7VXV) bring in the Comm Trailer.

Continued next column



Fred (KI7TPD) Kev in (K2MFK) and Johnny (KE6ZIM) setting up antenna and getting reports on tuning.



Fred (KI7TPD) Ventenna HF antenna used for the 10-meter radio operation.



Fred (KI7TPD) and Ben (N7MZZ) putting together another HF antenna.

Continued on page 19

Ham Radio Terminology Word Scramble on page 10 Answers

#	Word
1.	Ammeter
2.	Autopatch
3.	Duplexer
4.	Fuse
5.	Filter
6.	Multimeter
7.	Shack
8.	SOS
9.	Splatter
10.	Transceiver

LEVEL S4 SOLAR RADIATION STORM DISRUPTS HF COMMUNICATION

Our top story this week is the most severe solar radiation storm in more than 20 years. It began on Monday, January 19th and lasted through much of the week. The National Weather Service declared the storm to be at an S4 level - a degree of severity not seen since October of 2023. S4 is the second highest level of this type of storm.

The storm's severity, which exceeded that of the one in October of 2023, disrupted the HF bands, challenging ham radio operators, while creating spectacular auroral displays.

See (SPACE.COM, NATIONAL WEATHER SERVICE, LIVE SCIENCE).



US LAWMAKERS AGREE TO RESTORE VOA FUNDING

A bipartisan agreement among US lawmakers could restore the government's financial support of Voice of America, Radio Free Europe and other federally funded news services. Kent Peterson KCØDGY has that story.

US lawmakers in Washington, D.C., have reached a deal that would fund the Voice of America, giving its parent organization, the US Agency for Global Media, an estimated \$653 million. That figure is considerably lower than the annual \$860 million provided previously to the agency.

As described on the Radio World website, the funds would also pay for restoration of operations for Radio Free Europe/Radio Liberty and Radio Free Asia. A minimum of \$30 million is earmarked for medium- and shortwave programming by the Office of Cuba Broadcasting.

The deal is part of a larger spending bill, the National Security Department of State and Related Programs Appropriations Act. It has the support of both parties in Congress and its funding plan goes against the White House's executive order from last year which shut the international news services. Even if the measure receives final approval from the House and Senate, it will still require the president's signature.



RCARC Winter Field Day 2026

Continued from page 17



Brody (K7VXV) already making contacts on 20 meters.



George (AL7BX) working 10 meters



Fred (KI7TPD) Working 10 meters with Ben (N7MZZ) looking on.

Continued next column



Dennis (W6DLW) working 10 meters with Fred (KI7TPD) looking on and Bonnie (KI7WEX) on the background.



Austin (W1EPR) center background stopped by to say hello with Fred (KI7TPD), Shirleen (KB7QXB) and Russ (N7BO) gathered round.



Winter Field Day refreshment table set up. Thanks to Bonnie (KI7WEX), Terry West, Linda KG7PBX) and Darlene (N7WWB) for making this happen.

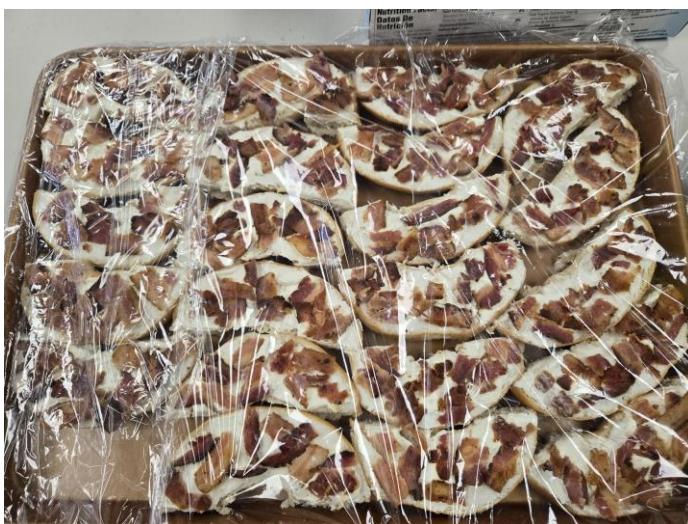
Continued on page 20

RCARC Winter Field Day 2026

Continued from page 19



Additional, WFD 2026 refreshments



Bagels with Cream Cheese and Bacon brought by Dick (K7ZI).



Where did the term Roger or Roger, come from? Continued from page 11

The phonetic alphabet used by the British and American military during the World War II was:

Able, Baker, Charlie, Dog, Easy, Fox, George, How, Item, Jig, King, Love, Mike, Nan, Oboe, Peter, Queen, Roger, Sugar, Tare, Uncle, Victor, William, X-ray, Yoke, Zebra

When a soldier or a radio operator said "Roger" after receiving a transmission, he was simply saying "R" for "received". The alphabet has changed since then, but the practice of replying to a message by saying "Roger" stuck.

It is just a coincidence that two-way radio became widespread during the relatively short period when the phonetic name of the letter "R" was "Roger". Before 1940, it used to be "Robert", and from 1956 on, it has been Romeo. Had the technology arrived a little bit earlier or later, we might as well have been saying "Robert that" or "Romeo that". End



Roger, Roger and Happy Valentine's Day

Winter Field Day 2026 Certificate of Participation

Winter Field Day 2026

Certificate of Participation

presented to Amateur Radio Station
N7U

for their active and invaluable participation during the 2026
Winter Field Day Event. The WFDA, gratefully thanks you for your effort and
recognizes your dedication to improving your operating skills,
which may be crucial during an emergency event.

Contacts Logged: **138**



Rainbow Canyons Amateur Radio Club



RCARC Winter Field Day 2026 Statistics

N7U's Contest Summary Report for WFD

Created by N3FJP's Winter Field Day Contest Log

Version 2.9.1 www.n3fjp.com

Total Contacts = 138

Total Points = 168

Operating Period: 2026/01/24 17:34 - 2026/01/25 18:29

Total op time (breaks > 30 min deducted): -34: -38: -45

Total op time (breaks > 60 min deducted): -30: -49: -47

Avg Qs/Hr. (breaks > 30 min deducted): -4.0

Total Contacts by Band and Mode:

Band	CW	Phone	Dig	Total	%
40	0	1	0	1	1
20	25	54	0	79	57
15	4	39	1	44	32
10	0	11	0	11	8
2	0	3	0	3	2
Total	29	108	1	138	100

Total QSOs Running = 0

Total QSOs Search and Pounce = 138

Total Contacts by Initials

Initials	Total	%
BRJ	67	49
BP	25	18
RS	16	12
RC	8	6
DW	7	5
FRG	7	5
BJ	4	3
GG	3	2
	1	1
Total 8		

Total Contacts by Operator

Operator	Total	%
K7VXV	71	51
N7MZZ	26	19
K7HDX	16	12
KI7TPD	7	5
N7BO	7	5
W6DLW	7	5
AL7BX	3	2
	1	1
Total 7		

**The Rainbow Canyons Amateur Radio Club (RCARC)
is Sponsoring an Amateur Radio**

Technician Class

Beginner Level for Ham Radio

Dates: Thursdays - March 5, 12, 19, 26 and April 2nd, 2026

with the test, Thursday April 9, 2026

Time: 6:00 pm - 9:00 pm

**Where: Cedar City Senior Center
489 E 200 South, Cedar City, UT 84720
Downstairs, entrance Northeast corner**

**Class Cost: Free
ARRL Test Fee \$15
FCC License Fee \$35**

Study Manual: Free Download

www.ad7fo.com/training.html

**Click on Amateur Licenses Technician Syllabus
(green button on left) to download. Please bring to class**



Contact to Register:

**Linda Shokrian KG7PBX
435-867-5914 or
email: Lgshokrian@gmail.com**