

Rainbow Canyons Amateur Radio Club Newsletter



Club Website: www.rcarc.info Number 8 – Vol. 6 – June 2026

Club Meeting Information

The RCARC Meets at 7:00 pm on the 2nd Tuesday of each month at the Cedar City Senior Center at 489 E. 200 S. Down stairs-North side of building.

2026 Club Officer's

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Happy Fathers Day



Presidents Message

Dear Fellow

Amateur Radio Operators,

Hope everyone is having a wonderful spring and that you are looking forward to all of the activities we have coming up in June. We have our club breakfast at IHOP on June 6th at 9:00am, our club meeting at 7:00pm on June 9th (bring your portable antennas, radios and power supplies for a show and tell), our annual swap meet June 13th will be starting at 9:00am with setup at 8:00am and of course we have Field Day on June 27-28th. We will be setting up at Three peaks at 9:00am on Saturday June 27th with Field Day contacts starting at noon and running until noon on Sunday June 28th when we will take everything down.

Continued on page 2

RCARC Club Nets:

7:00 am Breakfast Net- Monday – Saturday – 146.760.

12:30 pm Daily – Utah Beehive Net On 7.272.

8:30 pm Tuesday's- ORCA Digital Net. Using FLDIGI, FLMSG AND FLAMP – 3.581 +, 1500/MFSK32.

8:00 pm Wednesday – Panguitch Net – 147.160.

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

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

8: pm Saturdays – SSTV – 449.925.

9:00 pm Daily – Friendship Net – 146.760.

11: am Saturdays (Mtn. Time) QCWA – 160 Net, Utah Chapter,

12: pm 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.

Continued on page 2

Save The Date

June 9, 2026

RCARC Club Meeting.

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

Program: Off grid power supplies and set up.

July 14, 2026

RCARC Club Meeting.

7:00 pm. Cedar City Senior Center, 489 E. 200 South. [More info to follow](#)

August 11, 2026

RCARC Club Meeting.

7:00 pm. Cedar City Senior Center, 489 E. 200 South. [More info to follow](#)

September 8, 2026

RCARC Club Meeting.

7:00 pm. Cedar City Senior Center, 489 E. 200 South. [More info to follow](#)

Presidents Message

Continued from Page 1

We have a good batch of new members so we may have some new HAMs needing our help in the upcoming months so please make sure to introduce yourself and offer a friendly hand!

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

In service,

Fred Govedich (KI7TPD)

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 IHOP Restaurant, 980 W. 200 N., Cedar City. See you there.



Congratulations

Happy Birthday and Anniversary to those celebrating in June

Happy Father's Day

Breakfast & Friendship Net Awards April 2026

Breakfast Net		Friendship Net		
First Place	W0KLH - Kevin	First Place	N7WWB - Darlene	Third Place
K2MFK - Kevin	Second Place	K7HDX - Ron	W0KLH - Kevin	KI7TPD - Fred
K7ZI - Dick	K7AK - Art	K7NKH - Lee	W6DLW - Dennis	KI7WEX - Bonnie
KB7QXB - Shirleen	KI7LVB - Tammy	K7ZI - Dick	Second Place	KI7LTQ - Brant
KC6WFI - Tony	KI7LVC - Tim	KA7J - Lance	KK7FLL - Maddie	
KD6HYH Sonja	Third Place	KB7QXB - Shirleen	N7SIY - Sylvia	
KE6ZIM - Johnny	K7ZZQ - Johnny	KI7LUM Bruce	N7SND - Larry	
KG7PBX - Linda	N7SND - Larry	KI7LVB - Tammy	WA7GVL - Paul	
N7BO - Russ	WA7GVL - Paul	KI7LVC - Tim		
N7SIY - Sylvia		N7BO - Russ		

Rainbow Canyons Amateur Radio Club Treasurer Report May 12, 2026

Bank balance Apr 1, 2026 **\$3,030.46** Deposit 00.00

Expenses

Rocky mountain Power (98 repeater elec exp)
Service cancelled Mar 2026 - totally solar powered
final bill due 4/1/26 -\$15.37

Bank Balance Apr 30, 2026 **\$3,015.09**

Outstanding May Deposits

KE7GHH, AB7IM, K7GKF, K7KKF, KM7ETW +75.00 KM7FHZ

Funds Available after May 7, 2026 **\$3,090.09**

Submitted by
Linda Shokrian KG7PBX
2026 RCARC Treasurer
435-867-5914

Save the Date

1. **June 9,, 2026, RCARC Monthly Club Meeting** at the Senior Center, 489 E. 200 S. North side of building lower level. 7:00 pm.
2. **June 13, 2016 RCARC Swap Meet** at 09:00 am. Christ the King Catholic Church at 690 Cove Drive (just South of the Temple) in the Pavilion. See flyer on page 17 or at www.rcarc.info.com.
3. **June 27 and 28, 2026 Summer Field Day** at Three Peaks Regional Park in the Pavilion. See Flyer on page 21.

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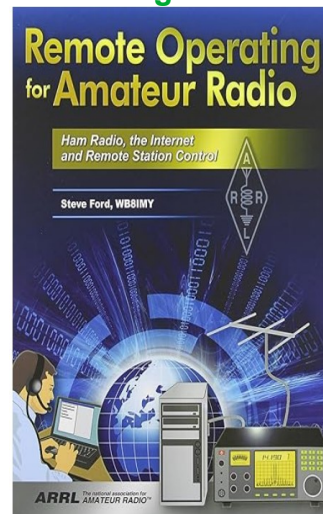
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To Join RCARC or Pay dues:
Go to www.rcarc.info select "Club Info" then join RCARC. Follow the instructions on the template.
Make checks payable to RCARC.
Please write call sign on check

RCARC Book Giveaway. Books are donated by Linda Shokrian (KG7BPX). The book below will be given away at the June 9, 2026 Meeting.



The book below was given away to Ron Shelley (K7HDX) at the May 12, 2026 Club Meeting.



Congratulations
Ron
Picture on page 10



Buzz's June Safety Tip(s)



Vehicle Radio Installation Safety Tips

For a safe ham radio vehicle installation, always wire power directly to the battery with fuses on both positive and negative leads within 12 inches of the battery. Mount the radio securely away from airbag deployment zones to prevent it from becoming a projectile, and use solid, unpainted metal for grounding the antenna, ensuring it's at least 3 inches from the vehicle.

Electrical Safety

- **Battery Power:** Connect power leads directly to the battery, not to the cigarette lighter, to prevent overloads and interference.
- **Fusing:** Install fuses on *both* the positive and negative lines, close to the battery.
- **Cable Routing:** Protect wires from sharp metal edges and hot engine components. Use grommets when passing cables through the firewall.
- **Wire Gauge:** Use appropriate gauge wire (typically 10-12 AWG) to avoid voltage drops.

Continued on next column

Installation & Mounting

- **Airbags:** Identify all airbag locations and ensure no equipment or cables are in their path.
- **Securing Equipment:** Use proper mounting brackets for the radio body and head, especially in mobile environments. Avoid placing items on the dashboard.
- **Antenna Grounding:** Use a quality antenna mount that grounds directly to the vehicle chassis.
- **Cable Management:** Keep RF cables away from vehicle electronic control units (ECU) to prevent interference.

Operational Safety

- **Drive First:** Avoid operating controls while driving. Position the microphone and radio head within reach but low down to avoid distraction.
- **Verify Interference:** Ensure the radio does not interfere with vehicle safety systems, such as ABS or engine controls.
- Consult guides on [No Damage Ham Radio Installation](#) and safe [mobile rig installation](#) from other operators.

End

RCARC MAY Breakfast Pictures at IHOP



Looks like the gangs all here



Another view



Fred (KI7TPD) checking out the menu.



Members conversing while they wait for their food



More members looking at the menu to order.



Fred (KI7TPD) and Ron (K7HDX) in conversation



RADIO NEWS

H. GERNSBACK, Editor and Publisher
SYLVAN HARRIS, Managing Editor

EDITORIAL AND GENERAL OFFICES, 53 PARK PLACE, NEW YORK

Vol. 7

JUNE, 1926

No. 12

Summer Radio Reception

By HUGO GERNSBACK, F. R. S.

AS summer after summer rolls around, the broadcast listeners, as well as the professionals, are becoming more and more accustomed to the idea that summer reception, after all, is in no wise different from reception in the winter.

In the statements which I shall make in the following discussion, it must be understood that when I refer to "summer reception" I really mean reception in the north temperate zone. Below the Tropic of Cancer, receiving conditions are, of course, vastly different from those in northern countries. Thus, for instance, reception in the tropics is notoriously poor, due to the frequent heavy thunderstorms that abound, many days in succession, during the so-called "rainy season". But in the temperate zone this is not at all the case.

I have pointed out many times before that reception in the summer-time is really better in many cases than during the winter. Did you, for instance, try for DX (long-distance stations) this past winter? DX reception was so notoriously poor that even stations 100 miles away could hardly be received consistently. Even with an excellent set it was almost impossible, for days and weeks at a time, to log the usual DX stations that were easy to reach, right along, during the summer of 1925.

As a matter of fact, I make bold to assert that the radio fraternity at large logged 50 per cent. more DX stations last summer than they did during the winter just past. For instance, the International Tests in February were notoriously unsuccessful, and that at a time when radio reception is supposedly at its best. The reason for this lies, not in static, as the term is commonly understood, but, rather, in disturbances that have their origin in the sun.

The sun, as we well know, goes through certain sun-spot cycles; and such a cycle reached the maximum of solar activity last winter. I, for one, am of the firm opinion that the sun was directly responsible for cutting down DX reception. The explanation is probably that increased solar activity caused an increased ionization of the earth's atmosphere, as well as of the earth (soil) itself; and the two, coupled together, probably have much to do with the greatly-reduced reception.

The objection might be advanced that the sun is not shining at night, when most reception is had; but to this argument I will say that the ionization, which is nothing but an electrical charge, is not dissipated at once, but persists for quite some time. It is the same with thunderstorms, which make themselves felt for hours, and sometimes days, before they register their effect on a radio set.

As to the so-called "static" during the summer, I make bold to assert that there is less static during the summer than during the winter, as a whole. This may seem to be a very extravagant statement, but a little reflection will show that it is not. Every one, located either in the city or in the country, will have noticed that in the winter time, particularly when snow is falling, long sparks can be drawn from the antenna, showing that the aerial is collecting a tremendous charge. This is an almost unheard-of thing during the summer, except when a thunderstorm is actually under way, with the thunder clouds in sight.

Time and again, last winter, right in New York City, I have drawn sparks from a quarter to a half an inch long from my antenna, which is only sixty feet long, but I do not remember such an occurrence during all last summer, with the single exception of one time when a thunder cloud was overhead.

All radio listeners will bear me out in my statement that static was more violent during the past winter than it has ever been before;

certainly very much more than during most of our summers. In our temperate latitudes, during summer, heavy static charges occur, practically, only when there is a thunderstorm in the offing, or right upon us. Otherwise, reception is usually good; moreover, it is often extraordinarily good, immediately after a heavy rain or thunderstorm.

On the other hand, how many thunderstorms are there during the summer? Certainly not more than the number of snowfalls or rainstorms during the winter. Possibly a good many less, if we except some storm belts in certain parts of the world.

When it comes to static, however, there are two classes, natural static and man-made static, with the latter very much in the lead. Every time some one in your neighborhood rings a bell, starts an electric vibrator, or a heating pad, or an electric fan, or rings a telephone, operates a vacuum cleaner, or an X-ray machine; every time that an automobile, electric train, or trolley car passes, small electric charges are let loose, all of which produce a static level usually far in excess of that produced by nature. And this static is *always* with us, winter as well as summer.

Naturally, this man-made static is very much more severe in congested centers, such as our big cities, than in suburbs or sparsely-settled districts.

Next in our discussion we have the good old-fashioned fable of the danger of lightning. Why so many people should be afraid of lightning hitting their aerials is a great and unsolved mystery.

The lightning danger during the summer is, in the vernacular, pure and undiluted "Bunk", with a capital B. Last year I announced a prize contest in RADIO NEWS, in which this magazine offered prizes of \$300 for authentic proof of lightning doing material damage to dwellings. Although the contest was advertised not only in the United States, but throughout the world, having

been given a tremendous amount of publicity through the daily newspapers and the press in general, there were only sixty entries received. A mighty poor showing.

Now, if all these entries had actually been able to show material damage, each one of them would have been entitled to \$300. But this was not the case. There was only one case, the prize winner, where the building had actually been kindled into flames and the roof destroyed; but even in this case it should be noted that lightning did not strike the antenna directly, but struck a flagpole first.

All the other cases submitted were ones in which lightning, or, rather, a secondary charge, did some damage to the radio outfits; but in no case wrecking the sets beyond repair.

The chances of your aerial being hit by lightning are about one in eighty-four thousand—practically nil.

Long before this prize contest started, I usually operated my set with an outdoor antenna—plus a good lightning arrester,—during a thunderstorm; and while I admit that reception during the height of the storm has been almost impossible at times, in no case was I ever forced to discontinue operation entirely. Of course I don't wear headphones, but with the loud speaker going I do not feel that I am taking much risk. While I do not recommend this procedure to the everyday broadcast listener, who will usually find it best to turn off his set, still I have merely tried to show here that radio reception during the summer need not worry us at all.

As for danger from lightning, everyone knows that broadcast stations with their big aerials and steel masts—a wonderful target for lightning—never think of shutting down, just because there is a thunderstorm raging overhead.

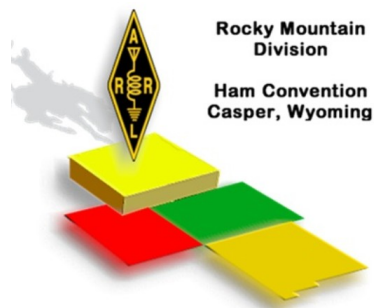
Q. . . in which the Editor makes the assertion that Summer reception is better than Winter reception,—why sun spots affect radio reception,—why man-made static is worse than natural static,—why lightning danger is the "grand Bunk",—and why he operates his radio throughout a thunderstorm. . . .

Ham Radio Terminology Word Scramble

#	Word	Hint
1.	TBAO RAONCH	Heavy, Usually very old
2.	TBOAORFE	No Amplifier
3.	XCAO	RF Line
4.	CDIIRETICE	Separates the Center Conductor
5.	DFLIE YDA	Contest Sponsored by ARRL
6.	TFSI	CW Sending Style
7.	RLEOFW	Experiments Low Frequencies
8.	TSHTGRIA YKE	CW Single Arm
9.	RWEAPLALP	Slang, QSL Cars, Certificates
10.	FWFOU GHNO	Poor Operating, does not follow rules.

See Word Scramble Answers on page 15

ARRL Rocky Mountain Division HamCon



The 2026 ARRL Rocky Mountain Division Convention is the Wyoming Ham Con. It will take place from August 28 to August 30, 2026, at the Best Western Downtown in Casper, Wyoming.

Event Details:

Dates: August 28–30, 2026

Location: Best Western (Downtown), 123 W. E St., Casper, WY 82601

Sponsors: Hosted by the Casper Amateur Radio Club (CARC) and ARRL.

You can track updates and ticket information as they become available by visiting the **[ARRL Rocky Mountain Division](#)** or checking the **[Wyoming Ham Con ARRL Event Listing](#)**. If you'd like to check for other local swap fests or regional ham radio events, you can browse the full schedule on the **[ARRL Hamfests and Conventions Calendar](#)**. Registration is now open at <https://wyohamcon.org/>

PROJECT PURSUES MYSTERIES OF SPORADIC E-SKIP

We begin this week with a new project by a ham radio operator who is trying to unlock the mysteries of sporadic E-skip. Andy Morrison K9AWM tells us what the project is looking at - and how you can look at it too.

Loyd Van Horn, W4LVH, is a fan of mysteries and there are perhaps few ham radio mysteries greater than that of Sporadic E-skip which makes its appearance on VHF in the Northern Hemisphere every year at about this time.

Loyd is the force behind DX Central, a resource for DXers that does, among many things, data analysis. This month he unveiled SEDAP, an acronym for his Sporadic Es Data Analysis Project. It can be found at fmdxdata.com and is free to use by hams, educators and anyone with a hobbyist's interest in this special season that turns propagation magical in the eyes of many.

He writes on the website SWLing Post that he compiled more than 95,000 FM broadcast logs from North America to get the data relevant for the project, which goes beyond simple spreadsheets by adding interactive visualizations.

He writes: "SEDAP allows us to physically watch ionospheric clouds spawn, compress and track across the continent in real-time. We can finally see what a typical season looks like on a macroscopic level."

He told the Radio World website that he also plans to include amateur radio data from 6 meters. He said that will permit analysis of days that had no propagation alongside days with active openings - days on which the maximum usable frequency did not reach the FM broadcast band.

OPEN-SOURCE SOFTWARE MODEM CALLED A VARA REPLACEMENT

A US-based company has developed an open-source software modem for HF Digital and other uses, as we hear from Paul Braun WD9GCO.

Developers have announced the release of Mercury, an open-source software modem that they are calling a replacement for Vara. Mercury is a digital radio OFDM protocol, which can be used for HF broadcast and peer-to-peer ARQ connections with compatible TCP interfaces.

According to Peter Bloom, general coordinator of the developer Rhizomatica, Mercury is compatible with Windows, Linux and a number of non-Intel architectures.

Peter told Newsline that Mercury, the newest element of Rhizomatica's HERMES software suite, it is built for reliable store-and-forward email and file transfer over HF radio links. He said it is compatible with most HF transceivers and it complies with ham radio use. The project coordinator is Rafael Diniz, PU2UIT.

He said that Mercury has a number of advantages over Vara, including improved performance over high-SNR links.

There is no license fee.

RCARC May 2016 Club Membership Meeting Pictures



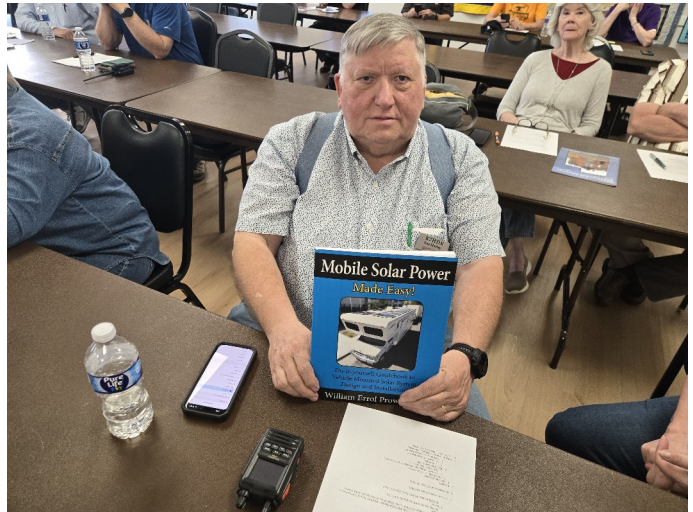
Club members arriving and getting ready for the meeting to start.



Fred (KI7TPD) leading the Pledge of allegiance.



Fred (KI7TPD) conducting club business.



Ron (K7HDX) won the Book Giveaway. Mobile Solar Power



Dick (K7ZI) Birthday Cake

Presentation: Yaesu C4FM Digital by Paul Erickson (WA7GVL).

Yaesu C4FM (Continuous 4-level Frequency Modulation) is a digital amateur radio mode, branded as "[System Fusion](#)," designed to deliver clear audio, robust error correction, and high-speed data transmission.

As an FDMA-based technology, it is often seen as a user-friendly alternative to DMR or D-STAR, with Automatic Mode Select (AMS) functionality that allows seamless communication between analog and digital users.

Continued on page 11

RCARC May 2016 Club Membership Meeting Pictures C4FM Pictures

Continued from page 10



Paul (WA7GVL) introducing the group to C4FM.



Paul (WA7GVL) explaining the needed equipment to set up a node. On screen are the Yaesu Radios that support C4FM.



Paul (WA7GV) taking questions from the group.

Ham Humor

S.W.R. -- A term, applied to any part of the antenna system, which means: "Savings-to-Watt Ratio". Based on the inverse relationship of dollars in the bank and effective radiated power.

House Bracket -- A device which secures the house and the tower together. It lets the tower do double-duty by holding up the house during severe windstorms.

Traps -- Devices installed in antennas to collect rain-water, to keep it from running further down the antenna.

Smith Chart -- An alias, to be used when you don't want people to know what chart you really used to design your antenna.

Long Path -- The direction you are told to aim your antenna, to work a rare DX station, as suggested by the other fellows in the pileup.

Windmilling -- A technique whereby prevailing winds are allowed to rotate the antenna, enabling the operator to "scan" the radio horizon.

"Off the back of the Antenna" -- A technique used by more experienced DX-ers, where the antenna is pointed away from the station being contacted. This creates a challenge similar to running QRP.

Balun -- (Pronounced: "balloon" by many). An anti-surveillance device, installed in coaxial lines at the antenna, to prevent nosy neighbors from eavesdropping on you through their TV sets.

Amateur Radio Emergency Data Network (AREDN)

By Ron Shelley

Non-Profit 501-(C)-3 Organization

In the presentation by Mel Parks NM7P earlier this year, he discussed and encouraged that the Club should consider reorganizing as a 501-(C)-3 non-profit organization. There are many benefits by this action. Primarily it would help in creating AREDN sites in the county. James Moore KG7VEI indicated that some mountain tower sites could become available for our use when we are a 501c3. Also, the Amateur Radio Digital Communications group (ARDC) offers grants for equipment to further the use of digital communications with one requirement being that our club has non-profit status. The board has considered the proposal and presented to the Club at May's general meeting for approval. The membership's approval allows us to further explore the steps and to move forward. We are at the preliminary stage and will keep the Club aware of further developments.

AREDN (which stands for the **Amateur Radio Emergency Data Network**) is a specialized, self-configuring digital mesh network used to send high-speed data over radio frequencies.

It allows hams to communicate using standard internet-style tools—such as voice-over-IP (VoIP) phones, live video feeds, chat apps, and file transfers—without relying on the commercial internet.

Building an AREDN network usually involves the following key components and concepts:

- **Repurposed Hardware:** Instead of building expensive, custom gear, AREDN uses affordable, commercial off-the-shelf (COTS) Wi-Fi routers and antennas manufactured by brands like Ubiquiti, MikroTik, and TP-Link.
- **Specialized Firmware:** The core of AREDN is its custom, open-source firmware (based on Open WRT), which you flash onto these routers. This changes the device to operate on ham-exclusive frequencies (primarily in the 900 MHz, 2.4 GHz, 3.4 GHz, and 5.8 GHz bands).
- **How Mesh Works:** When multiple AREDN nodes are powered on, they automatically search for one another to create a web-like, interconnected mesh. If one node goes offline or is blocked by an obstacle, the network automatically calculates the next best path to deliver your data.

Continued on page 15

A-ROVING THEY WILL GO

Members of the TOG Hackerspace and South Dublin Radio Club are no strangers to experimentation. Tinkerers, amateurs, makers and experimenters all find a welcome home in Dublin where the ham radio club station, EIØTOG, has its headquarters.

The radio operators are now working on yet another experiment - their first POTA Rover Day - in the hope of activating five POTA designated parks in a single UTC day, qualifying them for the POTA Rover Warthog Award.

Their shared daylong adventure is planned for Sunday the 31st of May. While they're not looking to bag an actual warthog - the tusks and tempers of these sub-Saharan mammals can be quite intimidating - they are going for five successful activation's and as many QSO's as possible. As club members note on the TOG Hackerspace website: "This could be a great idea, or it could totally fall apart, but that is all part of the fun. Amateur radio has always had that experimental side to it, and a day like this has a real sense of adventure." One ham plans to take the spirit of adventure to the extreme. He hopes to make the trip on his bicycle.

Be listening for EIØTOG and help them catch that warthog. This would not only be the first such award for the club, it would be the first warthog - wild or figurative - to actually find a habitat in the Republic of Ireland.

A TOWERING MOMENT IN BROADCAST HISTORY

There are always mixed emotions whenever a radio tower of any kind needs to come down -- but sometimes it means progress.

The radio tower is gone from the campus of Concordia Seminary, which had been its home since 1948. Despite its decades of history on the Lutheran seminary campus, the actual good-bye last month took only a few moments of its demolition.

The station itself, KFUO, predates the tower. On the air since 1924, it is considered the longest continually operating radio station to carry religious programming in the US. KFUO has such long tenure on the air that its original license was issued by the US Department of Commerce. In fact, it would be years before the US government had something known as the Federal Communications Commission. It is considered the broadcast ministry of the Missouri Synod.

Its demolition last month on the campus ended the last visible connection the seminary had with the AM station. It was, perhaps only a formality, since its invisible connection - the radio signals themselves - haven't been transmitted from Concordia for two years. Its 3.8 kW signal moved to the other side of the Mississippi River, to an existing broadcast site in Dupou, Illinois, where it now transmits the same Lutheran programming familiar to listeners.

The destruction of the tower, it seems, has cleared a path for what the station hopes is a bright future.

Ham Radio Word Search

Call Signs and Their Importance

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

Call Sign	Identifier	Amateur	Communications	License
Operator	Phonetic	Prefix	Suffix	Vanity

Amateur Radio Emergency Data Network (AREDN)

By Ron Shelley

Continued from page 12

- **Primary Use Case:** Because it does not require internet service providers or cell towers, AREDN is heavily used for **Emergency Communications (Em Com)**. During natural disasters, it allows emergency personnel and served agencies to share emails, maps, and forms seamlessly.
- **Internet Tunneling:** If you are the only ham in your immediate area and cannot physically reach another node with your antenna, AREDN nodes can "tunnel" over the standard commercial internet to connect to other mesh networks globally.

Answers to Ham Radio Terminology on page 8

#	Word
1.	Boat Anchor
2.	Barefoot
3.	Coax
4.	Dielectric
5.	Field Day
6.	Fist
7.	Lowfer
8.	Straight Key
9.	Wallpaper
10.	Wouff Hong

Happy Fathers Day



CQ, CQ Happy Father's Day

Rainbow Canyons Amateur Radio Club Ham Radio Gear Swap Meet

Come Join Us and bring your excess gear to sell



Date: Saturday June 13, 2026
Set Up: 8:00 AM.
Start & End Time: 9:00 AM to 12:00 or 1:00 PM.
Location: Christ the King Catholic Church.
690 Cove Drive, Cedar City. In the pavilion to rear of church.

Just South of
the Temple



Rainbow Canyons Amateur Radio Club (RCARC)

Summer Field Day Event 2026

When

This year on June 27 & 28 RCARC members will be transmitting from the Iron County, Three Peaks Recreational area in the Pavilion starting at 12 noon Saturday and continuing until 12 noon on Sunday.

Where

Iron County, Three Peaks Recreational Area. The Park is located on Mid-Valley Road, approximately 3 to 4 miles West of Lund Highway. **See Google Maps for directions.**

Field Day is Ham Radio's open house.

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



Annual RCARC Summer Field Day Potluck - Barbecue

The annual Summer Field Day Potluck - Barbecue will commence at 6:00PM. on Saturday June 27, 2026. Everyone is welcome but those attending are asked to bring a side dish to share with other attendees. Please send an email to cedarcity.rcarc@gmail.com with the type of dish you will be bringing.

Alkaline Versus Heavy Duty Batteries

(Reprint from August 2022 Newsletter)

I use only so called “heavy duty” batteries (see figure 2) in most of my portable test equipment and ham gear because that equipment may sit on the shelf for weeks or months between uses. They may look like alkaline batteries, but they have a quite different chemistry.

Alkaline battery chemistry can produce corrosive liquids as the batteries age and discharge. That can damage the battery compartment and sometimes the circuitry of the gear (see figure 3).

Heavy-duty battery chemistry works the opposite way. Those chemicals seem to dry up as the battery age and discharge. Hence the likelihood of chemical leakage is significantly less than in the alkaline cells. In my years as a ham, I’ve seen lots of radio gear ruined from leaking alkaline batteries, but I’ve yet to see any leakage from heavy duty batteries.

Although alkaline batteries may give longer run times, cheaper heavy-duty batteries are the safer solution to use in any equipment that sees infrequent use. I now use alkaline batteries only if they are to be installed in equipment that is very power hungry (a digital camera or a handheld transceiver that will see short term use), or equipment that sees frequent use and will be operated short term until the batteries are exhausted.

E. Kirk Ellis, KI4RK

Figure 2: Heavy-duty batteries may look like alkaline cells, but their internal chemistry is quite different.



Figure 3: When left installed for months or longer, alkaline batteries may leak and cause substantial damage.

