# RAINBOW CANYONS AMATEUR RADIO CLUB NEWSLETTER



#### Club Website: www.rcarc.info Number 7 – Vol. 7 July 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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Newsletter Editor/Historian Dennis L. West W6DLW

1-760-953-7935 rcarcnewsletter@gmail.com



CQ, CQ, Happy 4<sup>th</sup> of July



Presidents Message

# Dear Fellow Amateur Radio Operators,

Field Day was a lot of fun despite the not-so-great band conditions. We had lots of visitors who came out to learn more about HAM radio and it was fun to chat with them! The weather was good this year (a little warm) despite the smoke and everything seemed to go well. As always it is great to see everyone helping out our new members. A big Thank you to everyone who participated by helping with set up and clean up, and by manning the radios and making contacts. Overall, I hope everyone had a great time and I hope you can take the enthusiasm forward and play on the radio more! For our July meeting we will be talking about radio direction finding (fox hunting, etc.). In August we have our club BBQ and in September we will have a presentation on power options (solar, batteries, etc.). Should be fun couple of months!

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

#### <u>July 8, 2025</u>

# RCARC Club Meeting.

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

#### <u>August 12, 2025</u>

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

7:00 pm. Cedar City Senior Center, 489 E. 200 South. Annual Club Barbeque. Stay tuned for more info.

#### September 9, 2025

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

7:00 pm. Cedar City Senior Center, 489 E. 200 South. Using Solar systems with Ham Radio Presentation

#### October 14, 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.

I hope everyone has been getting out on the radio! We have our local nets as well as opportunities to participate on HF contests, POTA, SOTA and anything else you turn your radio to doing! Have fun, and play on your radio. Remember if you need help with setting up your radio, software or other equipment please ask your fellow HAMs for help. Part of the fun is helping others! Remember you can always pick up the mic and see who is listening! As always, I would like to thank everyone who makes our meetings great by asking questions. I would also like to thank all of our net controls for the nets and everyone who participates!

Cheers!

Fred (KI7TPD)

#### **Notice**

There will be no Breakfast or Friendship Nets on Friday July 4<sup>th</sup>.

The July 1<sup>st</sup> Saturday of the month breakfast at the Golden Corral has been canceled due to the July 4<sup>th</sup> Holiday.

# 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 July



# Happy 4th of July

# **Breakfast & Friendship Net Awards**

June 2025

Break	kfast Net	Friendship Net				
First Place	Second Place	First Place	Second Place	Third Place		
K7ZI - Dick	KC6WFI - Tony	KI7LVC - Bruce	K7HDX - Ron	KE8OYI – Caleb		
KE6ZIM - Johnny	KE8OYI - Caleb	K7NKH - Lee	K7ZI - Dick			
KG7PBX - Linda	N7SIY - Sylvia	KI7LVC - Tim	N7WWB - Darlene			
KI7SCX - John	Third Place	KI7LTQ - Brant	KI7LVB - Tammy			
KK6FLO - David	K2MFK - Kevin	KK7FLL Maddie				
N7SND - Larry		N7SIY - Sylvia				
W0KLH - Kevin		N7SND - Larry				
WA7GVL - Paul		W0KLH - Kevin				
		W6DLW - Dennis				

Rainbow Canyons Amat Club Treasurer Report Jun	
Bank balance May 1, 2025	\$3,132.01
Membership - KC6ZNC Cash Donation	$^{+15.00}_{43.00}$
Expenses Liability Insurance Rocky mountain Power (98 repeater elec exp)	- 200.00 - 11.51
Bank Balance May 31, 2025	\$2,978.50
June	
Expenses - Rocky Mountain Power (due 6/17/25) **Elec cost for 98 repeater after solar panels installe	- 11.56** ed
Funds Available after 6/17/2025	\$2,966.94
Submitted by Linda Shokrian KG7PBX 2023 RCARC Treasurer 435-867-5914	

#### **RCARC Upcoming Events**

July 8, 2025 RCARC Monthly Membership Meeting at the Cedar City Senior Center 489 E. 200 S. Lower-level, N. side of building at 7:00 PM.

August 12, 2025 RCARC General Membership meeting and annual barbeque at Christ the King Catholic Church Pavilion at 690 S. Cove Drive. Just S. of the temple at 6:00 PM.

**September 9, 2025** RCARC Monthly Membership Meeting at the Cedar City Senior Center 489 E. 200 S. Lower-level, N. side of building at 7:00 PM.

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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 July 8, 2025 meeting.



The Book below was given away to Dennis L. West (W6DLW) At the, June 10, 2025 meeting



Congratulations Dennis See Pic on page 14

# **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

Stay safe over the 4<sup>th</sup> of July Weekend



# Buzz's July Safety Tip(s)



# Summer is Just around the corner, Please see the Sumer Safety Tips below

#### **Heat Safety:**

- **Stay Hydrated:** Drink plenty of water throughout the day, especially if you're spending time outdoors.
- Protect Your Skin: Use sunscreen, wear hats, and sunglasses to protect yourself from harmful UV rays.
- Seek Shade: Take breaks in the shade to cool off and prevent overheating.
- Know the Signs of Heat Exhaustion: Be aware of symptoms like dizziness, headache, or nausea, and take action if you or someone else is affected.
- **Pace Yourself:** Don't push yourself too hard, especially during outdoor activities.
- Dress Appropriately: Wear loose, lightweight, light-colored clothing.

#### Water Safety:

- Never Swim Alone: Always swim with a buddy and have a designated water watcher if you have children.
- Use Life Jackets: Always wear a U.S. Coast Guard-approved life jacket when on or near the water.
- Supervise Children: Designate an adult to watch children in the water without distractions.
   Continued next column

• Avoid Alcohol: Drinking and water activities don't mix.

#### **Firework Safety:**

- Never Use Homemade Fireworks: The Red Cross warns against using homemade fireworks.
- Never Relight a Dud Firework: If a firework malfunctions, douse it with water and throw it away.
- Keep a Safe Distance: After lighting a firework, stand a safe distance away.
- **Don't Point Fireworks at People:** Never throw or point a firework towards people, animals, vehicles, structures, or flammable materials.
- **Supervise Children:** Never let children handle fireworks.
- Wear Eye Protection: The person lighting fireworks should wear eye protection.
- Have Water Nearby: Keep a water hose or buckets of water nearby to put out fires.
- **Keep Pets Indoors:** Fireworks can be frightening for pets.

#### **General Summer Safety:**

• **Practice Good Food Hygiene:** Wash hands, utensils, and workstations before preparing food.

Continued on page 8

# RCARC June 7<sup>th</sup> Club Breakfast Pictures



Fred (KI7TPD) and Ron (K7HDX) in conversation.



Linda (KG7PBX) and George (AL7BX) enjoying breakfast.



Fred (KI7TPD), Ron (K7HDX) and Geoge (AL7BX) discussing something. Continued next column



Sylvia (N7SYI) and Friend enjoying breakfast.

# Some Ham Humor





### SUMMER RADIO By HUGO GERNSBACK

HIS is the fourth summer since radio broadcasting started When radio first became popular, early in in this country. 1922, it was widely predicted, even by radio experts, that summer reception would be so poor that nobody would care to in. The summer of 1922 disproved this statement entirely. listen in. Radio broadcasting went on during the entire summer, and hundreds of thousands of people listened in to their perfect satisfaction, and did not find the reception much different from reception at other seasons of the year.

To be sure, radio reception is not as good during a hot, sultry summer day, when there is a thunderstorm in the offing, but on the other hand, static. during the summer time, is not a great deal worse than at certain other periods during the year. For instance, in the spring and fall, when heavy rains are in progress, or when the temperature changes suddenly, or when snow is falling, there is much static, which at times is much worse than that on a clear summer day. The impression that static is much worse during the summer is not entirely borne out by the facts. The majority of summer days are entirely free from bad static, or even when it is bad, not only during the summertime, but at any other season of the year, reception is not greatly hampered unless you are trying for DX.

Static, to radio, is the same as street noises to our living-room. If you are listening to local stations, which, as a rule, come in with good power, the static noises are usually not heard at all, and do not make themselves objectionable because the power of the receiver, unless it is a crystal set or a one-tube affair, is sufficient to drown out static noises.

If you are sitting in your living-room and talking with some one, the street noises coming in through the window interfere with your conversation somewhat as static interferes with reception. If you converse in a normal voice, it will be found that the street noises do not interfere very materially and the louder the tone of conver-sation, the less the interference.

 $S^{\rm O}$  far, scientists are not agreed upon what really constitutes static, except that it is known to be an electrical disturbance due to atmospheric conditions. Many queer things happen in connection with static, that are not as yet clear. For instance, suppose you are listening to a station a thousand miles away. The weather at the broadcast station, as well as at your station, is clear. Somewhere between the two stations there is a thunderstorm creating a tre-mendous amount of static. Nevertheless, in many cases, you are not aware of the fact, when listening in, that such a storm exists. The reason is that the radio waves pass directly through the static field without hampering reception. It also happens that this same condition is true when there is a thunderstorm at or around the broadcast station. It might be thought that under these conditions the reception would be exceedingly bad. This, however, is not the case at all in most instances. As a general rule, it seems that static hampers a receiving station only when atmospheric conditions are bad at the receiving end. Of course, this is only a general rule, because if you are listening in to a broadcast station fifty miles away and there is an atmospheric disturbance blanketing not only the transmitting but the receiving station as well, then static is bad at the receiving end, for obvious reasons.

As for danger from lightning, the writer has pointed out frequently in his past articles that this theory has been exploded many times during our past experience. If you have an indoor or loop acrial, you do not need a lightning arrester, for the possible effect of lightning on these is nil. The writer has also pointed out before that there does not exist an authenticated case wherein lightning ever struck an outdoor aerial and did any real damage, providing the installation was equipped with a lightning arrester. As a matter of fact, rather than being dangerous to the building,

the radio aerial positively becomes a source of protection to the building, exactly the same as a lightning-rod system. If lightning strikes your house and there is no lightning arrester and no aerial, the chances are that some damage may be done to the dwelling. The radio aerial, being a good conductor and grounded through a lightning arrester, offers an opportunity for lightning to pass down to the earth without doing damage. We repeat, therefore, that there is no danger from lightning from this source.



course, a radio outfit with an outdoor aerial O should not be used during a thunderstorm, for a very simple reason. If the outfit is working, and even a small lightning charge should pass through the aerial, some damage might be done to some of the delicate instruments of the set, such as, for instance, burning out a transformer, which is wound with wire as fine as a hair-or perhaps burning out one or more tubes, although the latter is an exceedingly rare occurrence, the writer never having heard of such a case. So it is best, during a thunderstorm, simply not to use the set, or at least not while you actually see lightning.

In order to prove our contention that the above facts are correct, RADIO NEWS is instituting herewith a \$300 Prize Contest, in order to ascertain this summer whether lightning causes serious damage to buildings equipped with radio,

As a rule, house owners are afraid that an aerial on the roof, if struck by lightning, may set the house afire. This seems to be the only fear in their minds. RAMO NEWS contends that no such thing

has ever happened, or can happen, and is willing to pay \$300 for any authentic proof showing that lightning has done such damage. The rules of the contest are as follows:

- 1. Any one may compete in this contest.
- Only radio installations with outdoor aerials and a standard make 2. of lightning arrester are eligible as entries in this contest.
- The usual ground connection, such as water-pipe, radiator, or any 3 other good and equivalent ground connection employed in standard practice, must be used.
- A sworn affidavit, sworn to by two responsible individuals who have inspected the damage, must be submitted to RADIO NEWS. Proof must be furnished that such damage was not caused by
- other means, such as explosions from gas, etc., fire from chimnevs. etc.
- 6. A photograph of the damage caused by lightning, either to the A story, of not more than 1,000 words, giving minutely the extent
- of the damage, time at which lightning struck, and other valuable information, must be submitted.
- 8. No entries will be considered under this contest where no real damage has been done. By real damage we mean that (1) Light-ning should have set fire to the house, (2) lightning should have wrecked part of the building, without setting fire to the house, or (3) lightning should have wrecked the radio outfit entirely, damaging it irretrievably, or (4) any of these three combined. The burning out of a transformer, or of one or more tubes in a radio set, would not be considered as real lightning damage, under these provisions, the intent of the contest being to prove that lightning never does actual property damage to any extent.
- The prize will go to that cutrant who, in the opinion of the judges, shows the greatest damage (money value) done by lightning.
- In the event that more than one individual reports an identical 10. damage in money value, the one who furnishes the best description and the best photographs will be entitled to the prize.
- 11. There will be only one prize-namely, \$300.
- This contest closes on October 10th, 1925, when all entries must have been received. RADIO NEWS hereby pledges itself to publish any and all entries, even though they do not win a prize.

### Buzz's July Safety Tip(s) Continued from page 5

- **Check the Weather:** Be aware of weather conditions and potential hazards.
- **Be Prepared:** Have an emergency supplies kit.
- **Stay Situationally Aware:** Be aware of your surroundings and potential dangers.

### **Fireworks Safety**

- Obey State and Local Laws/Ordinances: First and foremost, it is crucial to obey all state and local laws or ordinances regarding the use of fireworks. Familiarize yourself with the regulations specific to your area and ensure that any fireworks you use are approved and legal.
- Assign a Responsible Adult for Supervision: It's essential to assign a responsible and sober adult to supervise all firework activities. Never allow children to handle fireworks. Ensure that the adult supervising the fireworks is attentive, knowledgeable about firework safety, and can effectively manage the situation if any issues arise.
- Wear Eye Protection: Whenever you light a firework, make sure to wear appropriate eye protection. Safety glasses or goggles can help shield your eyes from potential debris or sparks and reduce the risk of eye injuries.
- Never Relight a Dud: If a firework fails to ignite or goes dud, never attempt to relight it. Give it ample time, preferably 20 minutes, and then soak it in a bucket of water. *Do not approach or investigate the firework immediately after it fails to light.*
- Use Fireworks Outdoors and Away from Structures: Fireworks should always be used outdoors in a clear and open area. Ensure there is a safe distance between the fireworks and any structures, vehicles, or flammable materials. Maintain a safe perimeter to prevent accidents or fires.

#### **Do Not Experiment with Homemade**

**Fireworks:** It is essential to avoid experimenting with homemade fireworks. Homemade fireworks can be highly unpredictable, dangerous, and illegal in many places. Stick to legally obtained and approved fireworks to ensure safety.

#### **Grill Safety**

- **Grill Outdoors:** Never use a grill indoors, in a garage, or under any type of overhang.
- Stable Surface: Set up your grill on a stable, flat surface away from flammable objects.
- Keep Kids and Pets Away: Create a safe zone around the grill and keep children and pets at least three feet away.
- Check for Leaks: If using a gas grill, check for propane leaks by applying a light soap and water solution to the hose. If bubbles appear, there's a leak.
- **Proper Lighting:** Follow the manufacturer's instructions for lighting the grill. If the flame goes out, wait 5 minutes before relighting.
- Stay Close: Never leave the grill unattended while in use.



**IT BEGINS WITH YOU** 

# RCARC 2025 Summer Field Day Pictures

Early Saturday morning June 28, 2025 RCARC members made their way to the Iron County Three Peaks Recreational Area Campground and Pavilion. Under the leader ship of Fred (KI7TPD) and the watchful eye of Bruno (KG7VVN – Safety Officer) the operation to set up the antenna tower and antenna was underway in preparation for the 12:00 pm. Field Day Start time.

2025 Field Day is ham radio's open house. Every June, hams throughout North America set up temporary transmitting stations in public places to demonstrate ham radio's science, skill and service to communities and the nation. It combines public service, emergency preparedness, community outreach, and technical skills all in a single event.

Some participants may also choose to operate from home, using the exercise to develop and practice their personal radio communications capability. Field Day has been an annual event since 1933 and remains the most popular event in ham radio.



Antenna being attached to the tower mast. Continued next column



Finalizing the connections of the guy ropes and coax before raising the tower.



First section of tower being raised.



Antenna and Tower now at full height. Continued on page 10

# RCARC 2025 Summer Field Day Pictures

**Continued from page 9** 



Riki Kline (K7NJ) working Morse Code stations.



George (AL7BX) working FT8 Stations.



15-meter voice station staffed by Dennis (W6DLW). He's taking the picture.





This is the 40-meter voice station.



Fred (KI7TPD) talking with Nate Palmer about Ham Radio.



Russ (K7VXV) and the girls taking a break Continued on page 13

# Understanding Different Radio Frequency Bands A Beginner's Guide

Have you ever wondered how your favorite FM radio station, Wi-Fi, or even your TV works wirelessly? It's all thanks to radio frequency bands!

From daily communication to deep space signals, radio frequencies (RF) make our modern life function. But not all frequencies are the same. Each band has its own role – whether it's helping you talk on your mobile phone or guiding airplanes safely through the sky.

Here's a quick breakdown of common RF bands and what they're used for:

1. Very Low Frequency (VLF) – Used for submarine communication. These waves can travel long distances even underwater!

- 2. Low Frequency (LF) Found in navigation and maritime communication.
- 3. Medium Frequency (MF) Think of AM radio this is its home band.
- 4. High Frequency (HF) Ideal for long-distance radio broadcasts, like shortwave radio. Used heavily by ham radio operators!
- 5. Very High Frequency (VHF) Used for FM radio, TV broadcasts, and aviation.
- 6. Ultra-High Frequency (UHF) Found in modern digital TV, mobile phones, and GPS devices.
- 7. Super High Frequency (SHF) This is the range used in satellite communication and Wi-Fi.
- 8. Extremely High Frequency (EHF) Mostly used in scientific and military applications due to its very short range.

Each band is regulated and assigned carefully to avoid interference. Just imagine the chaos if airplane radios clashed with your Wi-Fi!

Whether you're a hobbyist, a ham radio enthusiast, or just curious – knowing these bands helps you understand the invisible highways carrying signals all around us.

Visit the full article to explore more:

# https://www.savenetradio.org/different-radio-frequencybands

# **Components of a Ham Station**

# Word Search

V	L	С	К	R	Н	R	W	Ζ	Q	М	J	G	Х	W
W	Н	0	J	Е	Х	Ν	W	К	С	А	В	L	Е	S
Н	Y	Ν	С	Т	Ρ	W	Е	G	W	F	U	С	Н	Y
W	L	Ν	К	Т	R	А	Ν	Н	Х	R	С	С	Т	М
С	Ρ	Е	U	Ι	F	Н	0	W	Q	Е	Х	D	Ζ	Ι
Ν	Ρ	С	J	М	0	S	W	0	С	К	F	L	Ζ	С
U	U	Т	W	S	J	С	Ι	В	R	А	Ι	М	Е	R
G	S	0	V	Ν	Ρ	Q	U	Е	Ν	Е	L	Ι	Ν	0
Ζ	R	R	V	А	Q	Х	V	Ν	R	Ρ	Т	А	0	Ρ
Х	Е	S	Ζ	R	Η	Ι	Е	L	М	S	Е	V	Ζ	Н
Е	W	Ζ	F	Т	Е	Т	М	С	Н	W	R	S	R	0
X	0	G	С	С	Ν	R	J	В	Ν	J	S	s	В	Ν
A	Ρ	S	Е	А	В	Х	Е	Т	Υ	G	Ζ	К	U	Е
W	0	R	Q	R	Е	V	Ι	Е	С	S	Ν	А	R	Т
F	С	V	К	D	R	А	R	Н	D	Т	R	Ρ	J	Е

<del>،‡</del>

Transceiver	Antenna	Receiver	Transmitter	Power Supply
Microphone	Speaker	Cables	Connectors	Filters

# RCARC 2025 Summer Field Day Pictures

Continued from page 10



Russ (N7BO) and his Dutch Oven Chocolate Cherry Cobler.



Dick's (K7ZI) cooking his famous Dutch Oven Potatoes and Beans.



Here is a quick view of the potatoes. Continued next column



Dick (K7ZI) and the guys enjoying themselves at Field Day.



Fred (KI7TPD) briefing the attendees on the Silent Key presentation that Sylvia (N7SIY) will be doing over the radio for Merlin Mackay (N7TCE-SK).



Attendees listening to Sylvia (N7SIY) via Ham Radio as she conducts the Silent Key presentation for Merlin Mackay N7TCE-SK)

#### Continued op page 21

### RCARC June Membership Meeting Pictures



Members arriving and getting ready for meeting.



Fred (KI7TPD) calling meeting to order.



Fred (KI7TPD) leading the Pledge of Allegiance Continued next column



James Moore () updating the members on the status of the Winlink Training and repeaters.



Introduction to the 2025 RCARC Field Day PowerPoint.



Fred (KI7TPD) briefing the attendees on the upcoming Field Day activities.

Continued on page 14

### RCARC June Membership Meeting Pictures



Fred (KI7TPD) talking with Rus (N7BO) in red shirt.



Fred (KI7TPD) advising that we will be a 5 Alpha Utah station with call sign N7U at this year's Field Day.



Dennis (W6DLW) won the book drawing. The ARRL Operating Manual

### For the Amateurs

(A Poem on Solar Storms and Signal Loss

They tune their dials with quiet care, And send their signals through the air. But high above, the heavens flare— And leave the bands in disrepair.

For when the Sun lets loose its might, With X-class flares that blaze so bright, The D-layer wakes in harsh alarm.

From 80 meters to ten and more, On signals vanish, mute änd sore. On daylight's side, the bands fall dead— As if the ionosphere had fled.

And in the north where cold winds roam, The polar paths are not a home. For charged particles flood the skles, And steal the sound from hams so wise.

Auroral curtains twist and dance, But skies that storm will calm once more, And DX calls will fill the floor.

> Mark Waldrop KE4WA

# OREGON LATEST STATE TO PROCLAIM 'AMATEUR RADIO MONTH'

In the US, Oregon has become the latest state to proclaim June to be "Amateur Radio Month." Gov. Tina Kotek issued the proclamation in time for ARRL Field Day, which is taking place in the US and Canada on the 28th and 29th of June.

The state is a busy place on the ham radio map, both for hosting the convention of the Northwest Division of the ARRL and its location on an earthquake fault line that keeps emergency responders' alert. Governors in Hawaii and New Hampshire recently issued similar proclamations in their respective states.

# WEATHER RADIO STATIONS GO OFF AIR FOR UPDATES

The National Oceanic and Atmospheric Administration is in the process of temporarily taking its radio stations off the air for scheduled updates.

As some parts of the United States enter hurricane season, which officially began on June 1st, the National Weather Service is continuing with its nationwide update of their Advanced Weather Interactive Processing System. The system is used for weather data processing and communications, two functions that are especially critical during storms and other weather-related emergencies.

The upgrades will be taking more than 1,000 radio stations of the National Oceanic and Atmospheric Administration off the air, on a rolling basis, for 2 to 3 days in a scheduled rollout for their 122 Weather Forecast Offices. Broadcasters and ham radio groups have expressed concern about not having access to these emergency stations during those periods.

NOAA Weather Radio, known as the "Voice of the National Weather Service," is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest Weather Forecast office. These stations broadcast official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.

The NWS is using social media and other means to inform citizens in the affected areas when their stations will be out of service. They are also encouraging citizens to rely on alternate sources for weather warnings during the outage, including local TV and radio, weather apps, and NWS websites.

### FCC PROPOSES \$25,000 FINE AGAINST CB OPERATOR

A Citizens Band operator is facing a fine after the FCC charged him with a series of operating violations.

An Illinois man faces a \$25,000 penalty from the FCC for unauthorized operation of a Citizens Band radio. The agency announced its decision on May 30th, 2025, two years to the day after it issued a Notice of Apparent Liability against Jayme John Leon. The agency's Enforcement Bureau said that he repeatedly voided his operating authority by sending "nonverbal, indecipherable sound effects over long periods" causing malicious interference and engaging in one-way transmissions. According to the FCC document, Leon did not file a response to the 2023 Notice of Liability.

Citizens Band radio is not a licensed service in the United States. Operators retain the privilege of using CB by agreeing to comply with relevant regulations stipulated in the Communications Act of 1934.

### FCC EYES GIVING SATELLITES 20,000 MHz MORE OF SPECTRUM

We begin this week with changes the FCC has voted to make to the spectrum - specifically to accommodate satellite operations.

The US communications regulator is hoping to move ahead with the assignment of more than 20,000 MHz of spectrum bandwidth to accommodate expanded satellite-based broadband service. The FCC voted unanimously at its May 22nd open meeting to explore such use across four spectrum bands: the upper portion of the 12 GHz band, starting at 12.7 GHz; the 42 GHz band, the 52 GHz band and four unused sections of the 75-110 GHz W-band totaling 18,000 MHz.

FCC Chairman Brendan Carr said in a statement after the vote that "each band is a potential game changer.". The agency said that the amount of spectrum under consideration is greater than all the spectrum presently available for satellite broadband. He said the additional frequencies were ripe territory for so-called nextgeneration services.

It was unclear what impact, if any, the Notice of Proposed Rulemaking would have on the amateur radio service. The move was applauded by the Satellite Industry Association in a statement on its website. RCARC Participates in the May 31, 2025 Disaster Preparedness Fair at the Heritage Center



Bruno (KG7VVN) doing a presentation on Ham Radio.



Terry West, Linda (KG7PBX) and Ron (K7HDX) staffing the RCARC booth. Photo by W6DLW



Terry Meissner covering the CERT Booth. Continued on next column



Food survival kits for Disasters booth.



Anthony (KC6WFI) and Sonja (KD6HYH) taking a break at the fair.



# SPECIAL EVENT IN IRAN HIGHLIGHTS PERSIAN GULF HISTORY

A small group of amateurs living in different cities throughout Iran joined together over the airwaves recently to give the world its first ham radio history and cultural lesson about the Persian Gulf.

It was a proud moment for 11 ham radio operators in Iran who got on the air on June 7th, calling CQ on SSB as special event station EP2PG. Using modest, home-based equipment with 100 watts of power or less, the operators faced less-than-ideal conditions on the HF bands during their 16-hour operation.

Still, it was a proud moment as the hams of Echo Papa two Persian Gulf celebrated the historical and cultural significance of the Persian Gulf itself and shared it with the world. One of the operators, Morteza EP5APP, told Newsline that the team's focus was on making as many DX contacts as possible in the interest of friendship and unity and, of course, to share the story of the gulf, which is one of the world's oldest maritime regions.

The team achieved that goal, logging more than 360 QSOs from, 60 DX countries across Europe, Asia, Oceania and the Americas.

Morteza told Newsline "This activity was entirely self-funded and carried out by volunteers with a shared passion for radio and a strong desire to make the voice of Iran heard in a positive, non-political, and welcoming way."

They're ready to do it again next year - hoping to exchange even more stories and of course QSL cards.



### INDIANA EMCOMM GROUP SWITCHES FROM ANALOG FM TO DIGITAL

With emergency communications embracing digital modes more and more, operators increasingly find themselves navigating the tricky landscape of system access and compatibility.

In April of this year the Dubois County Office of Emergency Management in Indiana made the decision to migrate from analog FM to C4FM digital for their 147.195 repeater during activations. The change was made to reduce noise during operation and increase the quality of copy. According to Gary Fritz, WB9LIB, operations officer for the EMA "Our new Fusion repeater system was thoroughly tested to confirm its superior performance when using C4FM."

When the announcement was made to the Patoka Valley Amateur Radio Club, not all the club members were enthusiastic. Since some of them did not own a Fusion compatible radio, this decision would exclude them from emergency operations with SKYWARN.

Fritz told AR Newsline that the change has brought about the desired results in message quality, as proven by recent SKYWARN activation during severe weather. "We found that by using C4FM, our units are now able to check in crystal clear from locations that were previously impossible."

A number of local amateurs remain unconvinced regarding the move to digital. Reuben Montgomery, KA9RCM, told Newsline that his main concern is centered primarily on the lack of access to the emergency communications by hams without Fusion radios and by visitors who are passing through the area. With the variety of digital platforms, he also sees great difficulty in picking one mode to the exclusion of all others. Regarding participation, Fritz reported that the public and all amateur radio operators can continue to monitor net communications through audio streaming over Broadcastify.

# HACK

#### **Copper Adapter for Brass Rods**

Hams have been making VHF and UHF antennas out of SO-239 coaxial connectors for decades. These ground-plane antennas use a single vertical conductor to radiate the signal, and four horizontal wires know as radials. These radials create the ground return to complete the electrical circuit and allow the antenna to radiate signals as efficiently as possible.

I prefer to use a brass rod for the vertical conductor, but attaching it to the center pin of an SO-239 connector can be a challenge. The SO-239 pin doesn't solder well to brass, and you need a good connection at the pin in order for the antenna to work properly.

I found a 1-1/4-inch length of 5/32- inch hard drawn copper tubing at a hobby store. This tube is common, and it really accepts a 1/8-inch brass rod. The copper solders much easier to the brass rod as well as the center pin of the SO-239, although you will probably need to use a torch or a high heat soldering iron.

Utilizing a V-shaped file, I made a notch 5/16-inch from the bottom of the copper tube for access when soldering the rod end to the center pin of the SO-339 to ensure a good connection. This allows the tube to slip snugly into the center pin (see Figure1 below). Then I soldered the other end of the tube to the brass rod to complete the vertical conductor.

Hack provided by Manual Alverez, KB8ITC



# More Ham Humor



The Magic of the Mind's Eye in Ham Radio





# **RCARC EComm Members Meet**

On June 19, 2025 Dennis (W6DLW) brought the meeting to order at 5:30 PM.

Members recited the Pledge of Allegiance.

# **Meeting Program Presentation:**

Jon Karpel of our local Cedar City Civil Air Patrol Unit (Mustangs) delivered a very informative over view of the unit's operation.

He stated their mission is "Volunteers serving America's communities, saving lives, and shaping futures".

The Civil Air Patrol was established in 1941, to support the military during World War II.

The Cadets use the STEM training model which refers to education and professional development focused on the fields of science, technology, engineering, and mathematics.

Additionally, their training includes Emergency services, search and rescue, radio location (downed aircraft), security, network structure, meeting the needs of the operation, inter and intra-operability, radio communications, proper use of phonetics, message handling and using radios for ground to ground and air to ground HF, VHF and digital modes. See pictures below:



Jon Karpel from the local Civil Air Patrol Squadron starting his presentation to the meeting attendees.

Continued next column



Meeting attendees intently listening to the presentation.

# WHY IS AMATEUR RADIO SO GOOD?! LET US COUNT THE WAYS...



It's not just a hobby — it's a passport to the world! Talk to someone in Tokyo, Texas, or Tasmania... all in one evening.

Build it. Fix it. Tinker with it. Amateur radio is DIY meets sci-fi—and YOU'RE in control





Learn something new every day! From propagation to soldering, it's a full-on brain boost

No Wi-Fi? No problem! When the grid goes down, radio keeps you connected Emergency-ready and proud!





Best of all? The community. One big global family that shares knowledge, stories, and plenty of good laughs, e

# **More Ham Humor**



I said I was a Radiooligist, not a radiologist



"Islands On The Air" would be more fun if WE had a radio too!

# RCARC 2025 Summer Field Day Pictures

Continued from page 13



Members enjoying the potluck dinner along with the chili dogs.



RCARC Field Day set up from the South looking to the North. Picture taken by Paul (WA7GVL). File Photo



RCARC Field Day set up looking East. Picture by Fred (KI7TPD) End. File photo



# Silent Key Merlin Clegg Mackay N7TCE



Merlin Clegg Mackay passed away on June 22, 2025 in St. George Utah, surrounded by his loving family. He was born July 29, 1941 in Murray, Utah to William Lloyd Mackay and Eva Clegg, fifth of six children.

He considered his life ordinary with no significant disasters or special events. However, evidence shows otherwise. He took several trips down the Colorado and Snake Rivers in canoes. He joined the Utah National Guard and spent six months on active duty and served a mission for the Church of Jesus Christ of Latter-day Saints in Australia.

In 1963, he married Dawn Evelyn Greenlees in Salt Lake City, Utah and had three children, Janelle, Troy, and Kurt. That marriage was annulled in 1969. Merlin's relatives offered to take the children, but he was adamant that he retain full custody, all the while working full time for the Federal Aviation Administration (FAA).

Merlin married Edith Ellen Dicks on Aug 28, 1970 in the Salt Lake Temple. He wholeheartedly took on the responsibility of helping raise Edith's three children, Joe, Julie and Jill in Elko, Nevada. They had two more children, Jennifer Elaine in 1972 and Kenneth David in 1975. He tried fervently to treat all the children equally.

Merlin's determination to care for his family was manifested through his career with the FAA. Starting in 1967, he worked rotating, weekend, and overtime shifts for 38 years to provide earthly comforts and mission and education expenses before ever pursuing his desire to become a pilot.

He enjoyed an aviation class in high school and failed the class because he didn't realize he had to write a paper. After working many years with pilots, he joined the Civil Air Patrol (CAP) learning to fly with expenses paid by the CAP and observing many flights. Soon, he had an opportunity to join a corporation of four in ownership of a Cessna 182. He flew several search and rescue missions, locating downed aircraft and helping save lives.

While in Santa Barbara, California, Merlin learned to scuba dive and bought a small boat from which he dived for abalone. He used other talents and skills to help people load moving trucks and trailers, always insisting they load in a logical way for optimal balance.

Upon retirement in 2005, Merlin never wanted to get up early again or fill out mountains of paperwork. But his career enabled him to fly all over the world in cockpit jump seats to visit children finishing missions or military training. After 9/11, he bought his tickets, and took Edith on vacations to Europe, Australia, China, and Africa.

#### Continued on page 23

#### Silent Key Merlin Clegg Mackay Continued from page 20

He went on to fulfill other items on his bucket list, including sky diving, bungee jumping, and snow skiing. He became certified as an amateur ham radio operator and enjoyed connecting with other hams throughout the world. When he could no longer fly due to Parkinson's, he sold his part of the airplane and joined Ethan Bunker in partnership to restore an old tractor similar to models he used in his youth.

As his mobility declined, Calling on Angels and Iron County Health and Hospice assisted in keeping him safe and on his feet for a long time.

His viewing was held June 27 from 7-8 PM at the Cedar view Chapel at 320 South 1925 West, and on June 28 from 10 to 10:45 AM and funeral services held at 11:00 AM. After the service, interment was at the Cedar City Cemetery under the direction of HeartLight Funeral Services. www.heartlightfs.com/ In lieu of flowers, please contribute to a Parkinson's group: utahgwep.org. or swpdfit.com