

RAINBOW CANYONS AMATEUR RADIO CLUB NEWSLETTER



Club Website: www.rcarc.info Number 7 – Vol. 9 September 2025

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.

2025 Club Officer's

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CQ, CQ, Happy Labor Day



Presidents Message

Dear Fellow Amateur Radio Operators,

It has been a hot dry summer but things seem changing with some very welcome and needed rain and finally some cooler temperatures! Hopefully that means that you can get out and enjoy the nicer weather. Our August BBQ was a great success and it was wonderful to see everyone, especially our new members and those who we have not seen for a long time. It is always great to see how enthusiastic and passionate everyone is about radios and how willing everyone is to help out our fellow members. A big Thank you to Terry West and Brody for helping with the cooking and to everyone who participated by bringing food and helping with set up and clean up.

We have the Cedar City Half Marathon coming up shortly (Sept. 6th) and as always it looks like we have a good turnout for the aid stations. It is always fun to help with this annual activity and cheer the runners (and walkers) on to the finish line.

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

September 9, 2025

RCARC Club Meeting.

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

October 14, 2025

RCARC Club Meeting.

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

November 11, 2025

RCARC Club Meeting.

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

December 9, 2025

RCARC Club Meeting.

7:00 pm. Cedar City Senior Center,
489 E. 200 South. **Annual Club**
Christmas Party.

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

This year we are going to try to have the aid stations marked on the local APRS map and I will mark the end of the race. You will be able to follow along on the <http://APRS.fi> website. For September we will have a presentation on power options for HAM radio with batteries and solar power and key points for our discussion.

I hope everyone has been getting out on the radio! Have fun, and play on your radio. As we move into Fall the temperatures will be falling and you might want to get out a bit more. 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!

Continued next column

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)

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 September**



Happy Labor Day

Breakfast & Friendship Net Awards

April 2025

| Breakfast Net | | Friendship Net | | |
|---------------------|--------------------|--------------------|---------------------|--------------------|
| First Place | KI7SCX - John | First Place | Second Place | Third Place |
| K2MFK - Kevin | N7SND - Larry | K7NKH - Lee | K7ZI - Dick | K7HDX - Ron |
| KI7TPD - Fred | | KA7J - Lance | KI7LUM - Bruce | N7SND - Larry |
| W0KLH - Kevin | Third Place | KI7ZLVC - Tim | KJ7LTQ - Brant | |
| | KE6ZIM - Johnny | KI7TPD - Fred | N7SIY - Sylvia | |
| Second Place | N7SIY - Sylvia | W0KLH - Kevin | N7WWB - Darlene | |
| K7ZI - Dick | | W6DLW - Dennis | WA7GVL - Paul | |
| KC6WFI - Tony | | | | |
| KD6HYH - Sonja | | | | |
| KG7PBX - Linda | | | | |

Rainbow Canyons Amateur Radio Club Treasurer Report Aug 12, 2025

| | |
|---|-------------------|
| Bank balance July 1, 2025 | \$2,966.94 |
| Deposits | |
| membership - KJ7OGZ, NR7T, W0DHT | + 45.00 |
| Expenses | |
| Rocky mountain Power (98 repeater elec exp) | - 11.68 |
| Check order | - 36.21 |
| Field Day Food | - 249.86 |
| SK Donation N7TCE to Parkinson's Foundation | - 100.00 |
| Bank Balance July 31, 2025 | \$2,614.19 |
| Aug Outstanding | |
| Deposits | |
| Donation | +30.00 |
| Check order credit | +36.21 |
| Expenses - | |
| Rocky Mountain Power (due 8/15/25) | - 11.92 |
| Funds Available after 8/15/2025 | \$2,668.48 |

Submitted by
Linda Shokrian KG7PBX
2025 RCARC Treasurer
435-867-5914

RCARC Upcoming Events

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. Presentation: Power options for HAM radio with batteries and solar power are the key points for our discussion.

October 14, 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. Presentation: To be determined.

November 11, 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. Presentation: To be determined.

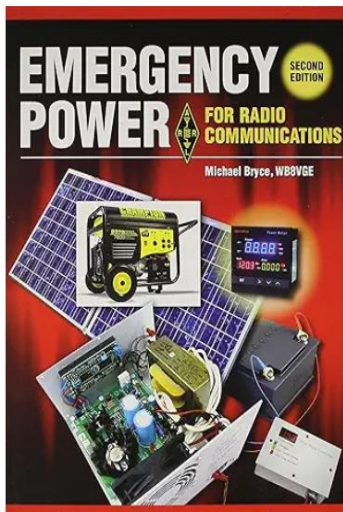
December 9, 2025 RCARC Monthly Membership Meeting at the Cedar City Senior Center 489 E. 200 S. Lower-level, N. side of building at 6:00 PM. **This will be our annual Christmas (Potluck Dinner), Please save the date. Note meeting time change.**

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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 September 9, 2025 meeting.



The Book below was given away to

At the August 12, 2025 meeting

Note:

There was no book giveaway in August.



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

A Thank you from Edith Mackay

*We appreciate your thoughtfulness
Far more than words can say,
And so this comes
With Many Thanks
From both of us today.
Edith and Merlin*



Buzz's September Safety Tip(s)



Monsoon Weather

Monsoon weather refers to a seasonal wind pattern that causes significant changes in precipitation.

It typically involves a shift in winds that can lead to a very rainy season or a very dry season, particularly in tropical and subtropical regions.

Monsoons are characterized by heavy rains during the summer months, which are vital for water supply, but also can lead to flooding

General Safety:

- **Be aware of your surroundings:**

Pay attention to weather forecasts and alerts, and be mindful of potential hazards like flooding, lightning, and strong winds.

- **Avoid flooded areas:**

Never drive, walk, or bike through flooded washes or roads. Water depth can be deceiving and currents can be strong, according to the National Weather Service.

- **Seek shelter:**

If caught in a thunderstorm, seek shelter indoors or in a sturdy vehicle. Avoid open areas, trees, and bodies of water.

- **Prepare for power outages:**

Have flashlights, batteries, and a backup power source ready in case of power outages.

Driving Safety:

- **Slow down:** Reduce your speed and maintain a safe following distance when driving in the rain.
- **Turn on headlights:** Use your headlights to increase visibility, even during the day.
- **Check your tires:** Ensure your tires have adequate tread and proper inflation for better traction.
- **Avoid sudden braking:** Brake gently and gradually to avoid skidding.
- **Be aware of potential hazards:** Watch for puddles, standing water, and debris on the road.

For Children:

- **Keep them dry and warm:** Dress children in appropriate clothing and ensure they have rain gear.
- **Educate them about hazards:** Teach children about the dangers of flooded areas, lightning, and strong winds.
- **Encourage good hygiene:** Remind children to wash their hands frequently and avoid touching their faces.
- **Provide healthy food and drinks:** Ensure children are eating nutritious meals and drinking plenty of safe water.

Continued on next column

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RCARC August 12, 2025 Membership Meeting/Barbeque Pictures

Pictures by Dennis L. West (W6DLW)



Club members conversing as they wait for the meeting to start.



Fred (KI7TPD) calling the club meeting to order.



Fred (KI7TPD) conducting meeting business.

Continues next column



Brody (K7VXV) cooking the burgers.



Tony (KC6WFI) and Sonja (KD6HYH) removing the cooked hotdogs from the grill.



Dick (K7ZI) setting up and prepping his famous Dutch Oven Potato's.

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RADIO NEWS

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

EDITORIAL AND GENERAL OFFICES, 53 PARK PLACE, NEW YORK

Vol. 7

SEPTEMBER, 1925

No. 3

WHAT THE BROADCAST LISTENER SHOULD KNOW

By HUGO GERNSBACK

THE following is addressed to those who already own sets and who are always looking for additional radio information. As the number of stations continues to increase rapidly, and as most of the stations are working on wave-lengths below 300 meters, many sets today do not tune down far enough. As a matter of fact, very many sets have distinct difficulty in tuning below 250 meters. There are plenty of excellent programs coming from the short-wave stations that many people would like to get and cannot get with the present sets.

Many letters come in to the writer asking for a remedy for this condition. Some relief may be obtained by connecting a variable condenser of about 23 plates in series with the aerial of your set. This sometimes helps, particularly if your aerial is long. A much better plan would be to shorten your aerial, if this can be done easily. An aerial of which the total length is not more than 50 or 60 feet will be found very much better for shorter waves.

Another remedy is to use one or more of the new straight-line frequency condensers. These condensers are to replace the ones now in your set. Much easier tuning will result, as the stations are not so badly crowded at the lower end of the dial. Replacing your present condensers with this new type will not be very expensive and will result in better service from your present set.

Very often it is found that signals coming from certain stations, even from the local stations, will fade rather badly. It may be said that had fading from a local station is rarely the fault of the station, but rather the fault of your aerial. This is particularly the case when listening in to the low-wave stations. It can usually be traced to swinging of your aerial in the wind. This changes the capacity of the aerial and causes fading. The remedy is to tighten the aerial, taking up all the slack. This should be done once every three months, anyway. A good stunt is to put stiff brass or steel springs between the insulators and the wall or other support. This spring will keep an even tension on the aerial and allow for its expansion and contraction. In the wintertime the average aerial is taut, while in the summer it sags badly. This is due to differences of temperature. For the long waves, the swinging of aerials does not give much trouble, but the shorter we go on the wave band, the worse this effect becomes.

Many people are puzzled as to why stations come in on different dial settings during different times of the month. The radio fans should know that the tuning of regenerative receivers is affected by several factors. First, the voltage of the "A" battery and the voltage of the "B" battery. If your "A" and "B" batteries get weaker, the dial readings change. As soon as the "A" battery is charged and a new "B" battery replaces the old worn ones, you will find that the dial settings are exactly the same as they were originally, when the batteries were new. The intelligent observer will always know by the change of the dial settings that the batteries need attention.

Another factor that changes the dial settings is the condition of the tubes. You will notice that, in practically all existing sets, when the tubes are changed, the dial settings vary as well. Therefore, dial readings should be recorded only after the set is working correctly and finally adjusted. The tubes should not be changed around after they have once been put in place, unless you wish to change your dial readings every time you do so. And this is apt to become a nuisance, particularly for DX (distant) stations.

As everyone knows, DX is not easy to get, at best, and switching tubes around sometimes makes it a very difficult task to bring back such stations, because, with the tubes changed, they are on different dial settings.

Should you at any time either lengthen or shorten your aerial, or change your ground wire, you will immediately notice that the dial readings are changed. For that reason, the aerial and lead wires, as well as ground wires, of your set should not be changed any more than necessary, because it means a lot of arduous work to relog stations afterwards.

When considerable interference exists between stations the wave-lengths of which are close together, particularly in the lower part of the wave band, and the tuning is not very sharp, the following trick may sometimes be resorted to: Simply disconnect the ground wire and operate the set with the aerial wire alone. You will probably find that the intensity of the signals is cut down somewhat, but that as a whole you will be able to receive the wanted station clearly, because the interference can be much more easily tuned out.

If this does not give sufficient relief, it will next be in order to try one of the attachments that are on the market, which can be screwed into any 110-volt lighting circuit. This does away entirely with aerial and ground and in many cases gives excellent results. It means that the lighting mains become your aerial and ground. A number of combinations can be made, some of which may prove surprisingly good. The one trouble with this arrangement is that it does not work in all localities. It is apt to work better in isolated dwellings than in large apartment houses.

As a general rule, the outdoor aerial is the best for reception, particularly if you want to get the distant stations. If, however, you are satisfied with the locals, and you have a fairly good set, from three tubes upwards, there is really no sense in having an outdoor aerial. An indoor aerial, which is nothing but an insulated wire running around the moulding of the room, will do just as well and, as a matter of fact, it will be better, particularly if there is much interference from other stations. The indoor aerial is also much more desirable when there is undue interference from other nearby stations. This is particularly so in the big cities where there are many broadcast stations and where an outdoor aerial is apt to give too much interference.

Then we should not forget to mention the good old-fashioned bed-spring aerial, which is not half as poor as many people think. The metallic part of the bed-spring is attached to the aerial binding post, while the usual ground is used. Some surprising results have been obtained by the writer with such an arrangement, even to bringing in some distant stations.

Then we have a sort of condenser aerial, which is really an excellent one for many purposes, and some surprising results have been obtained by means of it. The writer uses the following arrangement with very good results: He secured a pound of tin foil and tacked this in long strips on one of the house doors, covering the two sides of the door. From each side of the door, connected to the tin foil, a wire was run to the ground and aerial binding posts of the set respectively. Stations came in very nicely. By setting the door at various angles some stations would come in while others would fade out. In other words, such an aerial has directional qualities and can be successfully used to cut out interfering stations. The writer had very good results with such an arrangement, although he is located in a steel building. No doubt better results could be obtained with such an arrangement in a stone or wooden building. It will be noticed when using such an "aerial" that static is not so much in evidence as when using other kinds of aerials.

Perhaps you did not know it, but your wire net window screens, particularly in the summer, can act as a fair substitute for your aerial. If you have two windows in your room you can connect them by means of the usual connecting clips used so much in radio, and use the two screens as one aerial. The writer did this and obtained good results for a makeshift aerial. This may be remembered when away on your vacation with a portable set, when no other aerial may be available.

When you are using a super-heterodyne set, it is a good trick to ground the filament circuit; that is, the connections that go to the filament of your tube. This means that the storage battery leads either the positive or the negative pole, should be connected to the nearest ground available, such as cold water pipe or radiator pipe. Much better selectivity is obtained. The volume will increase somewhat and distant stations will be brought in much more clearly.

RCARC August 12, 2025 Membership Meeting/Barbeque Pictures

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Dick's (K7ZI) Dutch Oven potatoes are going fast.



The serving line is underway as members fill their plates.



The food line continues.



Tim (KI7LVC) and Tammy (KI7LVB) waiting for the line to get a little shorter before going to the serving tables.



Members back to their tables to enjoy the Barbecue Feast.



One final picture of the cooks and kitchen crew. L-R Sonja (KD6HYH), Tony (KC6WFI), Fred (KI7TPD) watching, Terry West. Brody (K7VXV) and Bonnie KI7WEX not showing. A great big thanks goes out to these folks for all their hard work and behind the scenes planning to make this event a success. End



FREE TRAINING FOR IRON COUNTY RESIDENTS

SATURDAY, SEPTEMBER 20, 2025

9:00 am to 4:00 pm | Festival Hall, Room 1
105 North 100 East, Cedar City UT 84720

What is CERT?

Community Emergency Response (CERT) teams respond in the period immediately after a disaster when response resources are overwhelmed or delayed. It is the bridge to professional responders until they are able to arrive. This training covers basic skills important to know in a disaster when emergency services personnel are unavailable. This training is sponsored by the State of Utah, Division of Emergency Management, and the Iron County Office of Emergency Management.

Skills taught during the CERT classes are:

- First Aid*
- Incident Command System (ICS)*
- Light Search & Rescue*
- Emergency Communications and more*



Please review class
information and
requirements before
signing up:



bit.ly/ironcountycert23

QUESTIONS:

TERRY MEISSNER,
IRON COUNTY CERT COORDINATOR
(435) 691-3742 TMEISSNER@ESCGROUP.US

RSVP:

GEORGE COLSON,
IRON COUNTY EMERGENCY MANAGER
GCOLSON@IRONCOUNTY.NET

Monsoon Weather

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- **Keep them entertained indoors:** Have indoor activities ready for when it's not safe to go outside.

Flash floods and low-lying areas

- Avoid low-lying areas, washes, and flood-prone zones. Flash floods can occur rapidly, even if it's not raining directly where you are.
- Never drive or walk through floodwaters. It only takes 6 inches of water to knock an adult off their feet and 2 feet of water to carry most vehicles away.
- "Turn Around, Don't Drown!" is a critical rule to remember.
- If your vehicle stalls in floodwaters, abandon it immediately and seek higher ground, if it's safe to do so.
- Be cautious at night, when it's harder to see flood dangers.

Dust storms

- If caught in a dust storm while driving: Pull your vehicle off the roadway as far as safely possible, put it in park, turn off your lights (including tail lights), take your foot off the brake, and wait for the storm to pass inside your vehicle with your seatbelt on.
- Dust storms reduce visibility to near zero in seconds, so it's vital to react quickly and safely.

Lightning

- When thunder roars, go indoors! If you can hear thunder, you are close enough to be struck by lightning.
- Seek safe shelter immediately in a substantial building with electricity or plumbing, or in an enclosed, metal-topped vehicle with the windows closed.

- Stay inside for at least 30 minutes after the last sound of thunder.
- Avoid contact with electrical equipment, plumbing, and windows during a thunderstorm.

Winds and outdoor hazards

- Secure outdoor furniture and other items that could be blown around by strong winds.
- Trim trees and shrubs near your home to prevent damage from falling branches.
- Stay away from trees and power lines during thunderstorms.

General preparedness

- Have an emergency kit readily available with essentials like water, non-perishable food, a first-aid kit, a NOAA weather radio, flashlight, extra batteries, and important documents.
- Have a family communication plan and practice it.
- Have a family communication plan and practice it.
- Stay informed by checking weather forecasts and being aware of watches, warnings, and advisories.
- If you live in a flood-prone area, elevate valuables, consider flood insurance, and know your evacuation routes.

Remember, your safety is paramount during monsoon weather. Being aware of the dangers and taking precautions can help keep you and your family safe.



Continued on next column

Blow Hard Repeater Site Open House

On the morning of August 2, 2025 after the RCARC Club monthly breakfast a number of members caravanned up to the top of Cedar Mountain to tour the Blow Hard Repeater Site which is one of two sites that allows the Cedar City area access to the Intermountain Intertie System.

The **Intermountain Intertie** is the largest linked amateur radio [repeater](#) system in the state of [Utah](#). Managed by the [Utah VHF Society](#),^[1] the Intermountain Intertie primarily covers areas west of the [Wasatch Front](#), from [Saint George](#) to [Tremonton](#). The Intermountain Intertie also covers areas in the northwest of Utah up to [Boise, Idaho](#) and toward the northeast into [Evanston, Wyoming](#) and [Rock Springs, Wyoming](#). The Intertie further reaches into parts of [Montana](#), and [Arizona](#). There are no Intermountain Intertie repeaters east of [I-15](#) on [I-70](#); in this area, the Sinbad Desert [Amateur Radio Club](#) Intertie has substantial coverage.

See Pictures:

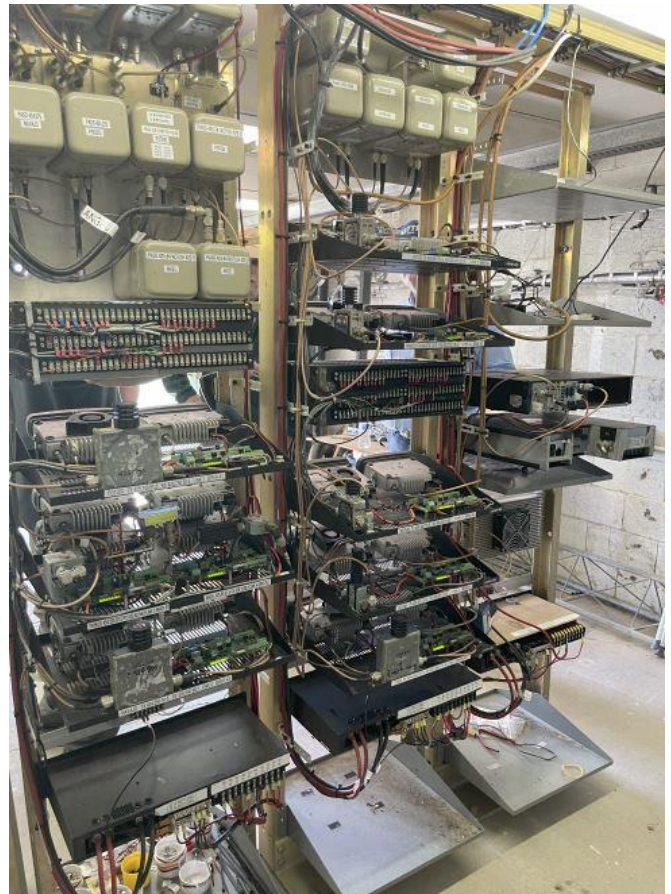


George (AL7BX) in black shirt explaining the antennas on the building. File photo.

Continued next column



Picture of just one of the racks inside the building.
Photo by Austin Smith – (W1EPR)



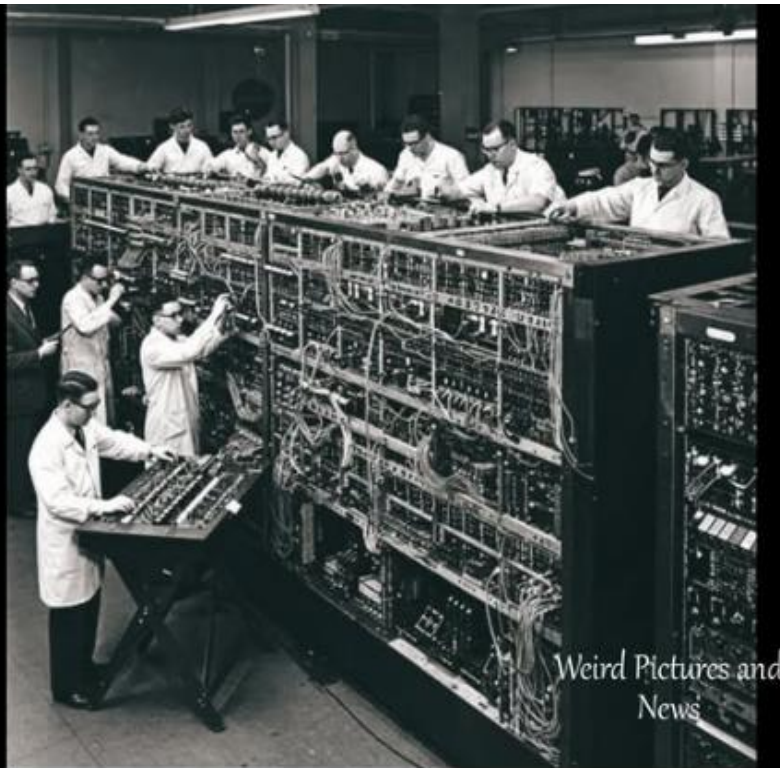
Additional racked equipment. Photo by Austin Smith –
(W1EPR)

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The World's First Computer (1945):

Five Fascinating Facts About ENIAC —

1. Massive in size – ENIAC stretched 30 meters long and weighed 27 tons. It filled an entire room!
No internal storage – It had no hard drive. Data was fed in using punch cards, and programming was done by physically rewiring its circuits.
2. Energy-hungry – It consumed a staggering 150 kilowatts of electricity—enough to power a small neighborhood.
3. Slower than a smartphone – ENIAC could do 5,000 additions per second, while today's smartphones handle billions. Yet, it was groundbreaking in its time.
4. End of an era – ENIAC was shut down in 1955, marking the close of the first true chapter in digital computing.
5. From punch cards to pocket-sized supercomputers... what a journey!



**Think your phone is slow? Meet the world's
first computer... it was 30 meters long!**

Continued on Page 18

NASA'S SPACEX CREW-11 ARRIVES, BEGINS WORK ABOARD ISS

Elsewhere in space two more hams have arrived aboard the ISS after a brief delay of their launch.

NASA's SpaceX Crew-11 arrived at the International Space Station in the early hours of Saturday, the 2nd of August after a launch that suffered a one-day weather delay due to poor weather.

Commander Zena Cardman, KJ5CMN and pilot Mike Fincke, KE5AIT were accompanied by two mission specialists, JAXA astronaut Kimiya Yui and Roscosmos cosmonaut Oleg Platonov. During their seven-month tenure aboard the orbiting laboratory, the team will conduct experiments on the impact of microgravity on bacteria-killing viruses. They will also study plant-cell division and human stem cells.

The ISS assignment marks the first time in space for both Zena Cardman and Oleg Platonov.



International Space Station

INDIA, SWEDEN INTRODUCE NEW CALLSIGN SUFFIXES, PREFIXES

If you've been listening around on the bands during the past few months, you may have heard some new personal callsigns on the air that have very different prefixes or suffixes - with good reason.

Hams who'd made contact with radio operators in India or Sweden - or who have perhaps just heard them on the air - have been hearing these operators identify themselves with callsigns that, until this year, did not exist. In India, newly licensed amateur stations have been assigned new suffixes since the 25th of June.

Although the existing, older callsign forms have not changed, new General Grade licenses, which are assigned a VU2 prefix, now get a combination of numbers and letters, creating callsigns such as VU22DX or VU29AR. Likewise, Restricted Grade licenses, which are assigned a VU3 prefix, are receiving suffixes of two numbers and three letters, creating callsigns such as VU33ABS.

Jose Jacob, VU2JOS, the assistant director of the National Institute of Amateur Radio advised that the changes are a direct result of ham radio's growth in India.

He stated "These new prefixes are a practical measure to accommodate the increasing number of amateur radio enthusiasts in India by expanding the available callsign combinations while still adhering to the country's internationally allocated prefix block."

Meanwhile, in Sweden, amateurs who have received the new entry level class certificate are identifying themselves with the country's new callsign prefix, "SH." These amateurs can be heard on 40, 20, 15, 10, 6 and 2 meters, where they are permitted to use a maximum of 25 watts of power.

The Basics of QRP Operation

Word Search

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

| | | | | | |
|------------|---------|-------------|--------------|----------------|---------|
| Operations | Basics | Efficiency | Transmission | | Signals |
| Equipment | Antenna | Performance | Frequency | Communications | |

Blow Hard Repeater Site Open House

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Dome is the FFA Radome. (Photo by Austin Smith – (W1EPR).



Another view of the outside of the building. File Photo



Fred (KI7TPD) and Ron (K7HDX) looking at the equipment. File Photo.



Ariel view of Blowhard Repeater Site. File Photo.



Additional structures at Blow Hard Mountain with FAA Radome in background. File Photo.

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Blow Hard Repeater Site Open House

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What is a Radome?

A Radome is a structural, weatherproof enclosure that protects a radar system or antenna and is constructed of material that minimally attenuates the electromagnetic signal transmitted or received by the antenna. Radomes protect antenna surfaces from weather and/or conceal antenna electronic equipment from public view. There are specialized Radome manufacturers who provide Radomes for all types applications including for weather radar, air traffic control, satellite communications, and telemetry.

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RCARC August Breakfast Pic's



Brodie (K7VXV) and Kevin (W0KLH) laughing at something.



The gangs all here and enjoying breakfast.



Our club breakfasts are truly a family affair.



Here's Fred (KI7TPD) and Ron (K7HDX) in background.



Dick (K7ZI) his wife Susan and others enjoying breakfast



Ham Radio Versus CB Radio

The cartoon tells the story of a humorous misunderstanding between two different types of radio enthusiasts.

The Ham Radio, with its many dials and complex diagram in a thought bubble, is the expert. It represents the hobby of amateur radio, which is known for its technical knowledge, long-distance communication, and experimental nature. It's trying to explain something highly technical.

The CB Radio, with its single "Breaker, breaker!" speech bubble, is the everyman. It represents Citizens Band radio, which is used for simple, local conversations and is far less technical. Its only response is a classic, casual phrase, highlighting the straightforward nature of its community.

The humor comes from the contrast between these two worlds: one trying to engage in a detailed, scientific discussion, while the other is only focused on getting a word in with a simple, friendly call. The cartoon's story is a humorous look at the differences between two communication styles. The Ham Radio represents the technical, scientific world of amateur radio, while the CB Radio embodies simple, casual conversation. The joke comes from the clash between the ham radio's complex thought bubble and the CB radio's straightforward "Breaker, breaker!" catchphrase.

Hashtags

General Ham Radio:

[#hamradio](#) [#amateurradio](#) [#radioamateur](#)
[#radiosports](#) [#hamshack](#) [#radiocommunication](#)

RCARC EComm Group Meets

RCARC EComm group member came together at the Cedar City Heritage Center on August 21, 2025.

Dennis (W6DLW) brought the meeting to order and welcomed all to the meeting. The pledge of allegiance was conducted and the minutes of the last meeting were approved.

Presentation: Dennis then introduced Gary Orton and Jim Harmon from the Iron County Sheriff's Departments Search & Rescue Unit who provided a very informative overview of the Organization's capabilities.

Gary advised that they are involved with:

Lost person searches, rescue: medical and stranded, evidence search & recovery, Natural Disasters (evacuations, traffic control, flood relief, etc.) along with anything else as directed by the Sheriff.

Jim Harmon shared that in 1988 the State of Utah placed everything under the Sheriff's Office which included their communications. Currently, they have two Command Trailers, mobile units, handhelds, both VHF and 700 MHz state system, Vtac, Vfire, Nirsc, Nicfc, FMRS, GMRS, Amateur Radio, Dot channels and business radio capabilities.

All Search & Rescue members are issued a 700 MHz Radio on the Statewide System. The old analog system is used as back up.

Jim stated that they have Ham Radio capabilities but if Ham Radio is needed, we would be called out through George Colson, Iron County Emergency Manager.

Old Business: Dennis provided a recap and accomplishments for the last year.

EComm Trailer, Tony (KC6WFI) and Sonja (KD6HYH) became the care takers of the EComm Trailer. They completed an inventory of the unit and submitted a list of items (wish list) for acquisition. Most of the items have been acquired, they include a new battery for the on-board generator, portable HVAC System and black out blinds for the windows.

Antenna Trailer: Bruno (KG7VVN) is the care taker of the Antenna Trailer. In early March a work group was put together.

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The World's First Computer (1945):

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In the shadow of World War II, six women—Betty Holberton, Jean Bartik, Kay McNulty, Ruth Teitelbaum, Marlyn Meltzer, and Frances Spence—were quietly making history. Chosen in the 1940s to program ENIAC, the world's first general-purpose electronic computer, they stepped into uncharted territory without guides, manuals, or coding languages. Just logic, blueprints, and determination.

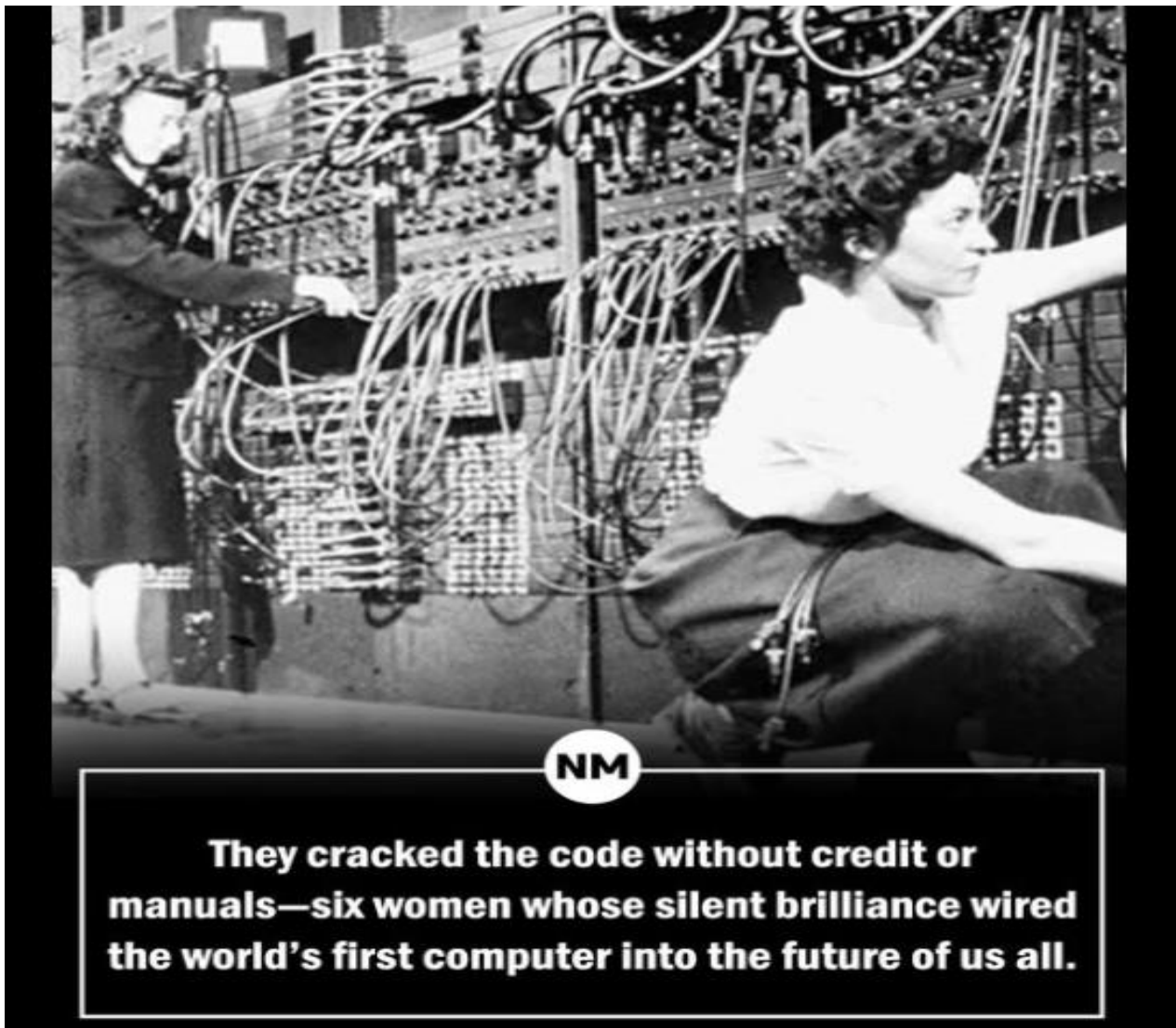
They weren't just inputting instructions—they were inventing them. Every wire, calculation, and punch card was a leap forward in a field no one had yet defined. Their innovations built the very language of modern computing.

But when the ENIAC debuted publicly in 1946, these women were nowhere in the spotlight. Applauded were the engineers, not the programmers. Their brilliance remained hidden—tucked behind blinking lights and forgotten files.

Decades later, in the 1980s, computer scientist Kathy Kleiman uncovered their buried legacy. Her work rewrote history's margins and gave these women their rightful place in the tech timeline.

Their story isn't just about code—it's about courage, clarity, and quiet revolution. These six minds didn't just run the ENIAC—they rebooted what it meant to be a pioneer in computing.

Their impact lives in every algorithm, every app, every click.



They cracked the code without credit or manuals—six women whose silent brilliance wired the world's first computer into the future of us all.

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The World's First Computer (1945):

Continued from page 18

They weren't models. They were the first programmers in history, and the world nearly forgot their names.

In 1945, six brilliant women stepped into uncharted territory, tasked with programming the ENIAC, the world's first electronic general-purpose computer. Without manuals, coding languages, or precedent, Betty Holberton, Jean Bartik, Kay McNulty, Ruth Teitelbaum, Marlyn Meltzer, and Frances Spence built the foundation of modern computing, quietly, and without recognition.

During World War II, they were hired as "human computers," solving complex equations by hand to aid ballistic calculations. When the U.S. Army developed ENIAC, these women were chosen to program it—not by writing code as we know it today, but by physically configuring the machine using thousands of switches, cables, and dials.

They studied engineering blueprints, memorized logic tables, and invented the first methods for what would become software engineering: algorithms, flowcharts, subroutines, and looping techniques.

On February 14, 1946, ENIAC's launch dazzled the world. But only the male hardware engineers were introduced to the press. The women who made it functional were left unnamed, uncredited, and eventually, erased.

Decades later, computer scientist Kathy Kleiman came across a black-and-white photo of the ENIAC team. She asked who the women were and was told, "They're just models." That dismissive remark ignited a journey to uncover the truth. Kleiman tracked down the original ENIAC programmers, many then in their seventies, and revealed the hidden history of the women who shaped the digital age.

Their contributions were more than symbolic. Holberton developed the first software application and influenced COBOL. Bartik went on to help develop the first computer to use stored programs. McNulty pioneered early programming concepts we still use today.

It took over 50 years, but in 1997, these women finally received formal recognition. Yet their story is more than a footnote—it is a powerful reminder that the digital revolution was not born in isolation, nor by men alone. End

RCARC EComm Group Meets

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The work group made a number of repairs and additions. Such as:

- A new paracord was added to replace the old cord.
- A new end fed antenna was installed replacing the old.
- Repairs were made to the dipole.
- Antenna coax fitting were replaced with new ones.

New Business

- **Annual EComm Exercise**
- Date to be determined – Late September or early October
- **Field** - Incorporate Winlink Mapping Training in the exercise.
- Utilizing Winlink Windshield Assessment Reports.
- **EOC** – Gather Information and compile for George Colson.
- **Committee** – A committee was put together to start the planning process.

Batteries

- Look in to purchasing batteries to operate our radios at Field Day events and other. This would help save the generator on run time.

Other Business

- A request to purchase a Pass filter for the 10 Meter Band was made.
- The current EComm Call out tree was updated.
- Save the date- Winter Field Day will be on January 24th and 25th, 2026.
- Prior to Winter Field Day, set up and test the Starlink unit.
- Revisit the County's AM Portable Emergency Radio Station – Used to make notifications.

Meeting Adjourned at 7:00 PM.

Continued on next column

RCARC EComm Meeting Pictures



Gary Orton, Presenting his Power Point on the Iron County Sheriff's Search and Rescue Unit.



EComm members viewing the Power Point.



Jim Harmon, Iron County Sheriff's Search & Rescue sharing with the group the units' communications capabilities. End

Blow Hard Repeater Site Open House

Continued from page 16



Attendees milling around outside the Blowhard Repeater Site.

Some Ham Humor



I think he is suffering from a "van-aerial disease"

Continued next column



In the world of amateur radio, a friendly debate often arises between enthusiasts of traditional analog HF (high-frequency) radios and modern digital modes like DMR (Digital Mobile Radio).

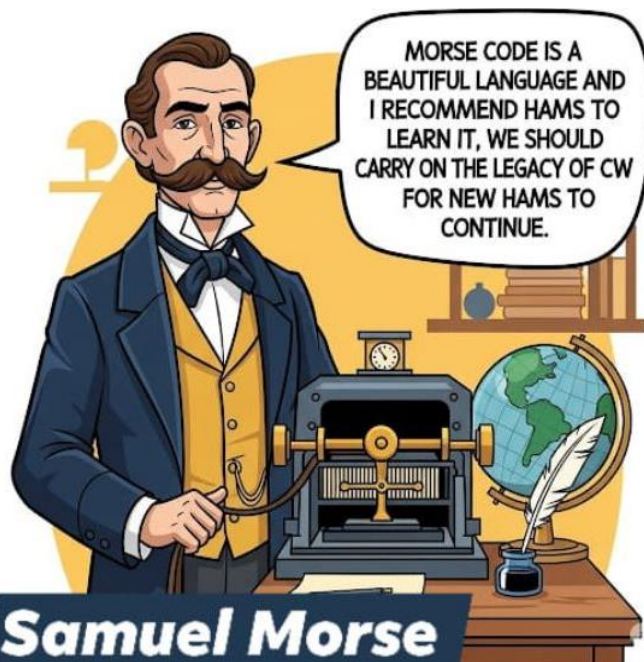
While many embrace the convenience and features of DMR, some purists believe that true "ham radio" involves the classic, hands-on experience of analog communication. This ongoing discussion highlights the evolution of the hobby and the different ways people connect through the airwaves.

Just some interesting Stuff

Meter to Feet Conversion



| | |
|-----------|-----------|
| 1 Meter | 3.28 ft |
| 10 Meter | 32.81 ft |
| 20 Meter | 65.62 ft |
| 30 Meter | 98.43 ft |
| 40 Meter | 131.23 ft |
| 50 Meter | 164.04 ft |
| 60 Meter | 196.85 ft |
| 70 Meter | 229.66 ft |
| 80 Meter | 262.47 ft |
| 90 Meter | 295.28 ft |
| 100 Meter | 328.08 ft |



Continued next column

Morse Code

Morse code is a telecommunications method which encodes text characters as standardized sequences of two different signal durations, called dots and dashes, or dits and dahs. Morse code is named after Samuel Morse, one of several developers of the code system.

| | | | |
|---|-------------|---|-------------------------|
| A | • — | U | • • — |
| B | • • • • | V | • • — • |
| C | • — • — | W | • — • — |
| D | • — • • | X | • • • — |
| E | • • • • | Y | • — • — • |
| F | • • • • • | Z | • — • — • — |
| G | • — • • • | | |
| H | • • • • • | | |
| I | • • • • • | | |
| J | • — • — • — | | |
| K | • • — • — | 1 | • — • — • — • — |
| L | • • — • • | 2 | • • — • — • — • — |
| M | • — • — • — | 3 | • • • — • — • — |
| N | • — • — • — | 4 | • • • • — • — • — |
| O | • — • — • — | 5 | • • • • • — • — |
| P | • • — • • • | 6 | • — • — • — • — • — |
| Q | • — • — • • | 7 | • — • — • — • — • — |
| R | • • — • • • | 8 | • — • — • — • — • — • — |
| S | • • • • • | 9 | • — • — • — • — • — • — |
| T | • — • — • — | 0 | • — • — • — • — • — • — |

WHAT PART OF

DON'T YOU UNDERSTAND?

fineart
america

