RAINBOW CANYONS AMATEUR RADIO CLUB NEWSLETTER

Club Website: www.rcarc.info Number 7 – Vol. 5 May 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

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

Secretary
Bonnie Bain
KI7WEX
1-435-865-1653
Bonnie.bain@gmail.com

Treasurer
Linda Shokrian
KG7PBX
1-435-867-5914
lgshokrian@gmail.com

Newsletter Editor/Historian
Dennis L. West
W6DLW
1-760-953-7935
rcarcnewsletter@gmail.com

CQ, CQ, Happy Memorial Day & Happy Mothers Day

Presidents Message

Dear Fellow Amateur Radio Operators,

Hope everyone is having a wonderful spring! We have had some interesting weather this spring (typical Cedar City with wind, snow and rain). I hope you are looking forward to our May 3rd Swap meet at the Christ the King church (690 S Cove Dr.). We will have our monthly breakfast and Go-Kit contest at the swap meet. We also have Field Day at the end of June (28-29)! Congratulations to our new Technician HAMs who took the class and passed their tests!

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

Continued on Page 2

RCARC Club Nets:
7:00 a.m. Breakfast Net - Monday – Saturday – 146.760.
12:30 p.m. Daily – Utah Beehive Net On 7.272.
8:30 p.m. Tuesday's - ORCA Digital Net. Using FLDIGI, FLMSG AND FLAMP – 3.581 +, 1500/MFSK32.
8:00 p.m. Wednesday – Panguitch Net – 147.160.
7: pm. Thursday– Morse Code Net- This is a Zoom Meeting.
8:30 p.m. Thursday's - WDN Digital Net. Using FLDIGI, FLMSG AND FLAMP – 3.581 +, 1500/MFSK32.
8: p.m. Saturdays – SSTV – 449.925.
9:00 p.m. Daily – Friendship Net – 146.760.
11: a.m. Saturdays (Mtn. Time) QCWA – 160 Net, Utah Chapter,
12: p.m. Freq. 7.272.
8:00 pm. Sunday's – New Harmony Valley Net – Bumblebee Repeater. – 146.680 with a minus offset – PL 100.

Local Repeaters:

Iron Mountain
146.760 MHz – Tone 123.0 Hz
146.980 MHz – Tone 100.0 Hz
448.800 MHz – Tone 100.0 Hz – connected to Dutton
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

May 13, 2025

RCARC Club Meeting.

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

June 10, 2025

RCARC Club Meeting.

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

July 8, 2025

RCARC Club Meeting.

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

July 15, 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.

We had a fun POTA demonstration at Rocky Peak campground (Three Peaks). We will most likely have more of these over the summer. 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)

Notice

Saturday May 3, 2025 RCARC Annual Radio Swap Meet and Pancake Breakfast 9:00 AM through 12:00 or 1:00 PM. Christ the King Catholic Church 690 S. Cove Drive in the pavilion. There will be Go Kit Challenge as well.

RCARC Monthly Breakfast

Please cone join us on the fir… …rday… …h m… …r clu… …at th… …& Gr… 137… Ci… …n un…nate… …riety quality foods from breakfast to dinner.

See you there.

No breakfast at Golden Corral this month.

Breakfast at the Swap Meet.

Happy Birthday and Anniversary to those celebrating in May

Happy Memorial Day
Happy Mother's Day

Breakfast & Friendship Net Awards

April 2025

Breakfast Net		Friendship Net		
First Place	**Second Place**	**First Place**	Larry (N7SND)	**Third Place**
Kevin (K2MFK)	John (KI7SCX)	Ron (K7HDX)	Darlene (N7WWB)	Bruce (KI7LUM
Dick (K7ZI)	Fred (KI7TPD)	Lee (K7NKH)	Dennis (W6DLW	Sylvia (N7SYI)
Tony (KC6WFI)	Bonnie (KI7WEX)	Dick (K7ZI)	**Second Place**	
Johnny (KE6ZIM)	Sylvia (N7SIY)	Caleb (KE8OYI)	Lance (KA7J)	
Linda (KG7PBX)	**Third Place**	Tammy (KI7LVB)	Brant (KJ7LTQ)	
Larry (N7SND)	Caleb (KE8OYI	Tim (KI7LVC)	Maddie (KK7FLL)	
Kevin (W0KLH	Tommy (KK7UBC)	Fred (KI7TPD)	Kevin (W0KLH)	
Paul (WA7GVL		Bonnie (KI7WEX	Paul (WA7GVL)	
		Tommy (KK7UBC)		

Rainbow Canyons Amateur Radio
Club Treasurer Report April 8, 2025

Bank balance Mar 1, 2025	**$3,422.46**
Membership W0KLH, KK7STC, K6QOG, KK7MPM, W1EPR, KR7KR, Ki7LUM, KJ7IMH, KG7VEI family N7BO family, K7WTB	+ 165.00
Expenses	
Xmas Exp - antenna	- 75.00
Xmas exp - food	- 100.00
Rocky mountain Power (98 repeater elec exp)	- 19.87
Bank Balance March 31, 2025	**$3,392.59**
Mar Expenses	
Rocky Mountain Power (due 4/16/2025)	- 21.69
Funds Available after 4/16/2025	**$3,370.90**

Submitted by
Linda Shokrian KG7PBX
2023 RCARC Treasurer
435-867-5914

RCARC Upcoming Events

Saturday May 3, 2025 RCARC Annual Radio Swap Meet and Pancake Breakfast 9:00 AM through 12:00 or 1:00 PM. Christ the King Catholic Church 690 S. Cove Drive in the pavilion. There will be Go Kit Challenge as well.

Tuesday May 13, 2025 RCARC Monthly Membership Meeting. Cedar City Senior Center, 489 E. 200 S. at 7:00 PM.

Saturday & Sunday June 28 and 29, 2025 Summer Field Day (SFD). Mark your calendars.

In This Issue

RCARC Book Giveaway. Books are donated by Linda Shokrian (KG7PBX)

Shown below is the book that will be given away at the May 13, 2025 meeting.

The Book below was given away to Sonja (KD6HYH) At the April 8, 2025 meeting

Congratulations

Sonja

See Picture on page 6

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

Buzz's
May Safety Tip(s)

Wet Weather Driving Tips

Spring and summer showers may mean flowers, but wet pavement contributes to nearly 1.2 million traffic crashes each year.

Here are some tips you'll want to follow the next time you're caught driving in the rain.

Safety starts before you drive, and your goal should be to see and be seen. Replace windshield wiper inserts that leave streaks or don't clear the glass in a single swipe. Make sure all headlights, taillights, brake lights and turn signals are properly functioning so other drivers will see you during downpours. Turn on your headlights whenever you drive.

Proper tire tread depth and inflation are imperative to maintaining good traction on wet roadways. Check tread depth with a quarter inserted upside down into the tire groove. If you can see above Washington's head, start shopping for new tires. Check each tire's pressure, including the spare, at least once a month… and be sure to check the pressure when the tires are cold.

Avoid Cruise Control

Most modern cars feature cruise control. This feature works great in dry conditions, but when used in wet conditions, the chance of losing control of the vehicle can increase. To prevent loss of traction, the driver may need to reduce the car's speed by lifting off the accelerator, which cannot be accomplished when cruise control is engaged.

When driving in wet-weather conditions, it is important to concentrate fully on every aspect of driving. Avoiding cruise control will allow the driver more options to choose from when responding to a potential loss-of-traction situation, thus maximizing your safety.

Continued next column

Slow Down and Leave Room

Slowing down during wet weather driving can be critical to reducing a car's chance of hydroplaning, when the tires rise up on a film of water. With as little as 1/12 inch of water on the road, tires have to displace a gallon of water per second to keep the rubber meeting the road. Drivers should reduce their speed to correspond to the amount of water on the roadway. At speeds as low as 35 mph, new tires can still lose some contact with the roadway.

To reduce chances of hydroplaning, drivers should slow down, avoid hard braking or turning sharply and drive in the tracks of the vehicle ahead of you. Also, it's important for motorists to allow ample stopping distance between cars by increasing the following distance of the vehicle in front of them and beginning to slow down to stop for intersections, turns and other traffic early.

Responding to a Skid

Even careful drivers can experience skids. If a driver feels their car begin to skid, it's important to not panic and follow these basic steps:

- Continue to look and steer in the direction in which the driver wants the car to go.
- Avoid slamming on the brakes as this will further upset the vehicle's balance and make it harder to control.

If you feel the car begin to skid, continue to look and steer in the direction you want the car to go. Don't panic, and avoid slamming on the brakes to maintain control.

Overall, you want to be extra cautious in wet weather. Slow down, avoid hard braking or turning sharply and allow ample stopping distance between you and the cars in front of you. Also, do these things one at a time. Brake, then turn, then accelerate.

RCARC April 8, 2025 Membership Meeting Pictures

Member's waiting for the meeting to start

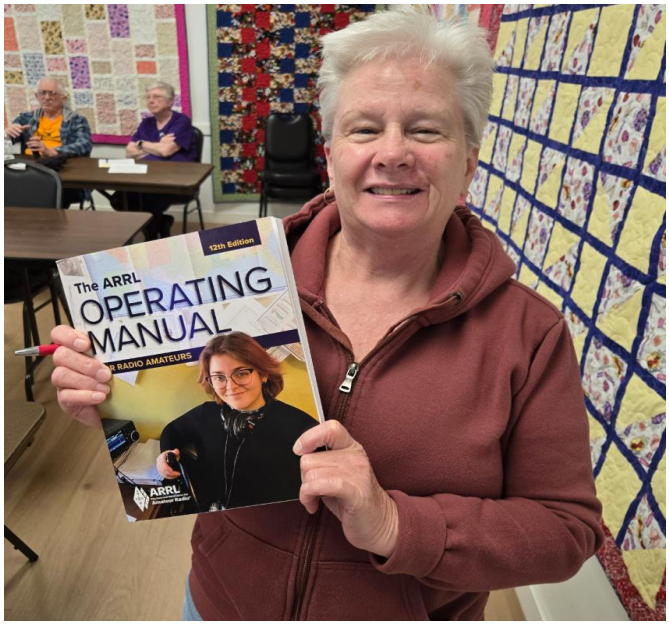
Fred (KI7TPD) bringing calling the meeting to order.

Member's citing the pledge of allegiance.

Continued next column

Fred (KI7TPD) conversing with Tony (KC6WFI)

Ron (K7HDX) providing a briefing on the upcoming Utah Great Shakeout.



Sonja (KD6HYH) won the book drawing The ARRL Operating Manual.

Continued on page 8

RADIO NEWS
H. GERNSBACK, Editor and Publisher
SYLVAN HARRIS, Associate Editor
EDITORIAL AND GENERAL OFFICES, 53 PARK PLACE, NEW YORK
Vol. 6 MAY, 1925 No. 11

"Mental Radio"

By HUGO GERNSBACK

SINCE broadcasting has become worldwide, a peculiar effect has made itself felt upon a number of individuals, the effect increasing at a rate that is viewed with concern in many quarters. Government officials, doctors, editors, and many other professional people are continually annoyed by persons with this new delusion. The writer, for instance, receives an average of from ten to fifteen letters every week from various people who are possessed of this affliction, and he sees, in the course of a month, a number of individuals who call upon him in person.

The correspondence or the talk usually centers around the following, and the symptoms in most cases seem to be uniformly the same. The receiver of the "mental radio" messages in all cases states that he or she has received "radio" messages steadily, every day, for a stretch of several years. Sometimes, the radio message is of a spiritual, uplifting nature, but more often, and most numerously, the messages are of the persecuting sort, where the message purports to come from an enemy trying to do the recipient harm.

Close questioning of the interviewed subjects nearly always brings forth the information that the "messages" are strongest at night before the subject goes to sleep, or that he is awakened by them. The voices in all cases appear to be real and loud and are supposed to startle the subject to such a pronounced degree that he or she thinks a sort of invisible loud speaker is located in the room. The radio messages are always supposed to be broadcast by modern radio transmitting apparatus, usually operated by the enemies of the subject.

OF course, every scientifically inclined person who receives correspondence of this sort promptly relegates it to the waste basket. The condition of the subject is, to be sure, very well understood by psycho-analysts, psychiatrists and alienists. No good, however, will ever come of just calling these subjects insane, or unbalanced. The writer, who has talked to a number of them, has found that in many cases they are very rational in points other than the one delusion. Nearly always these people know nothing at all of science or radio, and view the new radio art with great awe. They often have the idea that radio is only another form of mental telepathy. The writer is quite certain that if these deluded people understood the fundamentals of the radio science they could easily be cured, provided the mentality of the subject is such that he or she could grasp the facts.

It is usually a good plan to refer such a person to a good radio primer, or elementary radio text, written in such language that even the layman can understand it. There are a number of such books procurable at present. If the subject can be made to read them he will usually come to see that, as far as mental radio is concerned, it is non-existent and is simply an hallucination.

The writer desires to cite the following case which came under his observation some months ago.

The subject was a middle-aged woman, rather irrational in general, and from her appearance seemed to be highly nervous. Subject was unmarried. She complained of radio messages coming to her at all times of the day and night, particularly at such times when she was riding in street cars, subways or railways. Subject was also kept awake by these continuous messages, all purporting to come from some relatives who wished her bodily harm. The supposed messages kept increasing continuously as she grew older. Subject said that when putting cotton into her ears the messages would stop, sometimes, but not always.

The case was listened to attentively and patiently, and at no time was disbelief shown. The writer then gave the subject an ordinary magnet taken from an old telephone receiver which he happened to have in his desk. He asked her to keep this magnet under her pillow while she was sleeping, and to report within two weeks. The subject promptly returned within two weeks and reported great improvement. Still further improvement was reported within another two weeks, the writer having suggested that the subject sleep with ears tightly closed. Although she was to report at a later date, she never returned, evidently having been cured.

Here was an auto-suggestion case, pure and simple, for our scientific readers will readily understand that the magnet had nothing whatever to do with the case. It was simply that the subject believed in the cure and was affected by it. A piece of wood would have been just as effective as the magnet.

Naturally, not all cases can be treated alike, and where the subject is irrational to a high degree, it would not do to practice such a method. The best way is to try to explain to afflicted persons, in simple language, why radio cannot possibly have any effect whatsoever on the human brain. If any cases come to your observation, the subject might be told the following:

RADIO, at the present time, can be broadcast only by one means, and that is electromagnetic, commonly called radio waves. In order to send out such waves, it is necessary to have a sending or transmitting station. No one is allowed to have such a station unless he is licensed to do so by the Government. The Government has the names and addresses of all such stations. Not only has the Government such information, but the Radio Inspectors of each nine Districts watch carefully over all stations, to see that they are not misused. By means of radio receiving instruments, the Department of Commerce readily keeps tab on all stations, and it is practically impossible for anyone to send any messages whatever on an unlawful wave-length without being almost immediately caught. In other words, amateurs and private individuals are restricted to a certain wave-length which they cannot overstep without immediate penalty. Broadcast stations have another wave-length, while ship and shore stations have still another. All of these stations are under constant surveillance, not only by the Government, but by all who have receiving sets. So it will be seen immediately that if someone were sending out threats or meaningless messages, he would be almost instantly detected, because of the hundreds of thousands of receiving sets scattered around every nook and corner of the country and, for that matter, all over the world. It will thus be seen that, so far as radio transmission is concerned, the subject afflicted with mental radio must be convinced that there can be nothing to it.

Now let us see why it is impossible for the human mind to receive without instruments and apparatus any outside radio message. If you are located even as close as a mile from the most powerful receiving station, the energy which is received on a collecting antenna is so infinitesimal that it amounts to less than 1/100,000 of a fly-power. In order to detect such a message, it is necessary to use, even in the simplest radio apparatus, certain instruments that must magnify this weak message enormously. The crystal detector and a pair of telephone receivers of the simplest radio set may be compared to a fairly good microscope, and even then the received energy is so small that one must have the telephone receivers pressed close to the ears in order to hear the radio message at all.

On the other hand, the human brain is so constituted that it is impossible for it to receive radio messages without the intermediary of some apparatus such as a detector and telephone receivers. For instance, if one is totally deaf, and a locomotive sounds its whistle within a block, he cannot hear the sound. If you are totally blind, you cannot see and cannot receive luminous impulses. You cannot feel a coin without touching it with some part of your body.

Now, then, sound waves are of a low order of vibration, vibrating at the rate of from eight to 20,000 oscillations per second, after which we can hear them no longer. Broadcast radio waves vibrate at the rate of from about 30,000 to 300,000,000 cycles per second, while light waves vibrate at the average rate of approximately 600,000,000,000,000. It will be seen from this that radio waves have a vibration much too high to be heard by the human ear, while they are not fast enough to be seen by the eye. Lengthy laboratory experiments have shown that human beings, and animals for that matter, are so constituted that they have no organs by which they can receive radio or electromagnetic waves unaided. Radio waves must be rectified and no organ in the body, not even the brain, can do this.

RCARC April 8, 2025 Membership Meeting Pictures

Continued from page 6

Fred (KI7TPD) showing the make-up of his go kit.

Dick (K7ZI) sharing his go kit with club members.

Members walking around and looking at the various go kits on display.

The Dawn of Ham Radio: The Birth of The Wireless World Magazine 1913

In the early 20th century, the world was buzzing with the novelty of wireless communication. Guglielmo Marconi's experiments had transformed electromagnetic theory into practical telegraphy, and enthusiasts—amateur radio operators, or "hams"—were eager to explore this frontier. Amid this excitement, a publication emerged to serve as the voice of the wireless community:

The Wireless World. Launched in April 1913, it was the first magazine dedicated to amateur radio and wireless technology, building on the foundation of its predecessor, The Marconigraph. This article explores the origins of The Wireless World, the content of its inaugural issues, and its role in shaping the ham radio movement. The Roots: From The Marconigraph to The Wireless World The story of The Wireless World begins with the Marconi Company, a pioneer in wireless telegraphy. In April 1911, the company launched The Marconigraph, a monthly journal aimed at its engineers and operators. This publication, named after Marconi himself, focused on technical advancements in wireless communication and circulated primarily within the company's professional network. Over two years and 24 issues, The Marconigraph established a niche for detailed, insider-focused content but lacked broader **appeal. By** 1913, the Marconi Company recognized the growing interest in wireless technology among amateurs and the general public.

Continued on page 10

RCARC March Technician Class Completion and New Licensee's

The final class session of the March 2025 Technician Class Course was held on April 3, 2025 with Paul Erickson (WA7GVL) presenting Subelement T0 – Safety. See picture below. Ron Shelley (K7HDX) then gave a short talk on what to bring and expect on test night. Testing was held on April 10, 2025.

Congratulations to following attendees that passed their Technician Class License Test.

Name	Call Sign	Class License
Gavin Brown	KM7AGH	Technician
Mark Condon	KM7AES	Technician
Donald Davis	KM7AFK	Technician
Larry Dennis	KM7AFX	Technician
Daniel Hall	KM7AGC	Technician
Helaman Hepworth	KM7AHL	Technician
Lacey Hepworth	KM7AHM	Technician
Mark Ingram	KM7AFE	Technician
James Jilcott	KM7AGB	Technician
JoAnn Kalama	KM7AFZ	Technician
Jonathan Karpel	KM7AEU	Technician
John Stall	KM7AFY	Technician
Steven Trautman	KM7AGA	Technician

Paul (WA7GVL) presenting Subelement T0 – Safety.

April RCARC Breakfast Pictures

Members enjoying breakfast and fellowship.

Brody (K7VXV), Paul (WA7GVL) and Ron (K7HDX) conversing over breakfast.

Ron (K7HDX) talking with George (AL7BX) with Brody (K7VXV) in foreground.

The Wireless World

Continued from Page 8

To reach this wider audience, they rebranded The Marconigraph as The Wireless World: An Illustrated Monthly Magazine for All Interested in Wireless Telegraphy and Telephony. The shift was strategic: the new title was more inclusive, and the magazine was made available on newsstands, marking its transition from an internal bulletin to a public resource. The first issue, published in April 1913, set the tone for a publication that would become a cornerstone of the ham radio community.

The First Issues: A Window into the Wireless Era. The debut issue of The Wireless World was a modest yet ambitious 32-page publication, priced at sixpence. Its cover, likely featuring a simple design with the magazine's title and an illustration of wireless equipment or a telegraph station, reflected the era's fascination with technology. While no high-resolution images of the first issue are widely available, archival descriptions suggest a functional, text-heavy layout with woodcut illustrations—typical of early 20th-century technical journals. Advertisements for Marconi equipment and early radio components filled the back pages, signaling the magazine's commercial ties. Content-wise, the early issues were a blend of technical articles, news, and educational pieces.

The April 1913 issue included: Technical Tutorials: Articles explained the basics of wireless telegraphy, such as antenna design and spark-gap transmitters, catering to hobbyists building their own rigs. Industry Updates: Reports on Marconi's latest innovations and global wireless developments, including ship-to-shore communication, highlighted the technology's practical applications. Amateur Radio Focus:

A section dedicated to amateur operators offered tips on licensing and operating etiquette, fostering a sense of community among hams. Letters and Queries: A reader correspondence column allowed enthusiasts to share experiments and seek advice, making the magazine interactive. Subsequent issues in 1913 expanded on these themes.

For example, the May issue featured a piece on the challenges of long-distance wireless transmission, while June included a tutorial on constructing a simple crystal receiver—a popular project for early hams.

Continued next column

The magazine's tone was encouraging, aiming to demystify complex technology for novices while providing enough depth for seasoned operators. Its illustrated format, with diagrams of circuits and equipment, was a novelty that made technical concepts accessible. Challenges and Impact Launching the Wireless World was not without hurdles.

The magazine faced competition from general science publications and skepticism about the viability of a niche periodical. Printing costs were high, and the Marconi Company's initial backing was crucial. However, the decision to sell on newsstands paid off, as circulation grew steadily, reaching an estimated 10,000 by the 1920s,

buoyed by the rising popularity of amateur radio. The magazine's timing was fortuitous. The 1910s saw a surge in ham radio activity, with enthusiasts forming clubs like the Radio Society of Great Britain (RSGB). The Wireless World became their go-to resource, offering practical advice and a platform for sharing innovations.

It also played a key role in standardizing terminology and practices, helping to professionalize the hobby. During World War I, when amateur radio was temporarily banned, the magazine continued publishing, focusing on military applications of wireless, which kept its readership engaged. Legacy of the Early Years The first few issues of The Wireless World laid the groundwork for a publication that would endure for decades, evolving into Electronics World by the 1990s.

Its early emphasis on education and community-building resonated with hams worldwide, and its technical rigor earned it respect among professionals. By documenting the rapid advancements in wireless technology, the magazine not only chronicled the ham radio movement but also shaped its direction. For collectors, original copies of the 1913 issues are rare treasures. Most unbound copies were discarded as technology advanced, and library-bound volumes often lack covers or advertisements. A 1945 issue, for instance, fetched significant interest on eBay, hinting at the scarcity of earlier editions.

Conclusion The Wireless World was more than a magazine; it was a catalyst for the ham radio revolution.

Continued on page 13

RCARC E-Comm Group Participates in the Southwest Utah Great Shake Out Exercise

We all must get better prepared for major earthquakes, and practice how to protect ourselves when they happen. The purpose of the 2025 Great Utah Shake Out is to help people and organizations do both. Rainbow Canyons Amateur Radio Club registered to participate.

On Thursday morning April 17,2025 at 10:15 a.m. Dennis West (W6DLW) activated the RCARC E-Comm group due to a large Earthquake that just occurred in Cedar City.

Dennis then using Amateur Radio (also known as ham radio) conducted a roll call. When members acknowledged they were asked if they would be submitting a DYFI report and/or a damage assessment report with/without a photograph through Winlink.

At this point E-Comm members began to compile and format the requested information using Winlink Software that is used to send this type of information over the air through ham radio.

The DAR askes a number of questions related to the given emergency to give First Responders an idea of what the status is in their community.

Some of the questions on the DAR report:
Are there injured people, deceased and or trapped persons, are there fires burning, gas leaks, water leaks, chemicals leaking, electrical problems, collapsed or damage buildings, road conditions, access to the area and the same for animals.

Once this information is compiled and sent to the EOC) it gives the Emergency Managers a quick snapshot of the current situation in the city. This then allows Emergency Resources to be sent to the areas with the greatest impact.

Continued next column

The E-Comm Group are all volunteers and live in Cedar City or surrounding areas.

These members train in using the Winlink Software throughout the year and participate in exercises such as the Utah Great Shakeout.

This year a total of 20 members participated in the exercise with the breakdown as follows:

#	Winlink Reports Submitted
9	Did You Feel it (DYFI)
2	Disaster Assessment Form (DAF)
3	Damage Pictures

Additional information on the Winlink Exercise.

Hams that participated in the Winlink (Did You Feel it) portion of the exercise not only have their information on the damage assessment report along with a photograph of earthquake damage submitted to the County Emergency Manager but the same information is provided to the USGS (United States Geological Survey) with accurate, timely, situational awareness – "ground truth" - of the intensity of the earthquake which will provide for a more accurate understanding and response to the disaster.

While we know that not all E-Comm. members were able to participate for many reasons a great big thanks goes out to everyone for just being an E-Comm. volunteer.

Parks on the Air (POTA) Activation

Saturday April 26, 2025 RCARC members met at the Rocky Peak Campground near Three peaks Recreational area to set a POTA activation in motion.

Members brought their off grid "Go Kit" setups and began making contacts across the nation.

Parks on the Air (POTA) is an international radio sport award program that encourages licensed amateur radio operators to visit, enjoy and operate portable equipment in a variety of parks and public lands, always respecting other park users and local regulations.

POTA issues awards to participants based on a wide range of criteria including the total number of radio contacts made, number made on each amateur radio band, and for different modes of communication including voice, Morse code or FT8.

See pictures below:

Ron (K7HDX) just starting to set his kit together.

Continued next column

Ron (K7HDX) HF Antenna set up.

Ron (K7HDX) at his portable station making POTA contacts.

Club members arriving, visiting and getting ready to set their stations in motion.

Continued on page 19

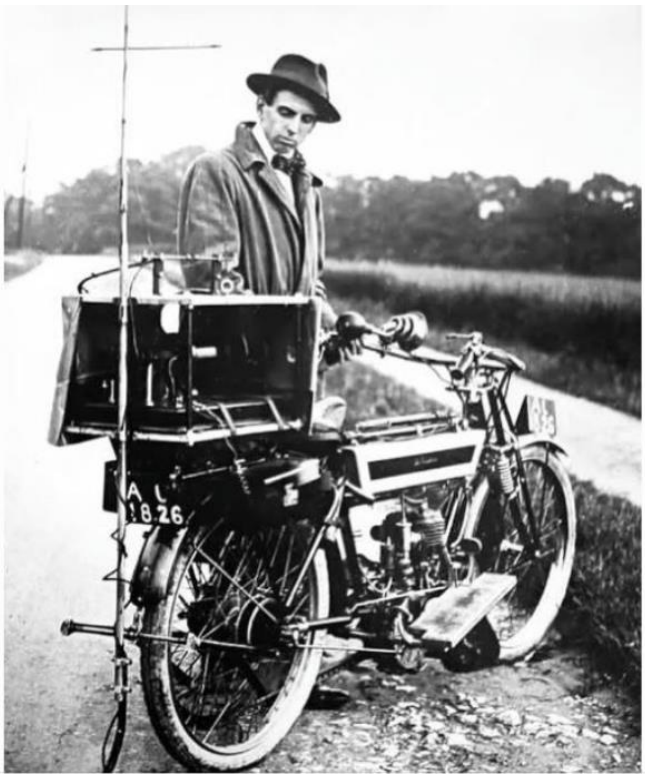
The Wireless World

Continued from Page 10

Born from the Marconi Company's vision and fueled by the passion of early radio enthusiasts, its first issues captured a pivotal moment in technological history. By bridging the gap between experts and amateurs, it democratized wireless communication and fostered a global community of innovators.

Today, as we communicate effortlessly via smartphones, the legacy of The Wireless World reminds us of the pioneers who tuned into the ether and changed the **WorldSIM** age Generation Request You've asked for a picture of the first issue of The Wireless World published in April 1913. Since no high-quality images of the original cover are widely available, I can generate a conceptual illustration based on historical descriptions.

The cover likely featured the magazine's title in bold, serifed text, possibly with a woodcut or line drawing of a wireless telegraph station, antenna, or Marconi equipment. The design would be simple, with a focus on text and minimal color, typical of early 20th-century technical journals. End.



Early 1900 Motorcycle with a Radio Installed

RCARC EComm Members Meet

On April 17, 2025 Dennis (W6DLW) brought the meeting to order at 5:30 PM.

Members recited the Pledge of Allegiance.

Meeting Program Presentation:

Intermountain Hospital Life Flight Medivac Helicopter.

Ken Coates provided a very informal presentation on the Life Flights operation here in Cedar City. The Cedar City Base opened 2 years ago. They cover the Counties of Washington, Iron, Beaver and Garfield. They are dispatched out of Salt Lake City. They can receive calls either by 9-1-1 or direct call. They started in 1978 in Salt Lake City.

The Helicopter has a 165-mile range and the capacity to carry 400 lbs. They have 7 bases in Utah with fixed wing both prop and jet which have longer range and are faster.

In addition, they have a new passenger jet for international travel. All members of the flight team(s) have significant training. Time from dispatch to airborne is approximately 6 minutes.

Meeting Information:

EComm and Antenna Trailer Update

Dennis (W6DLW) gave the group an update on both the EComm and Antenna Trailers.

A new battery has been purchased for the EComm Trailer Generator. A schedule is being put in to place for exercising and maintenance on the generator.

The last three items, two new laptops, HVAC system and polyphaser unit on the trailer wish list are being ordered by the Iron County Office of Emergency Management (OEM).

In regards to the antenna trailer the last couple of items on the wish list have been secured with the donation of the coaxial barrels through Ron (K7HDX) and the WD40 through John (KI7SCX).

In addition, the die pole connectors have been replaced, a new end fed antenna was purchased.

Continued on page 15

Ham Radio Word Search

The Impact of Noise on Signals

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

IMPACT	SIGNALS	INTERFERENCE	RECEPTION	TRANSMISSION
DEGRADATION	PERFORMANCE	QUALITY	MEASUREMENT	DISTORTION

Iron County Office of Emergency Management (OEM) E-Comm. Unit participates in Southwest Utah Healthcare Coalition Quarterly Exercise.

The Southwest Utah Healthcare Coalition Exercise is a communications exercise for Emergency Support Function 8, Public Health & Medical Services, and the Southwest Utah Healthcare Coalition. The purpose of this drill is to practice and validate emergency communication capabilities among healthcare facilities, emergency management, and other key partners in the Southwest Region of Utah.

On Wednesday April 23, 2025 E-Comm. members staffed the Radio Communication Room at Cedar City's Southwest Utah Public Health Department (SWUPHD) Facility to assist in the exercise.

Members Ron Shelley (K7HDX) and Dennis West (W6DLW) assisted Austin Smith (W1EPR) with VHF, HF and digital radio traffic. See picture below.

Austin (W1EPR) on radio wit Ron (K7HDX) documenting check-in numbers. Photo by Dennis (W6DLW).

RCARC EComm Members Meet

Continued from Page 13

Mesh Network/Winlink:

Mesh Network – Ron (K7HDX) and James (KJ7VEI) are working with several other club members to set up an Arden Network in Iron County. ARDEN is an Amateur Radio Emergency Data Network. ARDEN is a high-speed data network built with Amateur Radio Operators and Emergency Communications Infrastructure in mind.

Winlink:

James Moore (KJ7VEI) has created an online Winlink training program. If you are interested in learning how to use the Winlink software you can join the Winlink Training Group. The training group provides easy Weekley exercises to help you improve your skills. Access the Winlink Training Group at the following URL: https://rcarc.ecommtools.app

fill out the registration form and you are on your way. If you need help installing the Winlink program on your PC contact James (KJ7VEI) or Ron (K7HDX).

New Business:

RCARC EComm Radiation Unit Meter Reading Testing Net. Net was conducted on Monday April 28, 2025 with stations from Pine Valley, Beryl and Cedar City providing up-to-date radiation readings from their locations.

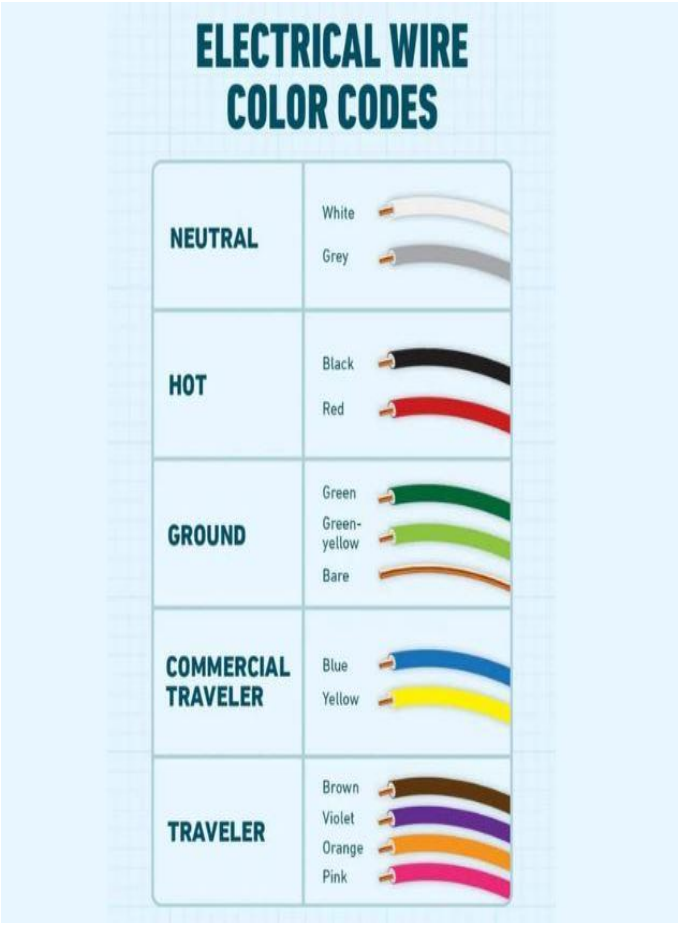
RCARC EComm Annual Exercise with Iron County Emergency Management. The exercise will be either an Earthquake or Wildfire. The date will be set at the next meeting in June for a July or August event.

Utah Great Shakeout Update Statistics: There were 20 check-ins, Did You Feel It (DYFI) 9 reports, 2 Damage Assessment Forms submitted along with 3 pictures.

Continued on page 19

Some Interesting Stuff

PC connectors

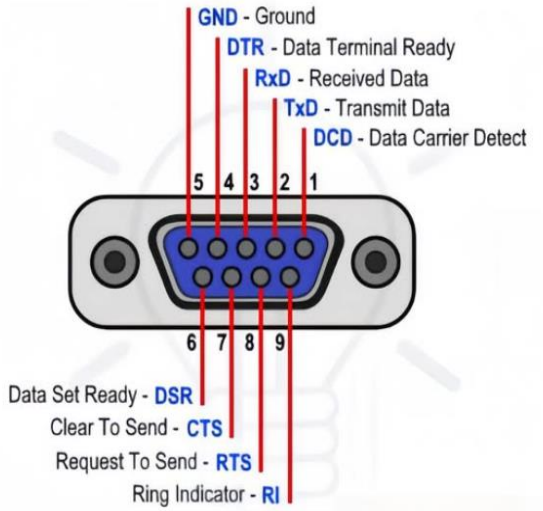


Continued next column

Continued on page 17

Some Interesting Stuff

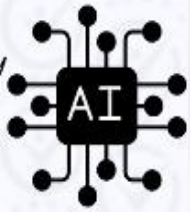
Continued from page 16



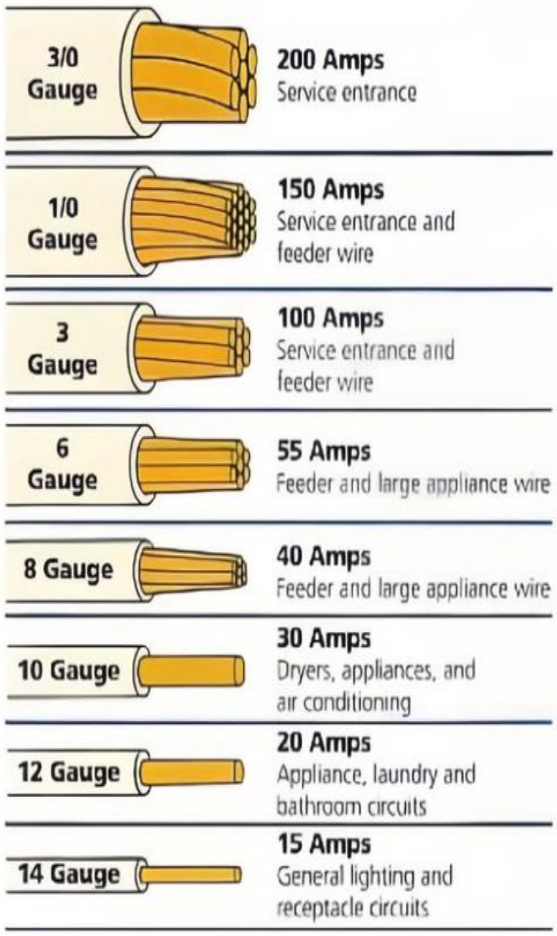
RS232 - DB9 Female Connector Pinout

Computer Abbreviations

1. *CPU - Central Processing Unit*
2. *RAM - Random Access Memory*
3. *HDD - Hard Disk Drive*
4. *LAN - Local Area Network*
5. *WAN - Wide Area Network*
6. *USB - Universal Serial Bus*
7. *VPN - Virtual Private Network*
8. *IP - Internet Protocol*
9. *UX - User Experience*
10. *ROM - Read-Only Memory*
11. *SIM - Subscriber Identity Module*
12. *MAC - Media Access Control*
13. *SSD - Solid State Drive*
14. *OS - Operating System*
15. *UI - User Interface*
16. *FTP - File Transfer Protocol*
17. *DNS - Domain Name System*
18. *BIOS - Basic Input Output System*
19. *DPI - Dots Per Inch*
20. *PPI - Pixels Per Inch*
21. *POP - Post Office Protocol*
22. *AI - Artificial Intelligence*



Continued next column



Continued on page 18

May 10, 2025 is NVIS day (Near Vertical Incidence Skywave)

Hello neighboring ARES organizations. WY-ARES is trying a new event for us on May 10th; NVIS Day. This is an idea that we borrowed from the Ohio Section and we are going to give it a spin for 2025.

In ham radio, NVIS (Near Vertical Incidence Skywave) is a radio wave propagation method that uses high-angle radiation to send signals almost straight up to be reflected back to Earth, enabling effective short to medium-distance communication, especially useful for in-state or regional communications during emergencies.

Our goals are twofold: get our operators out and active, and gain some added experience with our NVIS setups and maybe try some new ones.

Since some of each of your Sections fall within the NVIS range of Wyoming, I would like to invite your ARES groups, or any amateurs, to join in with us on the 10th. You can find the details at: https://shywyarc.net/wp/lc-ares/

This is our first attempt at this event, we are hopeful to have a good turnout, and we welcome suggestions on how to improve the event.

Any assistance th at you would be willing to provide advertising our event would be greatly appreciated.

Thank you

R.J Bragg - WY7AA
Wyoming ARES - Section Emergency Coordinator
Laramie County ARES - Emergency Coordinator
wyoming.ares@gmail.com

Some Interesting Stuff

Continued from page 17

RCARC EComm Members Meet

Continued from Page 15

Baofeng Radio Training with Iron County Road Department: Ron (K7HDX) will assist the Iron County Road Department programming their (FRS) and MURS frequencies) and show how to use the radios on Ma12, 2025.

Adjournment:

Meeting was adjourned at 6:58 PM.

Next Meeting:

Next meeting Thursday June, 19, 2025 at the Cedar City Heritage Center.

See Pic's Below:

Members arriving and signing in

Ken Coates from Life Flight Medivac Helicopters addressing the EComm membership.

Parks on the Air (POTA) Activation

Continued from page 12

George (AL7BX) with his small Go Kit in service.

The official Parks on the Air® Book

The Parks on the Air® Book explores the process of activating a park unit and hunting those activations. Through the experiences of 14 operators, it offers advice and motivation for taking your radio out to the park and becoming active in the growing POTA community.

If you get involved with POTA have fun and good luck.

US Amateur Radio Bands

Operator license classes: **E** = Amateur Extra **A** = Advanced **G** = General **T** = Technician **N** = Novice
CW operation is permitted throughout all amateur bands. Except as noted, all frequencies are in megahertz (MHz).

= RTTY, data, phone, image = USB phone, RTTY, data and CW = RTTY and data = phone and image
= SSB phone = CW only

LF – Low Frequency band

2200 Meters (135 kHz) E,A,G

1 W EIRP maximum

136.7 kHz — 137.8 kHz

Amateurs wishing to operate on **2200 or 630 meters** must first register with the Utilities Technology Council online at **https://utc.org/plc-database-amateur-notification-process/.** You need only register once for each band.

MF – Medium Frequency bands

630 Meters (472 kHz) E,A,G

5 W EIRP max, except in Alaska within 496 miles of Russia where the limit is **1 W EIRP**

472 kHz — 479 kHz

160 Meters (1.8 MHz) E,A,G

1.800 — 1.900 — 2.000 MHz

HF – High Frequency bands

80 Meters (3.5 MHz) E,A,G,T,N

3.500 3.600 3.700 4.000

E
A
G

N,T (200 W)

3.525 3.600 3.800 4.000

60 Meters (5.3 MHz) E, A, G (100 W)

CW, Digital

5.332 5.348 5.3585 5.373 5.405

2.8 kHz

5.3305 5.3465 5.3570 5.3715 5.4035

USB

General, Advanced, and Extra licensees may operate on a secondary basis with a maximum ERP of 100 W (relative to a half-wave dipole antenna).

40 Meters (7 MHz) E,A,G,T,N

7.000 7.075 7.100 7.300

ITU 1,3, & stations in 2 that are west of 130° west or below 20° north

E
A
G

N,T 200 W

7.025 7.125 7.175 7.300

N,T outside Region 2

30 Meters (10.1 MHz) E,A,G

10.100 — 10.150

200 Watts Maximum

20 Meters (14 MHz) E,A,G

14.000 14.150 14.350

E
A
G

14.175

14.025 14.150 14.225

17 Meters (18 MHz) E,A,G

18.068 18.110 18.168

15 Meters (21 MHz) E,A,G,T,N

21.000 21.200 21.450

E
A
G

21.225

N,T (200 W)

21.025 21.200 21.275

12 Meters (24 MHz) E,A,G

24.890 24.930 24.990

10 Meters (28 MHz) E,A,G,T,N

28.000 28.300 29.700

E, A, G

N,T (200 W)

28.000 28.500

VHF – Very High Frequency bands

6 Meters (50 MHz) E,A,G,T

50.1

50.0 — 54.0

2 Meters (144 MHz) E,A,G,T

144.1

144.0 — 148.0

1.25 Meters (222 MHz) E,A,G,T,N

E, A, G, T

N (25 W)

222.0 — 225.0

UHF – Ultra High Frequency bands

70 cm (420 MHz) E,A,G,T

420.0 — 450.0

33 cm (902 MHz) E,A,G,T

902.0 — 928.0

23 cm (1240 MHz) E,A,G,T,N

1240 — 1300

E, A, G, T

N (5 W)

1270 1295

SHF&EHF – Super and Extremely High Frequency bands

All licensees except Novices are authorized all modes on the following frequencies:

2300-2310 MHz	3400-3450 MHz	10.0-10.5 GHz	47.0-47.2 GHz	122.25-123.0 GHz	241-250 GHz
2390-2450 MHz	5650-5925 MHz	24.0-24.25 GHz	76.0-81.0 GHz	134-141 GHz	All above 275 GHz

See www.arrl.org/band-plan for detailed band plans

OTAbands **rev. 07/25/2024**

Basic Gear for the Public Service Ham

Arc Thames, W4CPD

Whether you're new to public service or re-evaluating your collection of gear, there are some things a public service ham can't do without — and they don't have to cost a lot.

I've been re-evaluating my gear following the communications outages that were experienced from Hurricane Helene, and I was reminded of a phrase that you may have heard: *two is one and one is none*. If I'm in a critical situation where I need communications and the one handheld radio that I brought breaks, or the battery dies, then I'm left with no communications at all (assuming traditional communications methods are down). In an emergency, I just need a way to communicate. It doesn't have to be the best or the fanciest, it just has to work. Here are the basics.

The Icom IC-T10 Dual Band Handheld Transceiver and the AnyTone AT-D878 UVI Plus DMR/FM Handheld Transceiver are just two of many options to choose from when buying a handheld radio.

Handheld Radios

When communications matter in a crisis, we are generally going to default to good old FM. Digital radios that operate on C4FM, D-STAR, DMR, etc. are advantageous for many things but, for communicating with random individuals in a disaster scenario you're mostly going analog. By all means, continue to carry your digital handheld with you. Most of them can still operate analog. I would however, going back to *two is one and one is none*, also keep with me a cheap $25-50 analog handheld as a backup. I keep one in my truck that I charged when I first got it and so far, every time I've needed it when I've forgotten my main handheld, it's still been charged and ready to go. (I do recommend charging your batteries regularly, I'm just demonstrating why it's good to have a backup radio lying around.)

HF Radios

If you need long-range communications, you'll want to invest in a good portable HF radio. Again, if having redundancy is important to you, have some sort of backup HF radio. There are many QRP (low power) radios available for less than $500 that are ultra-portable. While they may only put out 10 watts of power, with the right antenna, you can still reach a long distance. While I'm not advocating that you carry two HF radios everywhere you go, if I were deploying to an area with no traditional communications and knew I was having to provide comms, I absolutely would bring at least one backup HF radio. And keeping a QRP radio in your vehicle is also handy for last-minute POTA (Parks on the Air) activations!

Rite in the Rain makes notebooks of water-resistant paper in many sizes, as well as a variety of writing instruments that produce water-resistant writing.

A bag with MOLLE straps on the outside makes it easier to attach additional bags or other items.

Antennas

You're going to want a good selection of antennas for your handheld as well as your HF radio. For your handheld, the stock antenna is generally good enough to keep around in case your primary antenna fails, but for that primary antenna you're going to want something with higher gain. I'm a fan of fold-over tactical whip antennas because you can keep it folded over when you're near the repeater or person you're trying to contact, and then extend it if you get farther away.

The same thing goes for HF antennas. I like to have a selection of them in my go-bag. I lean toward antennas that are resonant on a particular band or several bands, to keep me from having to carry an antenna tuner. A lot of modern full power (100 watt) radios will have an antenna tuner built in that can handle a 3:1 SWR or lower, but most QRP radios in the 10 watt range won't have a built-in tuner, and the tuner just becomes one more thing you must carry — and that can break. A few companies like Chameleon and TN07 offer antennas that are broadband and can be used without a tuner. You can also make your own wire antennas for bands that you will need. The most common bands I see used in statewide emergency communications are generally 40 meters for daytime and 80 meters for nighttime. Several manufacturers make a dual band 40/80-meter dipole antenna.

Tools for Documentation and Messaging

For documentation and other tools to interface with your radio, you'll want a basic, affordable laptop or tablet. *Winlink*, software that allows you to utilize your radio to send messages over the air with or without internet, is one of the primary software programs used to communicate during a disaster or incident. Winlink was primarily written for Windows, but there are Linux versions, as well as apps like *Radio Mail* on iOS or *WoAD* for Android devices that can interface with a supported radio over Bluetooth. This capability is incredibly handy for being able to send ICS forms, radiograms, and other formal messages without having to read them aloud over the air.

A laptop or tablet also allows you to keep any necessary ICS forms, radio manuals, or other documents you may need, saved and readily available. You can get usable tablets for less than $100 online, and there are generally good deals on refurbished laptops under $500. Most amateur radio software doesn't require anything super powerful, so you can keep a laptop or tablet in your bag without having to spend a lot.

Don't forget old-fashioned pen and paper. So often, I just revert to a legal pad to quickly write down information that I may need to later transfer to an official form. If you're going to be outside a lot, it's worth investing in a Rite in the Rain notebook and pen/pencil (riteintherain.com). There's even a tactical notebook sold by a company called Off Grid WX (offgridweather.com) that includes reference cards for amateur radio band plans and other useful tactical information.

A Bag for Carrying It All

I've covered suggested items to keep in a go-bag in a previous article (see "Basic Gear for Public Service" in the September/October 2022 issue), but what we haven't talked about is the bag itself. I won't even begin to suggest brands, as there are far too many, but there are a few key things I would look for.

First of all, find a bag that is the right size for the gear you actually need to carry. Everyone tends to rush to the biggest bag, but that's not always the right choice, especially if it becomes so heavy that you can't carry it. Don't be afraid to split gear into multiple bags or cases so you can add or take away things you may not need for a particular scenario.

MOLLE straps on the outside make it easier to add on additional bags or hook-on items like carabiners and paracord. MOLLE (pronounced "molly") stands for "modular, lightweight load-carrying equipment," and a MOLLE system on a bag can make it more versatile. It also might be nice to have EMP/RF shielded interior compartments to protect your gear from anything that might harm it.

For Sale

Telescoping 25 Foot Flagpole

If interested contact Dennis West (W6DLW) at

hamcommunications@gmail.com

or 760-953-7935

Brand Name Uncommon USA

$80.00

Continued on page 24

Hitch Mount for Large Diameter Portable Flagpole

Sells for $69.00 New

If interested contact Dennis West (W6DLW) at
hamcommunications@gmail.com or 760-953-7935

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

For more information on what a Go Kit Challenge is. Go to:

https://gokitchallenge.org

Date: Saturday May 3, 2025

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