

RAINBOW CANYONS AMATEUR RADIO CLUB NEWSLETTER CEDAR CITY, UTAH



Club Website: www.rcarc.info Number 6 – Vol. 6 - June 2024

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.

2024 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
K17WEX

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 Father's Day



Presidents Message

Dear Fellow Amateur Radio Operators,

Hope everyone is having a wonderful spring and start to the summer! The weather has been very nice so I hope you can get out to enjoy it. We will have our June 15th Swap meet and Field Day at the end of June (22-23)! Congratulations to all of our new HAMs and all of our upgraded HAMs, it is great to have so many new HAMs over the last couple of months. HF has been tricky with all of the sun spot activity. We just had one of the strongest solar flares in decades and it looks like more it on the way. Keep an eye on our space weather! We had a great first aid presentation and I hope you learned a lot (Thank you). For our June swap meet don't forget to bring your Go boxes!

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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

June 11, 2024

RCARC Club Meeting.

7:00 pm. Cedar City Senior Center,
489 E. 200 South. [Parks on the Air](#)
(POTA) Presentation with Ron
(K7HDX)

July 9, 2024

RCARC Club Meeting.

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

August 13, 2024

RCARC Club Meeting.

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

September 10, 2024

RCARC Club Meeting.

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

President's Message

Continued from page 1.

I encourage you all to play, share, and have fun on the radio! We have many new HAMS who are just learning about the hobby so lets show them what options they have! 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

**RCARC Swap Meet & Go Kit
Challenge June 15, 2024**

**ARRL Summer Field Day
June 22-23, 2024**

See flyers pages 15 & 18

RCARC Monthly Breakfast

**Please cone join us on the
first Saturday of each
month at 9:00 am. for our
club breakfast. We meet at
the Golden Corral Buffet &
Grill (in the back room),
1379 S. Main Street, Cedar
City. Their menu offers an
unmatched variety of
quality foods from
breakfast to dinner.
See you there.**



**Happy Birthday and
Anniversary to those
celebrating in June**

Happy Father's Day

June 16, 2024

Breakfast Net		Friendship Net		
First Place	Second Place	First Place	Second Place	
K2MFK - Kevin	KE6ZIM - Johnny	KA7J - Lance	K7HDX - Ron	
K7ZI - Dick	W0KLH - Kevin	K7ZI - Dick	N7WWB - Darlene	
KE8OYI - Caleb	WA7GVL - Paul	KE8OYI - Caleb	N7SYI - Sylvia	
KG7PBX - Linda	Third Place	W9YNK - Benjamin	WA7GVL - Paul	
N7SND - Larry	N7SIY - Silvia	KI7LUM - Bruce	K7NKH - Lee	
KI7WEX - Bonnie	KC6WFI - Tony	KI7WEX - Bonnie	Third Place	
KI7TPD - Fred	KI7SCX - John	KI7TPD - Fred	K7WEP - Paul	
		W6DLW - Dennis	KI7LVC - Tim	
		W0KLH - Kevin	KJ7LTQ - Brant	

**Rainbow Canyons Amateur Radio Club
Treasurer Report May 14, 2024**

Bank balance April 1, 2024 (reconciled)	\$1,613.57
Deposits - membership 2024 AF7TE, KJ7JAO, W0DHT	+ 55.00
Donation - Commander 857	+ 1000.00
Expenses	
Rocky mountain Power (98 repeater elec exp)	-19.33
Check # 134 Ecomm Expense	- 117.89
Bank Balance April 30, 2024 (Reconciled)	\$2,531.35
May Deposit	
Donation - equipment	+300.00
Membership 2024 - W7KCL	+15.00
May Expenses	
Rocky Mountain Power (due 5/15/2024)	- 20.47
Outstanding check # 133 Liability Insurance	-200.00
Funds Available afer 5/15/2024	<u>\$2,625.88</u>

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

RCARC Upcoming Events

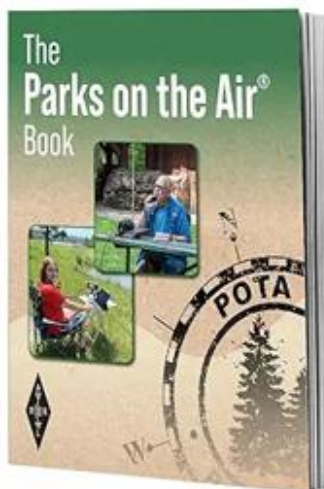
- June, 11 2024 – Monthly Membership Meeting. Cedar City, Senior Center at 489 E. 200 S. at 7:00 PM. Ron (K7HDX) will do a POTA Presentation.
- June 15, 2024 – Annual Radio Swap Meet & Go Kit Challenge. Christ the King Catholic Church, 690 Cove Drive, Cedar City. Pavilion to rear of church. 9:00 AM to 1:00 PM.
- June 20, 2024 – RCARC EComm Meeting at the Heritage Center, 105 N. at 100 E., Upstairs. 5:30 pm to 7:00 pm. Presentation by the “Oath Keepers”.
- June 22 & 23, ARRL Summer Field Day at Three Peaks Pavilion.

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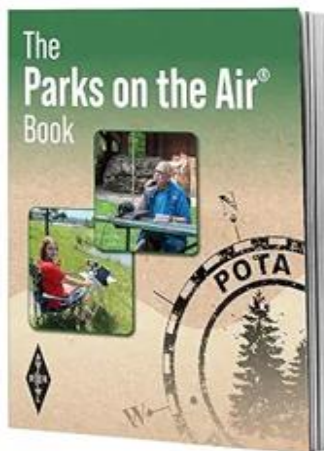
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RCARC Book Giveaway. Books are donated by Linda Shokrian (KG7PBX)

Shown below is the book that will be given away at the June 11, 2024 meeting.



The Book below was given away to Ron Shelley (K7HDX) at the MAY 14, 2024 meeting



Congratulations

Ron

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

RCARC June11, 2024

Meeting Presentation

With Ron Shelly K7HDX)

Parks On the Air

Parks on the Air 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.



Buzz's June Safety Tip(s)



Summer Safety Tips

Whether you're spending the summer months at the pool, [tackling yard work](#), or traveling to new destinations for a beach vacation or hiking, knowing how to stay safe is vital for all ages. Here are our top safety tips for keeping everyone in your family healthy and happy this summer.

Remember these summer safety tips

1. Be prepared for anything by checking the weather before you head out.

The weather can be unpredictable, but thanks to our smartphones, we can access weather predictions anytime, anywhere, even for impromptu trips. It's important to adequately prepare for the weather and your surroundings, especially if you are traveling or far from home. (And, keep that cell phone nearby in case of an emergency!) When you know the approximate temperature, you can plan to dress accordingly. Knowing what the weather will be like can also help you determine what to bring to help keep you safe, protected from the sun, and hydrated.

It's also good to stay on top of something called the UV index, which indicates how much ultraviolet (UV) radiation is expected from the sun.

The higher the UV index, the more at risk you are of overexposure and sun damage. This is important to know because the UV index can be surprisingly high on cloudy days when the sun is out of view. If the UV index is over three, you should take additional precautions to [protect your skin from the sun](#), like wearing sunscreen and sun-protective clothing, hats, and sunglasses.

2. Lather on Sun Screen anytime you are outside.

Unprotected skin can quickly burn in the sun, which can cause immediate and long-term damage. Sunburn is a common summer injury, but early and frequent exposure to the sun can also lead to skin cancer, including melanoma, which can be deadly. [Wearing sunscreen](#) is one of the best summer safety tips to ensure you stay healthy now and in the future.

The American Academy of Dermatology recommends that people of all ages use sunscreen that:

- Offers broad spectrum protection, protecting against both UVA and UVB rays
- Is water- and sweat-resistant
- SPF 30 or higher

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Summer Safety Tips

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For the best protection, you should apply a shot-glass-sized amount of sunscreen 30 minutes before going outside, and reapply every two hours or sooner, if you are sweating or swimming. This recommendation applies to people of all skin tones and ages, as anyone is susceptible to sun damage. Even if you don't burn easily, the sun can cause other skin damage, including wrinkles, photoaging, and sun spots.

Choosing a sunscreen for babies and kids.

When choosing a sunscreen for kids, consider selecting one that is a physical or mineral sun blocker. These use zinc oxide or titanium dioxide rather than chemicals and are less likely to cause a reaction.

If you have a newborn or infant, you may have noticed that the back of the bottle recommends asking a doctor before applying sunscreen to babies under six months of age. That's because babies especially should be kept out of the sun, as early overexposure significantly increases the risk of skin cancer later in life. However, it's a myth that you can't apply sunscreen to your little ones. Try to keep them in the shade and/or covered with clothing and hats, but definitely apply sunscreen to any areas of exposed skin, like the face, if you are out walking or otherwise can't avoid the sun.

3. Wear the right clothing and accessories.

Where you're going should affect what you choose to wear. What you'd wear to the beach should be different than what you'd wear on a summer hike on a hot day. In either case, you may want to wear more than you think you'd need.

Many people wear less clothing in the summer sun, but it's a good idea to opt for more skin coverage when possible. Many articles of clothing now have a UPF rating, which indicates they provide additional skin protection from the sun. Light-colored and lightweight clothes can also help reflect the sun, keeping you cool and safe.

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You should also wear a hat that has a UPF rating and is wide-brimmed, protecting the face and neck. In addition, sunglasses offer important eye protection from the sun. We often think about sunglasses as a fashion accessory but they're actually very important for minimizing long-term vision problems. We recommend choosing shades that provide 99-100% UVA and UVB protection.

4. Pack a refillable water bottle and first aid kit.

Staying hydrated is extremely important, especially with increased outdoor activity over the summer. Drink plenty of fluids, regardless of how active you are, especially in dryer climates or higher altitudes. Don't wait till you are thirsty to drink, as that's a sign you're already low on fluids. In addition, avoid surgery or alcoholic drinks which can actually cause you to lose more body fluid. Don't forget to keep your pets hydrated too, giving them plenty of fresh water and shade.

It's also a good idea to pack a personal first aid kit to help tend to common summer injuries. You can buy a pre-assembled first aid kit online or build your own with:

- **Soft gauze, tape, and antibiotic ointment** for minor cuts and scrapes
- **Sunscreen** for frequent application in the sun
- **Bug spray** to ward off mosquitoes and bug bites
- **Aloe vera** to soothe sunburns
- **Hydrocortisone cream** to ease itchiness and irritation from insect bites or poison ivy

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EDITORIAL AND GENERAL OFFICES, 53 PARK PLACE, NEW YORK

Vol. 5

JUNE, 1924

No. 12

Money in Radio

By H. GERNSBACK

DURING 1923, according to the latest figures available, the radio business went above \$250,000,000 in total sales for the year. Very conservative estimates for 1924 seem to indicate that the total radio sales will probably be in the neighborhood of 400 million dollars. Tremendous as this amount is, it is small compared to what it will be five or ten years hence. Always remember that there are 110,000,000 persons in the United States and that we have only sold, so far, about two or three million sets, whereas there is a potential market for at least 25,000,000 sets. This does not mean that once we sell 25,000,000 sets the market will be saturated. Quite the contrary. Years ago when the automobile industry was in the same position radio is today, it was thought that the saturation point in automobiles would soon be reached. It was forgotten, however, that the average life of a car is only two years and that it means nothing by way of statistics for future sales if a man owns a car, because in two years or less he will own a new one.

The same holds true in radio. The average life of a radio outfit is barely one year, in other words, we have not yet even scratched the surface.

RADIO IN COUNTRY STORES

FOR the past few years, ever since the inception of radio, sales always decreased during the summer for no reason at all. As a matter of fact, theoretically, trade activities should be more active in the summer than in the winter, and during the next two or three years that condition will be reached. The writer predicts that fortunes will be made this year in radio from altogether unsuspected sources. *A large percentage of sales will shift from the city to the country.* Nearly everybody who has a car this year and goes motor camping or touring will take along a radio set, and it will be the country store that will be benefitted to a very large degree. If country stores will install receivers and loud speakers, and put in a supply of radio essentials, such as dry cells, "B" batteries, aerial wires, tubes, grounding rods and other radio essentials, they will find a brisk trade on their hands.

This is an entirely new field for the trade and it is surprising that the radio manufacturers have not pushed this source heretofore. Every automobile accessory manufacturer knows that the country store and country garage as well as road service stations are a most productive source of sales in the summer. The radio trade has not as yet awakened to this possibility.

Road Houses, Inns, etc., should also take advantage of radio and install good outfits with loud speakers to attract customers. People are getting used to radio and are beginning to miss it when they do not hear the latest news that is being broadcast daily. It is a wise Inn-

keeper who appreciates this feeling. If city restaurants install radio loud speakers, is there any reason why those in the country cannot do likewise? This summer particularly, all baseball returns will be broadcast far and wide. A loud speaker in a store or Inn will surely attract people by the hundreds.

HALF A MILLION FOR AN INVENTION

AN official of one of our big manufacturing corporations recently, in a conversation, mentioned to the writer that his Company would gladly pay a half million dollars for a real static eliminator. Just think of that, you experimenters; think what you could do with a half million dollars! One of these days someone is going to invent a static eliminator that will be sold for \$5 or \$10 and then summer radio will be on for good.

The problem should not be hard to solve. It seems to the writer that here is the most fruitful field for research work that you can tackle this summer, instead of putting your outfit away in the cellar during the hot spell. Work it for all it is worth and then try and think up ways and means of doing away with the bothersome static. The harder you work on this problem, the greater radio will be. The writer predicts that the man who invents such a device will go down in history as one of the outstanding radio inventors of the age.

Here are a few tips on static elimination: Dr. Harris Rogers, who has worked along these lines, has found that static can be reduced considerably by burying the aerial in the ground, in other words, an underground aerial. The same result can be obtained by submerging an aerial in water. Then, of course, we have the loop which reduces static quite a good deal, although not enough to make it really worth while. The experimenter will find a wide field in this direction by experimenting with special coupled and balanced circuits, resistance units and other similar means, all of which cut down the static. Then we have the much neglected condenser aerial. This also reduces the static quite a good deal. It may even be possible to construct a special sort of aerial that may be made static-proof.

Some years ago the writer experimented with such an aerial, which was nothing but a heavy rubber insulated wire, No. 14 B. & S. gauge; over the rubber there was wrapped tinfoil, or copper ribbon, covering the entire length of the wire. By grounding the outside metallic covering static was eliminated to some extent. The connections can be switched so that the outside metal covering may be used as the antenna, while the center wire is grounded. Additional experiments may be made by inserting a condenser in series with the grounded connection. Due to lack of time the experiments were never completed.

All of these are suggestions that are well worth while and may lead to bigger things.

Storms and Tornadoes: Amateur Radio Ready

Strong storms and reports of at least 60 tornadoes have wreaked havoc in the Central U.S. for nearly two weeks. Homes and businesses across Nebraska, Oklahoma, Texas, Missouri, and Iowa were destroyed, and power is still down for more than 30,000 residents. On May 1, 2024, President Joe Biden declared a major disaster exists in Oklahoma, making federal aid available to those affected by last weekend's severe storms in Hughes, Love, and Murray counties.

Section Manager of the ARRL Iowa Section Lelia Garner, WA0UIG, reported that in Iowa, they have moved from response to recovery. Currently, nine counties are under the Iowa State Individual Assistance Grant Program and the Disaster Case Advocacy Program.



Iowa Tornado 2024 [NOAA photo]

"Amateur Radio has served our local agencies well. We recently networked at a central Iowa Hamfest and are building our emergency communications capacity primarily through [the Amateur Radio Emergency Service® (ARES®)]. ARES resources [include] personnel, experience, meetings, training, [communications] equipment, [and] operating trailers. The opportunity to share our experience and knowledge gained in the field has been critical to supporting ARES in Iowa," said Garner.

Garner added that awareness is the best tool. She stressed that amateur operators and ARES members work to help the National Weather Service and other served agencies in order make their work and the community safer.

ARRL Emergency Management Director Josh Johnston, KE5MHV, agrees that everyone should stay vigilant in their awareness and preparations, even during periods of less activity. Make sure you are prepared at home and that your family has a severe weather plan. This is extremely important if you plan to be mobile or away from your home during a severe weather event. Your safety is the most important thing if you plan to be active during severe weather. Every ham who is interested in severe weather should take the [SKYWARN](#) storm spotting class offered by the National Weather Service," said Johnston.

He added that some of the most important aspects of preparation are communication and building relationships. These activities, including drills and exercises, need to be done during blue - sky days to ensure you will be ready during days with severe weather.

The [ARRL Learning Center](#) offers courses like on Basic EComm and Intro to Radio for Emergencies & Disasters. End



RCARC May Breakfast Pics



Brody (K7VXV) and Son



Ed (KK7ZL) also pausing from his breakfast for the picture.



Fred (KI7TPD) and Bonnie (KI7WEX) enjoying breakfast.



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



Kevin (W0K1H) pausing from his breakfast for the picture.



Overall, view of members having breakfast.

RCARC Membership Club Meeting Pictures May 14, 2024



Meeting is underway with the Pledge of Allegiance



Fred (K17TPD) conducting meeting business.



Happy Birthday George (AL7BX). Did I hear you were 39 again?



George (AL7BX) providing a repeater report to the group.



Linda (KG7PBX) announcing George's (AL7BX) in blue shirt Birthday.



Da Boyz

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RCARC Membership Club Meeting Pictures May 14, 2024

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George's Birthday Cake being served.

Meeting Presentation

South West Utah Public Health Department (SWUPHD) was on hand to present a Basic First Aid Presentation. Speakers, Austin Smith (W1EPR) and Mike Gale (K17ZXC) provided a great refresher on First Aid Techniques.

They covered the "March for Trauma Acronym"

MARCH is a mnemonic device used to help first responders prioritize the most critical injuries when treating trauma patients. It stands for:

- **Massive hemorrhage:** Life-threatening bleeding that can be fatal twice as fast as breathing or airway complications
- **Airway:** Check for chest wounds or trauma that may be restricting breathing
- **Respiration:** Check for chest wounds or trauma that may be restricting breathing
- **Circulation:** Check for signs of shock, such as rapid pulse, clammy skin, or weakness
- **Head injury/hypothermia:** Severe blood loss can cause a dramatic drop in body temperature, which can lead to hypotension, low blood pressure, and hypoxia.

Continued next column



Pictured are Mike Gale left and Austin Smith right discussing the March for Trauma Acronym.



Austin (W1EPR) is explaining how to administer a splint on the arm.



Attendees' pickup some of free items that Austin and Mike brought with them such as Gauze, bandages and other

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MFJ Ceasing On-Site Production

MFJ Enterprises, Inc. founder Martin F. Jue, K5FLU, announced that as of May 17, 2024, the company will cease on-site production at their Starkville, Mississippi, facility. Ameritron, Hy-Gain, Cushcraft, Mirage, and Vectronics brand products will be affected by the shutdown.

In a letter posted to social media, Jue said he is looking forward to retiring:

Times have changed since I started this business 52 years ago. Our product line grew and grew and prospered. Covid changed everything [for] businesses, including ours. It was the hardest hit that we have ever had, and we never fully recovered.

I turned 80 this year. I had never really considered retirement, but life is so short, and my time with my family is so precious.

Jue founded MFJ Enterprises in 1972, after building a CW filter kit that sold for less than \$10. Since 1990, the company has acquired several other legacy brands within the amateur radio market. Jue shared that the company will remain open to sell existing inventory because they have "a lot of stock on hand." They will also continue to offer repair services for the foreseeable future.

Jue expressed gratitude to the many longtime employees of MFJ, some of whom have been with the company for 40 years.



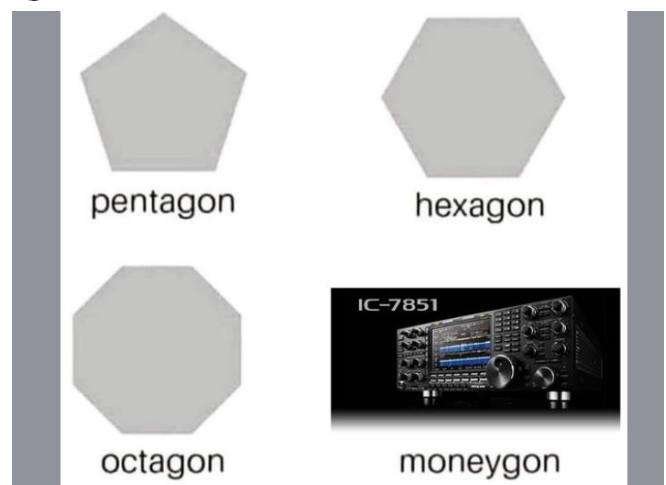
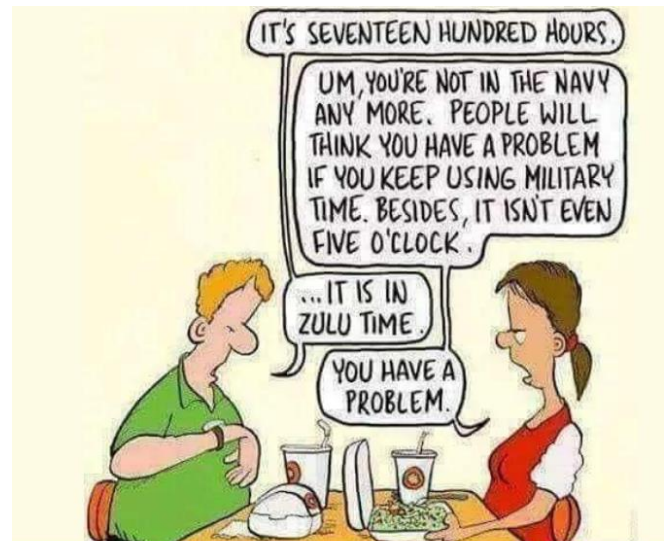
Martin F. Jue, K5FLU, founder of MFJ

He also thanked MFJ dealers and radio amateurs for their patronage over the decades.

He also sent a special message to ARRL Members and loyal QST readers:

"I give my deepest heartfelt thank you to my fellow hams all over the world, and especially to ARRL members and QST readers. In my youth, I was given a second-hand set of 1958 QSTs. I read them over and over until I practically memorized every word. This gave seed to MFJ.

MFJ became a worldwide ham radio leader only because of you. As I turned 80, I cannot thank you all enough for 52 wonderful ham radio years. Thank you, 73s . . . Martin F. Jue, k5flu" End.



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Summer Safety Tip

Continued from page 6

5. Be Vigilant about water safety.

It's not just the pool and open water at the beach that can cause drowning. The majority of drownings for kids between one and four actually happen during non-swimming times, like at a backyard barbecue where someone has a fountain, pond, or baby pool. For that reason, it's important to always be aware of your surroundings, and if you have a child that is not a strong swimmer, always practice "touch supervision." In other words, stay within arms-length of your toddler or young child anytime you are in or near water. If you are with a group of people, you can also assign an adult (who isn't drinking alcohol) to be the designated "water watcher."

The best thing you can do to protect your child from the dangers of water is by getting them swim lessons, if they're over the age of one. If your young child cannot swim or is not yet a proficient swimmer, definitely consider a well-fitting life jacket that is coast-guard approved anytime you are around water, whether you're boating or at the beach or pool. A foam noodle or pool-floatie should not be a replacement for a life vest.

6. Know the risks and signs of heat exhaustion.

Heat-related illnesses, like heat exhaustion or heat stroke, occur when the body can't properly cool itself. During extreme heat, a person's body temperature can rise faster than the body can cool it down, leading to damage to the brain and other vital organs. Older adults, young children, and people with chronic diseases are at the highest risk of heat exhaustion, although it can also happen to young, healthy people who are participating in strenuous activity in the heat.

Warning signs can vary but may include feelings of:

- Dizziness
- Muscle cramping
- Weakness

Continued next column

- Fatigue
- Confusion
- Heart palpitations
- Nausea

If you notice any of those and generally feel unwell, go indoors immediately. Rest in a shady or air-conditioned place, drink water, and blot your skin with cool water to help lower your body temperature.

7. Never leave your pets or children unattended in a car.

It only takes about two minutes for cars to heat up to lethal levels, so it is critical that you never leave a young child or animal alone in your vehicle at any time. We're all capable of making mistakes or forgetting where we're going or why, but there are a few things you can do to remind yourself that you bring everyone with you. If you have children in car seats, one thing you can do is put something you need, like your purse, wallet, phone, or shoes, in the backseat next to your child. This will help you remember to check the backseat and bring your children with you. It may sound silly but if there's a family emergency or a change in routine, it could help save a life. End.



Club Member Devin Elliott (KG7NYJ) Silent Key (SK)



We are sad to announce that Devin Elliott passed away at home in Beaver on May 13th, joining his mother and two brothers in paradise. He leaves here on earth his wife Teresa, father Lynn, step mother Connie, 4 brothers, two sisters and pup Theo.

Devin served an LDS mission in Missoula, Montana and graduated from Ricks College. He was married to Teresa Kay Davis in the St. George Temple on September 25, 1993. After several years in Northern Utah, they settled in Beaver, where they have loved the area and people for 23 years.

Uncle Devin's love of life, the outdoors, scouting, wildlife photography, cutting great steaks, and making his own recipe for brats, are legendary. He has been and is a champion for family values; was most proud of his position as eldest son,

Continued next column

was very concerned for his brothers and sisters, and will be sorely missed.

A graveside service will be held at the Cedar City Cemetery at 11:00 am on June 3rd under the direction of HeartLight Funeral Services. Floral orders can be made through Desert Rose Florist in St. George.

435-628-3030.



Rainbow Canyons Amateur Radio Club (RCARC)

Summer Field Day Event 2024

When

This year on June 22nd & 23rd RCARC members will be broadcasting from the Iron County, Three Peaks Recreational area in the Pavilion starting at 12 noon Saturday and continuing until 12 noon on Sunday.

Where

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

Field Day is Ham Radio's open house.

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



Annual RCARC Summer Field Day Potluck - Barbeque

The annual Summer Field Day Potluck - Barbeque will commence at 6:00PM. on Saturday June 22, 2024. Everyone is welcome but those attending are asked to bring a side dish to share with other attendees.

Please send an email to cedarcity.rcarc@gmail.com with the type of dish you will be bringing.

USB Basics

Steve Ford,
WB8IMY

Many transceivers and other devices in your station come equipped with *Universal Serial Bus* ports, better known as *USB*. Because you'll be working with these often, it helps to understand what they are and what they do.



Transferring Data and Power

At a basic level, USB consists of two main components: the USB *host* and the USB *device*. The USB host is typically a computer that provides the power and/or controls the data transfer. It can also be something as simple as a power supply module, sometimes referred to as a *wall wart*.

The USB device, on the other hand, is an external device that is connected to the USB port. This can be a transceiver, smartphone, tablet, and so on.

When you connect a USB device to a USB port on a computer, several things happen:

- **Device recognition:** The computer recognizes that a USB device has been connected and starts communicating with it.
- **Power delivery:** The USB connection provides power to the connected device, allowing it to operate without requiring a separate power source. This is why you can charge your smartphones or other USB-powered devices by connecting them to a computer or a USB charger. The same can be true of handheld transceivers.
- **Enumeration:** The computer communicates with the connected USB device to determine its capabilities and functionalities. This process is called *enumeration*. During enumeration, the device and computer exchange information about the device's manufacturer, model, supported protocols, and other details.

• **Data transfer:** Once the enumeration is complete, data transfer can take place between the computer and the USB device. The USB standard supports different transfer speeds, ranging from the original USB 1.0 with a data rate of 1.5 Mbps (megabits per second) to the latest USB 3.2 with data rates of up to 20 Gbps (gigabits per second). The actual data transfer speed depends on the USB version supported by both the computer and the device.

In ham applications, you'll often find USB connections used to provide software control of transceivers. If you own logging software, for example, the software may be able to communicate with your radio via USB to automatically read your operating frequency, operating mode, and much more. This makes it much easier to add the details of each contact to your log. This is especially valuable during over-the-air contests, so much so that virtually all contest software available today supports USB transceiver control.

Software used with digital modes, such as the popular *WSJT-X* software used for FT8 operating, rely on USB not only for radio control, but also to communicate with so-called *interface* devices that convert data from the computer into sound the radio can transmit (and vice versa). Some of these interfaces are available as separate boxes that may sit next to your radio, but many transceivers now have interfaces built in.

If you own a modern handheld transceiver, chances are it uses USB to allow your computer to program its memory channels, charge its internal batteries, and other functions.

USB Cables and Connectors

There are many distinct types of USB cables, but most have the traditional rectangular connector used on most computers and other devices such as chargers. See Figure 1.

At the other ends of the cables, you'll find a variety of connectors. The most common ones found in amateur radio stations are...

- **USB-B:** This sizable connector usually plugs into printers as well as some amateur radio HF transceivers. See Figure 2.
- **USB-C:** This is a reversible, compact connector with fast data transfer and power delivery capabilities. It has become more prevalent in devices such as smartphones and tablets, but it has yet to become widespread in ham gear. See Figure 3.
- **Micro USB:** This small connector (see Figure 4) sees considerable use, especially in handheld transceivers.
- **Mini USB:** Another small connector (see Figure 5) that can be easily mistaken for a Micro USB. It has become less common in recent years.

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USB Basics

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Proprietary Connectors

Some handheld transceivers use custom proprietary connectors rather than the ones mentioned previously. An example is shown in Figure 6. This USB cable is used with a handheld transceiver that communicates to computers through its microphone/speaker jack.

You may also encounter special cables that include the USB communication device as part of the cable itself (see Figure 7). Some of these will only function with certain types of software, so you must have the correct software installed before you can use them.

Cable Lengths

It is important to note that USB cables have limited usable lengths because of changes the cables can cause to the data signals. USB 1.0 and 2.0 cables can stretch to about 15 feet before problems begin to arise. Newer, faster versions of USB 3.0 are limited to only 6 feet. When in doubt, always choose the shortest possible cable for your application.

USB Cables and Interference

USB cables can act like antennas and pick up the radio frequency (RF) energy generated by your transceiver. This will interfere with the data signals within the cables and can even cause a computer to suddenly stop communicating with the device. For example, if you are using contest logging software you may discover that your software crashes every time you transmit on a certain frequency band.

Not only that, USB cables can radiate signals generated by computers. These signals will show up as interference in your receiver.

You can purchase USB cables that come equipped with chokes that block RF. In stubborn cases, however, you may find that you must wrap several turns of the cable through a ferrite core (see Figure 8). These cores are available from several outlets including Amazon. For ham radio use, try an FT31 core for HF signals or an FT43 core for VHF signals.

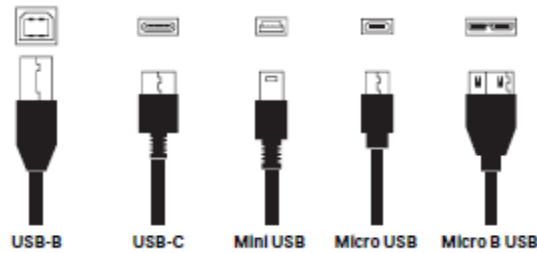


Figure 1: There are many types of USB cables, but all of them have traditional rectangular connectors that plug into your computer or power supply.

Figure 2: The square USB-B connector is often found in modern HF transceivers.

Figure 3: The USB-C connector is becoming increasingly popular.

Figure 4: The Micro USB is a small connector you'll often find in handheld transceivers.

Figure 5: The Mini USB is a small connector that has become less common in recent years.

Figure 6: This specialized USB cable is used with a handheld transceiver that communicates to computers through its microphone/speaker jack, which is why it has a dual-conductor plug.

Figure 7: Some special USB cables include the USB communication device as part of the cable itself.

Figure 8: You can make a choke to suppress interference by wrapping several turns of the USB cable through a ferrite core, as shown here.

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 June 15, 2024
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



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



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.

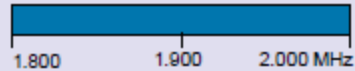
MF – Medium Frequency bands

630 Meters (472 kHz) E,A,G

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

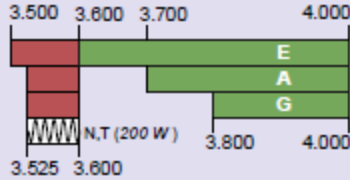


160 Meters (1.8 MHz) E,A,G

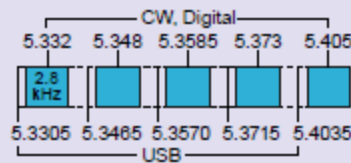


HF – High Frequency bands

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

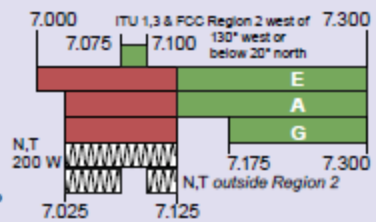


60 Meters (5.3 MHz) E, A, G (100 W)

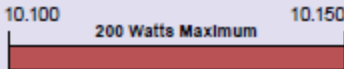


General, Advanced, and Extra licensees may operate on a secondary basis with a maximum ERP of 100 W (relative to a half-wave dipole antenna).

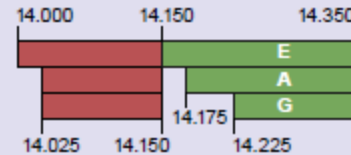
40 Meters (7 MHz) E,A,G,T,N



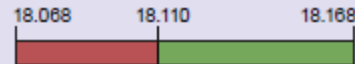
30 Meters (10.1 MHz) E,A,G



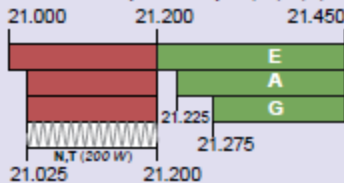
20 Meters (14 MHz) E,A,G



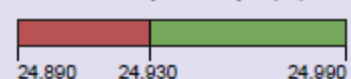
17 Meters (18 MHz) E,A,G



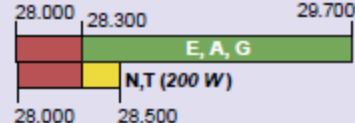
15 Meters (21 MHz) E,A,G,T,N



12 Meters (24 MHz) E,A,G

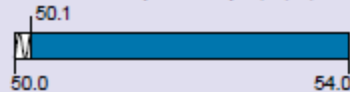


10 Meters (28 MHz) E,A,G,T,N

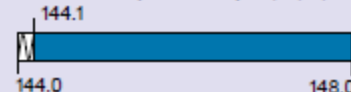


VHF – Very High Frequency bands

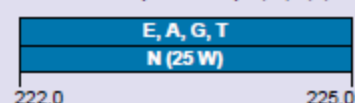
6 Meters (50 MHz) E,A,G,T



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



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



UHF – Ultra High Frequency bands

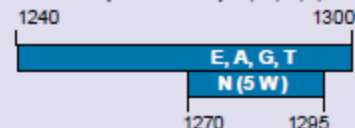
70 cm (420 MHz) E,A,G,T



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



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



SHF&EHF – Super and Extremely High Frequency bands

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

2300-2310 MHz 3300-3450 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.

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 OTAbands rev. 11/16/2023

ARRL Learning Center Features Two New Emergency Communication Training Courses

ARRL has released [two new courses](#) to train emergency communications (EComm) operators for volunteering within the [Amateur Radio Emergency Service® \(ARES®\)](#). Both courses are within the ARRL Learning Center.

The Basic EComm course is designed to get a new volunteer started. It provides basic knowledge and tools for any emergency communications volunteer and contains three modules and 11 topics, including required prerequisites. It's expected to take approximately 10 - 20 hours to complete.

The Intermediate EComm course builds on the lessons learned in the first course and equips volunteer radio amateurs with the tools needed to thrive in the fast-paced environment of public service communications and to understand the legal rights and responsibilities of working with a served agency, as well as teach them and how ham radio fits into the broader incident command (IC) structure.

The new courses replace the previous EC-001 and EC-016 programs, however, certificates of completion earned for the previous courses are still valid. "Training is not a one-and-done thing. Throughout my firefighting and emergency management career, we were constantly taking new courses to reinforce existing knowledge and introduce new concepts," said ARRL Director of Emergency Management Josh Johnston, KE5MHV. "Engaged volunteers should want to stay up to date on advances in the science of emergency communications. I'd even encourage veteran operators to take the new courses."

Continued next column

In 2023, the Federal Emergency Management Agency (FEMA) [revised the Guide for National Emergency Preparedness](#) to specifically include amateur radio. ARRL and FEMA entered into a new Memoranda of Understanding in May 2023 that outlined the importance of trained radio amateurs within the response ecosystem.

"Amateur radio is as important as ever in emergency management," said Johnston. "The new courses will keep hams trained to serve effectively."

The ARRL Learning Center at learn.arrl.org is a member benefit and features many ways to get the most out of your amateur radio license. The Basic and Intermediate EComm courses are available to anyone with a free www.arrl.org account. Users must log in to the ARRL Learning Center with this account, and functionality of the site relies on cookies being enabled. END.



**I foolishly suggested he try it out first.
That was three days ago...**



RCARC Membership Club Meeting Pictures May 14, 2024

Continued from page 11



Fred (KI7TPD) is attempting to splint Bonnie (KI7WEX's) right Arm.

Thank you, Austin and Mike, for your time and expertise in sharing your vast knowledge with our group. End

The Battleship New Jersey Amateur Radio Station, NJ2BB, is sponsoring the 2024 Museum Ships Weekend from June 1 - 2, 0000Z - 2359Z.

The event is not a contest but an opportunity for amateur radio operators to contact stations onboard historic battleships across the country. To date, more than 100 ships are registered to participate, including the USS *Hornet* aircraft carrier and the USS *Nautilus* submarine. Additional information and a complete list of ships, locations, and call signs can be downloaded [here](#). Contacts made on any amateur radio frequency are permitted, but most ships will be operating SSB or in the General-class licensee portion of the bands. Additional modes, including PSK31, FT8, and FT4 may also be active.

RCARC EComm Board Meets

On May 27, 2024 the RCARC EComm Board Members met via Zoom to continue setting direction for the remainder of the year. The following items are being discussed and moved forward.

The Board continues to move forward with getting the RCAC EComm Trailer front line ready for response if needed. Some of the improvements we hope to make over the next few months include a new printer, heating and air conditioning unit, a new polyphaser lightning arrestor, window coverings and faraday cloth for the radio storage boxes. **We are still looking for a club member to take the lead on coordinating these items.**

Additionally, the Antenna Trailer is being upgraded with new outriggers to stabilize the trailer when in use. We are looking to upgrade the current tools on board as well as fix the PL259 on the driven element along with getting a new spring for the safety lock.

We will be looking at setting a date for another trailer(s) work party after Summer Field Day.

The next General EComm Membership meeting will be on June 20, 2024 at 5:30 pm. at the Cedar City Heritage Center upstairs.

The program will be a presentation by the Oath Keepers, an overview of who they are, there make up and mission. Hope to see you there. End.

Happy
Fathers
Day



RAINBOW CANYONS ^{jm} AMATEUR RADIO CLUB
Cedar City, Utah 84720

October, 1992

OFFICERS

PRESIDENT: Dave Harris N7NKK phone: 676-8032
VICE PRES.: Russ Chaffee KB7NLX phone: 586-7297
SEC/TREAS: Mardi Biedermann KB7HHB phone: 586-7033

MONTHLY MEETING TIME

RCARC meets regularly on the 3rd Tuesday of each month. October's meeting will be held on the 20th, at 7:30pm. We meet in the C.A.P. room at the Cedar City airport.

The scheduled topic for this month will be emergency and portable radio systems. Ray Congdon, N7HQK and Brad Biedermann, WA7HHE will be the featured speakers. If you are interested in "suit case radio" and digital communication be at the meeting on the 20th.

SEPTEMBER MEETING MINUTES

Pres. Dave Harris, N7NKK called the meeting to order at 7:35pm. He gave a report on the presidency's visit to the Dixie ARC. They were warmly received and gave a positive reception to the proposed joint venture on the 100 mile endurance ride.

Problems with the repeaters were talked about. Work is under way to make necessary repairs, when time permits.

Dick Parker, KI7DF presented an exposita on his recent antenna tower installation, covering safety, engineering and problems with interference with a window antenna.

Meeting was adjourn at 9:00pm.

ENDURANCE RIDE, WHAT ENDURANCE RIDE?

It was a little disheartening to be told that the services requested from the radio club would not be needed. That was the extent of the phone conversation with the race sponsors. They felt they could handle it with 2 portable radios. More power to them. I, for one, can use the time profitably else where. Thanks to all who volunteered their services.

MARS NETS

Recently, Pres. Dave Harris, N7NKK, has renewed the interest of some local Hams in MARS. MARS stands for Military Affiliate Radio System. The purpose of MARS is to provide Department of Defense sponsored emergency communication on a local and larger scale. It also provides auxiliary communications for military, civil and disaster officials during periods of emergency. The goal of MARS is to improve individuals radio skills in HF and VHF equipment and systems.

To participate one needs a special MARS license, obtainable by any

licensed amateur regardless of class. MARS use their own frequencies adjacent to but separate from the amateur bands. Anyone may listen in on the MARS nets. Net schedules in the Cedar and Utah area are as follows.

-HF net, Saturday, 8:00am. 4.023.5 CW. Following check-ins, move to 4.026.0 for SSB. This is a state-wide net.

-HF local slow speed net, Saturday 9:00am. 7.315.5 CW check-in, move to 7.317.0 for SSB operation.

-HF net, Saturday, 8:00pm. 4.026.0 SSB.

-VHF net, Wednesday, 9:00pm 143.99 simples. This freq. was used for the first time on September 30. It will become Cedar City's local MARS VHF net, with the promise of a repeater in the future.

To become a member of MARS, contact Dave Harris, N7NKK (phone number listed at the top of the first page) local recruiter for MARS. Many exciting future opportunities are in store for the MARS organization, state-wide links, packet, VHF, HF etc.

KEYER UPDATE

A short visit with Don Blanchard, WA7GTU, on the steps of the Post Office, indicated the keyer project is still a go. However, no one has officially been assigned to keep record of those wishing to build one. (A business matter for club meeting??) Don suggests a ball park figure of about \$15 each. He apologizes for the delay. Like so many things they too must be prioritized.

A MESSAGE FROM THE VICE PRES.

(Editor's note: the following is a reprint from Educational Activities September 1992 ideas exchange, the ARRL newsletter form).

Novice Examining Under the VEC

The FCC recently announced a Notice of Proposed Rule Making (NPRM) on bringing all Novice exams under the VEC system. They originally considered it in 1989-90 as part of the codeless license proposal. The FCC has always been concerned with how easy it is for non-hams to falsify Form 610. Also, FCC notes that the majority of people now enter the hobby through VEC exams (as Technicians), and cites the 9.4% error rate (versus 0.8% through the VEC) of exams not given by VECs. The NPRM doesn't directly address exam fees. It proposes to permit Generals to become VEs for Novice exams.

The ARRL VEC hopes to simplify the process for accrediting VEs who give only Novice exams, and to suggest ways to easily meet requirements for exam coordination, such as advance publicity. We want to increase the number of VEs and Novice exam sessions. If these things can be done, the only real change from examining Novices in the home would be the need for three qualified people, rather than two. Please read "Exam Info" in September QST for specific details, and how to send comments to the FCC on exam fees or other aspects of the NPRM. For a copy of the NPRM, send a SASE to the ARRL Regulatory Information Branch.

Thanks, Russ, for keeping us informed on recent rule changes. With the next Novice/Tech class scheduled for January this will be a boon for the examiners following the instruction sessions.

THE FOX HUNT THAT ALMOST WASN'T

Saturday, October 3, found two foxes scarring for their den while the hounds and hunters assembled at the city park. Unfortunately, other activities captured the interest of local amateurs. Our usual few participated, with one sharp shooter finding the foxes after only 32 minutes. You guessed it, Merlin MacKay, N7TCE, took first place. Then he shared his "double barreled" detection finder with Steve Despain, N7YSC, and his son. It was Steve's first experience hunting the fox and did quite well using only a HT. It was fun watching the hunters sleuthing through the sage brush looking for the foxy Foxes.

Come to the club meeting this month and find out where the Foxes were hidden, and see the trophy Merlin won.

The trophy goes to the winner of the next hunt. Merlin will be the fox next time so the rest of us will have a fair chance in finding him!

We also hope there will be more participating in the next hunt. The skills learned in these fun events are useful in locating emergency locator beacons associated with Civil Air Patrol and other transmitters

FOR SALE

Don McAllister, N7AVJ, 586-6015 Epon laptop computer, ideal for portable packet setup. \$95.00. Yaesu FT 208-R 2-meter handheld transceiver and drop-in charger with extras.

Russ Chaffee, KB7NLX, 586-7297 Butternut 6 band vertical. Cushcraft 10 meter, 4-element beam antenna. Make offer.

Terry Arnett, 586-1008 (business hrs. only) Collins R-390 Receiver. Heath Kit SB 300 Transmitter and SB 400 Receiver. Call.

Dick Parker, KI7DF, 586-2167 Various length of RG-8/U, RG11/U, RG58/U and 1/2 inch Andrews "Helix" (hardline). Possible line on N-type fittings. Call.

Walt May, KA7STK, St. George. Numerous computer/TNC packages for packet radio station. Call "May's Flowers" in St. George.

Gloria Darley, N6TWR, 586-2752 Drake TR-4 HF 10-80 meter transceiver, 300 watt output, with books. Best offer.

Don Blanchard, WA7GTU, 586-4512 "Lots of stuff" for sale, please call.

This space gone to waste for lack of news worthy stories, events, articles and "For Sale" items. Help get your money's worth. 6 double sided pages go for the same postage 2 pages do).

PRINTING AND MAILING COSTS PAID FOR BY GALAXY AUDIO, YOUR LOCAL RADIO SHACK DEALER. Tracey Williams, N7DWB, owner; Don Francisco, manager.