RAINBOW CANYONS AMATEUR RADIO CLUB NEWSLETTER

CEDAR CITY, UTAH

Club Websites: www.rcarc.info OR www. rainbowcanyons.com Number 3 – Vol. 3 – March 2021

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. On Hold UFN. COVID-19

2020 Club Officer's

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CQ, CQ, Happy St. Patricks Day

Presidents Message

Greetings fellow HAMs!

Hope everyone is having a great start to 2021! The senior center is nearly done with their renovations and it looks like they will be open again at the end of March. This means that we will be able to start meeting again in April. We will be required to mask up for now. The cold weather and power outages in the Southeast show the need for our hobby. As we learn about how to communicate as a radio community, we also build the skills that allow us work together and to help one another. For our March meeting WA7GTU will giving a presentation on "How your Radio Works." This should be a very educational talk. We will try to have more 'Elmer' nights/classes and online activities that will help new and old Hams connect with our Hobby over the next few months.

Continued on page 2

RCARC Club Nets:
7:00 a.m. Breakfast Net - Monday – Saturday – 146.760.
12:30 p.m. Daily – Utah Beehive Net On 7.272.
7:00 p.m. Tuesday's Southwestern Utah Digital Net. Using FLDIGI, FLMSG AND FLAMP – 146.680, 1500/MT63-2KL
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. Wednesday – Morse Code Net-
146.980. - offset. PL 100
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.

Local Repeaters:
146.980 MHz – Tone 100.0 Hz
146.940 MHz – Tone 100.0 Hz
146.760 MHz – Tone 123.0 Hz
147.160 MHz + Tone 100.0 Hz.
448.800 MHz – Tone 100.0 Hz
146.680 MHz – Tone 100.0 Hz
Remote Bases:
449.500 MHz – Tone 100.0 Hz
449.925 MHz – Tone 100.0 Hz
ILRP/Echolink
449.900 MHz – Tone 100.0 Hz

Save The Date

March 9, 2021

RCARC Club Meeting.
***Radio meeting**

Zoom presentation will be on "How your radio works". Presented by Don Blanchard (WA7GTU).

April 13, 2021

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

May 11, 2021

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

*** Meetings start at 7 pm. on the Iron Mountain Repeater - 146.760, minus offset with a PL of 123.0**

Also available through Echolink – KG7PBX.

President's Message

I hope you are all getting a chance to play, share, and have fun on the radio! I also hope that you are learning new things so that you can share them with your fellow HAMS! We all have strengths and weaknesses but we are all interested in radio communications and can benefit from each other. 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)

RCARC Club Breakfast

Come join us the first Saturday of every month at 9:00 a.m. for breakfast at the Pastry Pub located at 86 W. Center Street, Cedar City. Check out their website at: www.cedarcitypastrypub.com

Note

Back to the Senior Center

On April 13, 2021 the RACRC monthly meetings will return to the **Cedar City Senior Center, 489 E. 200 South.**

Masks, hand sanitation and social distancing will be required.

Please come join us.

No food allowed

Happy Birthday and Anniversary to those celebrating in March

Spring is almost here!

Breakfast & Friendship Net Awards

Breakfast Net		Friendship Net	
First Place	**Second Place**	**First Place**	**Second Place**
KI7WEX - Bonnie	KE6ZIM - Johnny	KI7WEX - Bonnie	KA7J - Lance
KI7TPD - Fred	**Third Place**	KI7TPD - Fred	KB7UMU - Sylvia
KG7PBX - Linda	KI7LUN - Scott	KJ7OZI - Paul	N7SND - Larry
K7DVP - Vernile		KI7SXJ - Isaiah	KG7PBX - Linda
KB7UMU - Sylvia		N7TCE - Merlin	**Third Place**
KI7LUO - Melody		KJ7LTQ - Brant	K2MFK - Kevin
KK7ZL - Ed		N7WWB - Darlene	
N7SND - Larry		K7HDX - Ron	
K7ZI - Dick		W6DLW - Dennis	
KC6WFI - Tony		K7NKH - Lee	
		K7ZI - Dick	
		KI7LUM - Bruce	

Article: Ham Radio Forms a Planet-Sized Space Weather Sensor Network

The article "Ham Radio Forms a Planet-Sized Space Weather Sensor Network," which appeared on February 9 in *Eos, Earth & Space Science News*, sprang from a project by the Ham Radio Science Citizen Investigation (HamSCI), founded by Nathaniel Frissell, W2NAF, of the University of Scranton, one of the paper's authors. The other authors are Kristina Collins, KD8OXT, who led the project, and David Kazdan, AD8Y, both of Case Western Reserve University (W8EDU). The article posits that, with their experience dealing with ionosphere-influenced propagation, radio amateurs have an empirical knowledge of space weather and offer a ready-made volunteer science community.

The article covers the methods and research being used to monitor the effects of solar activity on Earth's atmosphere, telecommunications, and electrical utilities -- and the valuable data being crowdsourced from amateur radio signals.

"To fully understand variability on small spatial scales and short timescales, the scientific community will require vastly larger and denser sensing networks that collect data on continental and global scales," the article asserts. "With open-source instrumentation cheaper and more plentiful than ever before, the time is ripe for amateur scientists to take distributed measurements of the ionosphere -- and the amateur radio community is up for the challenge."

"The reach of these crowdsourced systems, and the support of the amateur community, offers tremendous opportunities for scientific measurements," the article notes.

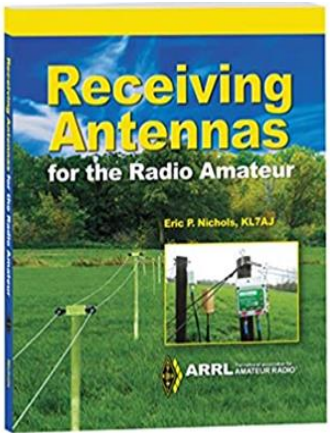
Continued on page 9

In This Issue

RCARC February Meeting Book Giveaway

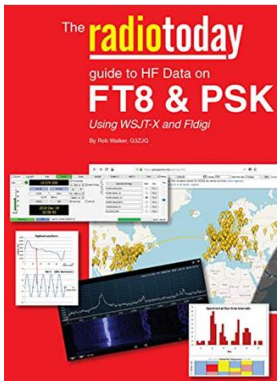
The book shown below will be awarded to one of our RCARC members at our club meeting on March 9, 2021

This book is being donated by Linda Shokrian (KG7PBX).



RCARC Book Giveaway Winner.

The winner of the February 9, 2021 book giveaway, ARRL's the radio today – FT8 & PSK using WSJTX and Fldigi is Lee (K7NKH)



Congratulations Lee

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
www.rainbowcanyons.com

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.

RCARC SWAP MEET COMING SOON

Start getting your excess gear ready to sell. RCARC Will be hosting a Swap meet either in May or June.

Actual date/time and location to be announced soon.

$$$$$$

Buzz's March Safety Tip(s)

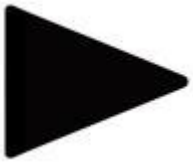
. Learning Road Sign Safety

Road signs regulate the flow of traffic, warn drivers of safety hazards and road conditions, and guide them to travelers' services and assistance. Once you learn the basic shapes, colors, and symbols, you will be able recognize road signs from a distance or in poor weather conditions.

Standard Shapes and Colors

Sign shapes and colors standardize and simplify road regulations, warnings, guidance, and directions so everyone can understand them. For example, the most recognizable road signs are the red octagon STOP sign and the upside-down triangle YIELD sign.

Shapes
Road sign shapes represent regulatory commands, give a traveler guidance and direction, and warn of hazards or conditions ahead. Nine standard shapes are used in road signs in the United States.

Shapes	Example	Meaning
Octagon		Always means STOP
Upside down triangle		Always means YIELD
Diamond		Warning of possible hazard ahead, such as slippery or winding road or intersection
Pennant		Warning of a no passing zone
Round		Railroad crossing

Continued on page 11

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Rainbow Canyons Amateur Radio Club
Treasurer Report, February 9, 2021

Balance - January 12, 2021	$1,778.18
*Dues received	110.00
charge for checks	- 27.75
Availability - February 9, 2021	$1,860.43

*Dues received $110
Family payments of $20 - received from
K7VXV & WB7FET
Individual payments of $15 - received from
KR7KR, KC7IHE, KA7J, N7TCE, KJ7JAQ, K7VVN

These are the bank account records as I have them. (Because we changed Treasurer's and bank accounts in January 2021, there may be an overlap of membership dues credited between bank statements so if I have missed anyone who has paid their dues, please let me know. See January treasurer report in newsletter for additional membership dues paid for 2021. Dues can be mailed or dropped off to me at address below. There is a membership form to include in the newsletter.

Activity since treasurer's report - amounts are not included above and will be reflected in next month's bank statement and treasurer's report

Accounts payable due 2/16/2021 $16.18
There is a automatic monthly deduction to Rocky Mountain Power to pay for the electricity used by the 98 repeater up on Iron Mountain

Additional Dues received and deposited after monthly meeting date: $90.00
Family payments of $20 - received from
KG7YID & KI7SXJ, KG7YIB & KG7YIC, KB7VAO & KI7FZP
Individual payments of $15 - received from
KI7SCX, N7CWO

Submitted by Linda Shokrian KG7PBX, 2021 RCARC Treasurer
435-867-5914
2438 W Carmel Canyon Dr., Cedar City, UT 84720

Daylight Savings Time

Daylight Saving Time is here again. Sunday March 14, 2021 at 2:00 am. It will be time to set your clock's 1 hour ahead to 3:00 am.

Whatever Happened to Heath kit?

Whenever I mention to folks that I used to work at Heath kit, a few people actually ask, "What's Heath kit?" Yes, I suppose that does date me a bit. Others will say, "Oh, yes, my dad used to build Heath kits." Anyway, some of you do remember Heath kit, and fondly in most cases. If not, let me explain.

There once was a time in electronics when you could actually build circuits and equipment yourself. You needed a design that you could create yourself—or if not, get from one of many magazines, including Electronic Design. You could buy the resistors, capacitors, transistors, or tubes in the olden days, then put them all together on a metal chassis, a breadboard, or a finished printed-circuit board (PCB).

It was quite a project but doable, and many hobbyists like hams built these designs on a Rin the late 1940s and 1950s, someone invented the kit business. Companies designed a product and sold it as a bundle of parts called a kit. You could buy the kit for a fraction of what a comparable wired unit would cost and then build it yourself. The outcome was quite favorable—a workable electronic product and a great sense of accomplishment you got from the construction.

Heath was one of those companies that help started the kit business. Ed Heath founded the company in 1926 with, of all things, an airplane kit. He died in a test flight in one in 1935, but Howard Anthony kept the company going. Right after World War II, he bought a batch of electronic surplus. Out of that came one of the first successful kits, a small oscilloscope for $50, which was a real achievement in its time. With that success came many new products.

Continued on page 15

ARRL to Extend Field Day Rule Waivers from 2020, Add Class D and E Power Limit

The COVID-19 pandemic-modified ARRL Field Day rules from 2020 will continue this June with the addition of a power limit imposed on Class D (Home Stations) and Class E (Home Stations-Emergency Power) participants. The news from the ARRL Board's Programs and Services Committee comes as many clubs and groups are starting preparations for Field Day in earnest. Field Day 2021 will take place June 26 - 27.

This early decision should alleviate any hesitancy that radio clubs and individual Field Day participants may have with their planning for the event," said ARRL Contest Program Manager Paul Bourque, N1SFE.

For Field Day 2021, Class D stations may work *all other* Field Day stations, including other Class D stations, for points. This year, however, Class D and Class E stations will be limited to 150 W PEP output.

For Field Day 2021, an *aggregate* club score will be published -- just as it was done last year. The aggregate score will be a sum of all individual entries that attributed their score to that of a specific club.

ARRL Field Day is one of the biggest events on the amateur radio calendar. Last summer, a record 10,213 entries were received.

Continued next column

"With the greater flexibility afforded by the rule's waivers, individuals and groups will still be able to participate in Field Day, while still staying within any public health recommendations and/or requirements," Bourque said.

The ARRL Field Day web page contains complete rules and entry forms, as well as any updated information as it becomes available. Join the ARRL Field Day Facebook group. Read an expanded version. End.

ARRL to FCC: Additional Volunteer Examiner Coordinators Not Needed

ARRL has told the FCC that no additional Volunteer Examiner Coordinators (VEC) are needed to oversee the administration of amateur radio exams by Volunteer Examiners (VEs). Examination opportunities have continued to be widely available throughout the US -- except for a couple of months during the onset of the COVID-19 pandemic -- and adding VECs to the 14 now in place would "have no effect" on the number of available exams, ARRL said.

ARRL's comments on February 4 were in response to a January 5 FCC *Public Notice* in WT Docket 21-2 seeking input on possible expansion of the VEC pool.

"We found that even though 10 of the 12 months for calendar year 2020 were times of severe disruption throughout the nation, including for FCC and ARRL Headquarters staff, amateur examination opportunities and numbers were strong," ARRL told the FCC.

Continued on page 9

ARRL to FCC: Additional Volunteer Examiner Coordinators Not Needed.

Continued from page 8

"Instead of increasing the number of VECs, we would encourage volunteers to become accredited as VEs and to volunteer to help the current VECs wherever possible," ARRL said. "Many of the VECs would welcome help." ARRL said VEs, not VECs, are responsible for administering amateur radio exams.

The number of new and upgraded licenses has been in line with earlier years, "with noticeable increases in the 4 months following the lockdown that occurred in many areas in the early spring," ARRL pointed out.

ARRL said, "Increasing the number of VECs would expand the complexity of VEC coordination and management, increase demand on FCC resources to interface with additional organizations, and raise the potential for abuse and fraud." Read an expanded version. End.

Article: Ham Radio Forms a Planet-Sized Space Weather Sensor Network.

Continued from page 3

The research acknowledges a handful of HamSCI collaborators -- from organizations and universities -- and is supported by National Science Foundation grants. HamSCI's Personal Space Weather Station initiative aims to develop a network of specially equipped amateur stations that will allow amateurs to collect useful data for space science researchers. Ham radio operators and researchers, through HamSCI, are designing hardware for a distributed network of personal space weather stations, the article explains.

The 2021 HamSCI virtual workshop will take place March 19 - 20. Read an expanded version.

World Radio Day

The Federal Emergency Management Agency (FEMA) would like to give a big shout out to Ham radio operators! They are such an important part of the emergency management community! When normal communications networks are down, these volunteer operators can share critical information that helps save lives.

World Radio Day was celebrated all over the world last February 13th. The day aims at promoting the medium and encouraging people to use it. The main object behind celebrating World Radio Day is to raise awareness among the public and the media of the importance of radio, secondly to encourage decision-makers to establish and provide access to information through radio; as well as to enhance networking and international cooperation among broadcasters.

Buzz's March Safety Tip(s)

Continued from page 5

Pentagon		School zone or school crossing ahead; county route signs in some states
Horizontal Rectangle		Guide/information signs, such as route markers, destination, or road closed.
Vertical Rectangle or Square		Regulatory notice, such as KEEP RIGHT, ONE WAY, or DO NOT PASS
Shield		Route marker for interstate highways

Colors

Road sign colors also encode regulatory commands, directions, warnings, road conditions, and motorists' assistance and services. There are seven basic colors used for road signs in the United States.

Continued on next column

Color	Example	Meaning
Red		Stop, yield, do not enter, or wrong way
Green		Directs you to go or guides you where to go
Yellow		General warning to take caution for hazards or changes ahead; slow down
Black and White		Regulatory notice, such as speed limit
Orange		Construction or maintenance ahead
Brown		Scenic, historic, or recreational points of interest
Blue		Guides motorists to assistance or services (food, gas, etc.); handicap parking or facilities

Continued on page 11

Buzz's March Safety Tip(s)

Continued from page 9

Standard Road Sign Symbols

The symbols used on road signs in the United States replace words and are also easy to recognize in other countries. Familiar examples of these symbols as applied in the U. S. include:

Symbol	Example	Meaning
Children on yellow pentagon		School zone
Squiggly arrow on yellow diamond		Winding road
Two up and down arrows on yellow diamond		Two-way traffic
Up arrow and red octagon on yellow diamond		Stop ahead
"H" on blue square		Hospital nearby
Two Rs on either side of an X on yellow circle		Railroad crossing

Continued next column

Note that though road symbols are universal, the meanings of shapes and colors in other countries, such the United Kingdom, differ from those in the U. S.

Essential to Road Safety

Road signs are essential to traffic control and safe driving. Protect yourself and others and follow regulations by learning the meaning of road sign shapes, colors, and symbols. End.

NOTE:

Morse Code Net Day Change

As of February 17, 2021, the RCARC Morse Code Net moved to Wednesday nights.

Time: 7:00 P.M.

Frequency: 146.980 – Off Set and PL of 100

.--. .-.. . .- ... . -.-. --- -- . .- -.-..

-.-. .... . -.-. -.- --- ..- - - .... . -. . -

Save the Date

RCARC will host *a* **"Technician Class"** this coming May. The dates are: May 6th, 13th, 20th, 27th, - June 3rd, and 10th, with testing on June 17th.

Additional details to follow as they become available.

If you are an instructor and would like to assist in teaching please contact Linda Shokrian at **lgshokrian@gmail.com.**

RCARC 2021 Winter Field Day Statistics.

As most of you are aware RCARC members participated in the ARRL 2021 Winter Field Day held this past January. Listed below are the statistical contacts recorded by the RCARC members during the event. Total contacts 152. See breakdown.

Name	Call Sign	# of Contacts
Bruno De Backer	KG7VVN	77
Tom Adams	KI7LUI	25
George Gallis	AL7BX	25
Brad Biedermann	WA7HHE	13
Brodie Johnson	K7VXV	8
Fred Govedich	KI7TPD	2
Linda Shokrian	KG7PBX	2
		Total 152

A Great big thanks goes to:

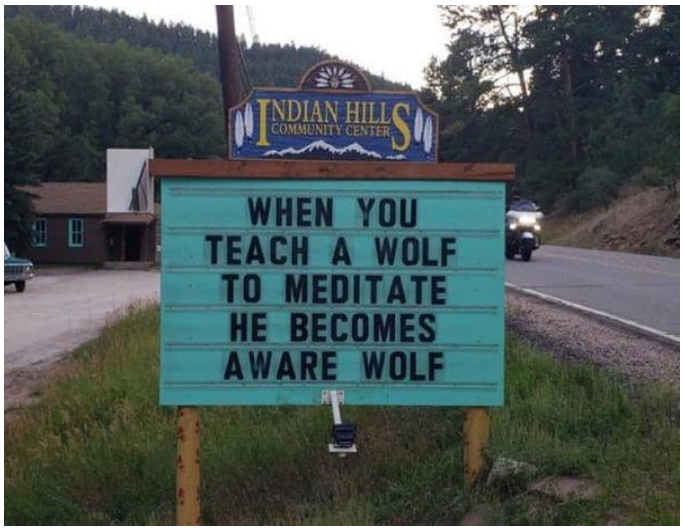
Dick Parker – KI7ZI

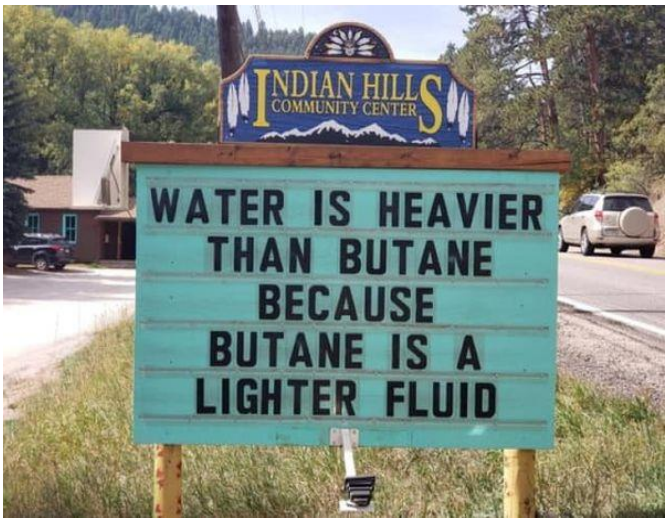
Dick thank you for the great "RFI" Zoom Presentation at last month RCARC Club radio meeting. The information and visuals presented a great picture on how to find, identify and mitigate "RFI" noise.

Great Presentation

Chuckle, Chuckle, Chuckle

Some Humor





Congratulations

A big shout out congratulation goes to Kayla Moore (KJ7OHA) who up upgraded her license to General Class.

In addition, a big shout out congratulation goes to Michele Gutierrez who passed her Technician Class License test.

RCARC Coffee/Breakfast at the Pastry Pub Pictures

Members standing line to order.

Different View

Enjoying breakfast

Continued next column

Carolyn (KG7YB) and Ken (KG7YIC) ordering breakfast.

Different View

https://www.facebook.com/DIYCraftsTV/videos/2955658214666097/

Heath kit continued from page 7

Heath kit probably succeeded more on its ham radio products than anything else. Most of the early kits were shortwave radios, transmitters, accessories like antenna tuners, and the famous Cantenna, a 1-kW non-inductive power resistor in a paint can with mineral oil for the heatsink. Heath kit went on to create an extensive line of small and large transceivers and big power amps, many of which are still operational today.

The Successful Years

Later in the 1950s and 1960s, Heath kit expanded into audio equipment, TV sets, and lots of other consumer products. The company even had a low-cost line of test equipment with scopes, multimeters, generators, counters, and other items. While Heath kit had competitors like Allied Knight, Lafayette, Eico, and a few other smaller companies, it essentially beat the pants off everyone else because it had a better product.

But Heath kit's good reputation really came from offering a better assembly manual than anyone else. A poorly executed step-by-step manual is a prescription for disaster for any kit company. If the customer can't build the kit successfully without massive telephone and mail support, it would die a quick death, and many did. Heath kit figured this out early and spent as much development time in the manual as it did engineering the product. Its primary marketing message was "We won't let you fail," and the company lived up to it.

I went to Heath kit in the early 1970s to start its education and publishing product line. The idea was to extend the concept that building a kit was an educational endeavor and that we could expand on that idea with more formal learning materials to supplement the kits. We built a line of self-instructional courses on electronic fundamentals and a wide range of other topics. A line of kit trainers accompanied the instructional materials. The first products emerged in 1974 and were instantly successful. We followed up with microprocessor learning packages, which were hot for their time. And, we developed the Hero robot kit that came out in 1982.

I was also involved with the development of the Heath kit computers. We created the H8 and the H11, not to mention the H9 terminal, and of all things the H10, a paper tape reader/punch. (What was I thinking?) The H11 kit used Digital Equipment Corporation's (DEC) famous LSI-11 board. We packaged that into kit form with some 8-in. hard drives (remember those?) and the RT-11 operating system with Basic—not bad for $1200 at that time. The all-in-one H89 and others came later.

Continued on page 16

Heath kit continued from page 15

The Beginning of the End

The success of the computer line attracted the attention of Zenith Corp., which went on to buy heath kit in 1979 from the owner Schlumberger, an oil field service company that also owned Fairchild Semiconductor at the time. Zenith carved out the computer product line and started Zenith Data Systems (ZDS), and that company went on to build a several billion-dollar businesses making Zenith computers and PC compatibles. Groupe Bull of France eventually bought that business, and ultimately it succumbed to the market forces driving the PC-compatible business with all its shakeouts, ups, and downs during the late 1980s and early 1990s.

In the meantime, the kit business suffered. Zenith didn't really want that business, but it came with the deal. It was neglected as ZDS grew, and so began its slow decline into oblivion. But a great deal of that decline had little to do with Zenith. It was also the time of great progress in semiconductor manufacturing. More and more equipment was being made of more and smaller ICs and surface-mount components, both of which were always a challenge for kit builders. It became harder to make a kit people could build at home with basic hand tools.

At the same time, wired products became cheaper thanks to Asian engineering and manufacturing. You could buy a great stereo or color TV set for less than what a kit cost, and you didn't have to spend three weekends building it. Everyone was into instant gratification in the 1980s, so nobody wanted to spend time building kits.

heath kit discovered it could no longer compete in many markets like ham radio, audio, TV, and test equipment as it took as much time and money to create the manual as it did the product. With double the development costs and the technology making assembly more difficult, heath kit eventually concluded it could not compete. This perfect storm of conditions led to the formal phasing out of the kit business in 1991 and 1992. There was lots of editorial coverage about that being the end of an era

But Wait—heath kit Really Didn't Go Away

Everyone thought that heath kit was no more. Wrong! The education and publishing business now called heath kit Educational Systems (HES) was still doing well. While the courses, materials, and trainers were sold to individuals, HES also developed a huge college and university business. HES was soon sold to a private buyer and continued as a successful operation. It still is today.

Continued on page 20

ARRL Learning Network Webinars

Visit the ARRL Learning Network (a members-only benefit) to register, check on upcoming webinars, and to view previously recorded sessions.

Talking to Astronauts: An Elementary School's Exciting ARISS Experience -- Diane Warner, KE8HLD

This is a story about Tallmadge Elementary School's participation in a once-in-a-lifetime ARISS (Amateur Radio on the International Space Station) school contact. Learn about their amazing journey leading up to the amateur radio contact with an astronaut on the International Space Station.

The excitement of the entire experience was shared not just by the students, but included faculty, parents, the community, and local amateur radio operators. You will also learn how to begin the process of submitting your own ARISS contact proposal.

Tuesday, March 2, 2021 @ 1 PM EST (1800 UTC)

Technicians: Life Beyond Repeaters -- Anthony Luscre, K8ZT

Maybe you just received your Technician-class license, or perhaps you have had it for a while and burned out on sparse FM repeater contacts.

Continued next column

Take a new look at the possibilities available to you beyond repeaters. Explore Tech HF and 6-meter privileges for SSB, CW, and digital modes such as FT8, RTTY, and PSK31 to expand your operating modes and your station's outreach. Explore other VHF/UHF uses, including SSB, satellites, FM simplex, digital modes, contesting, and more.

Tuesday, March 9, 2021 @ 1 PM EST (1800 UTC)

The Art and Science of Operating Ultra-Portable -- Mike Molina, KN6EZE

Ultra-portable operation, or being able to carry your radio over distances (e.g., in a backpack), is quickly growing in popularity. Whether it's for SOTA, POTA, backcountry survival, or just spending time in nature, learning how to operate ultra-portable is a fun and rewarding experience. In this presentation, Mike, KN6EZE, will cover the basics of ultra-portable operating for both the new and experienced ham operator.

Tuesday, April 6, 2021 @ 8 PM EST (0100 UTC on Friday, April 7)

The ARRL Learning Network schedule is subject to change. End.

ARRL Board Considers Plan to Cover New $35 FCC Fee for Some Young Applicants

At its Annual Meeting in January, the ARRL Board of Directors considered a motion to offer a new service that would pay the new but not-yet-implemented $35 FCC application fee for a limited number of new radio amateurs younger than age 18 who, at the time of testing, belonged to an ARRL-affiliated 501(c)(3) charitable organization and passed their tests through an ARRL VEC-sponsored exam session. The proposal called for reducing the VEC fee for these candidates to $5. The initial proposal came from ARRL Southeastern Division Director Mickey Baker, N4MB.

Other Board members offered subsidiary motions. Supporters said the purpose behind the motion was to ameliorate the potential financial hardship the pending FCC application fee posed on certain minors applying for their first license, and to encourage new youth membership.

Consideration of the motion, which was subject to considerable discussion, was deferred to an ad hoc committee composed of the members of the Administration & Finance Committee, two Members of the Programs & Services Committee, and ARRL CEO David Minster, NA2AA (or his designated representative). The Board directed the panel to review and more fully develop the proposal and report back to the Board by the end of March with a recommendation as to whether such a program should be adopted and, if adopted, how it should be implemented.

Continued next column

Supporters expressed the belief that recruitment and training of young radio amateurs "is a necessary and proper mission of the ARRL" and that subsidizing the $35 fee "will reduce the number of new amateurs that otherwise would be lost from these groups."

In December, the FCC agreed with ARRL and other commenters that the initially proposed $50 fee for certain amateur radio applications was "too high to account for the minimal staff involvement in these applications." In a *Report and Order* (*R&O*), the FCC scaled the fee back to $35 for a new license application, a special temporary authority (STA) request, a rule waiver request, a license renewal application, and a vanity call sign application. All fees are per application. There will be no fee for administrative updates, such as a change of mailing or email address. Read an expanded version. End.

Winter Yellowstone VHF Radio Rally Involves ARES

January 30, 2021 -- The morning dawned dark and gray with heavy snow falling and the roads were slick. It was winter in the Greater Yellowstone Ecosystem. The North Yellowstone Amateur Radio Club/Park County Amateur Radio Emergency Service has 15 active members scattered across this sparsely populated area of northern Wyoming and southern Montana. Many more bison and elk roam the roads than do hams.

The critical duty in winter for the North Yellowstone operators is deployment to remote locations of winter emergencies. To train for these responses, the members devised the *VHF Radio Relay*, a radio scavenger hunt designed to get members out to remote road locations where winter emergencies may require radio communications

Bison on northern Yellowstone roads. [Reve Susan Carberry, KX4LZ, photo]

support. The group uses the Eagle's Nest repeater located at 8,000' on Electric Peak southwest of Gardiner, Montana, the north entrance to Yellowstone National Park; the machine covers the northern one-third of the vast park and southern half of Park County, Montana.

Continued next column

For last month's exercise, with COVID-19 precautions rigorously observed, at 8:45 local time, the participating hams received their instruction set consisting of two pages. The first page contained the directions for completing their call out assignment and listed 15 carefully chosen locations requiring hams to go to the far reaches of the radio coverage area. The second page consisted of a map showing the designated general locations. There are only three roads in the area and conditions on one dirt road are normally difficult. Each route had five locations along the way to the terminal check point. The 15 widely spaced locations guaranteed that no operator could visit all of them.

A tactical call sign was assigned to each location. The communicators had to use GPS locating devices to verify that they were at the exact locations. At all locations, hams radioed Net Control to have their location verified before moving to the next location.

On two roads, there was an interpretive sign at the last check-in point. Hams were required to radio in from the sign and then were given instructions on how to find a code word hidden on the sign to verify their location. For example, when a ham called in, he might be told to find the seventh word in the third paragraph and relay it to net control. There was a different code word for each ham.

Locations were chosen such that hams needed to plan their route strategy -- ideally before leaving the starting point. Hams also needed to have their GPS devices working. At the start point, participants' odometer readings were recorded. Directions included a safety warning about bison and elk on the road, and bad driving conditions due to snow. Hams were reminded to obey speed limits and modify speeds as necessary for safety.

All were off at 09:00 on their quests. Hams were required to be back at the starting point at 11:30. A prize was awarded to the ham who visited the most locations with the least mileage on his vehicle's odometer. The winners: First place, Doug McCartney, K7GRZ; second place, Reve Carberry, KX4LZ. Jim Halfpenny, K9YNP, served as Net Control Station. -- *Jim Halfpenny, K9YNP, ARRL Public Information Coordinator, and Emergency Coordinator, Park County ARES, Montana. End.*

Heath kit continued from page 16

While its primary customers are educational institutions, you can still buy individual learning programs and even the trainer kits. HES also retained the rights to all those amazing kit manuals. The company still has many in stock. If you're looking for the documentation on an older heath kit transceiver, scope, or whatever, you can get a copy of the manual. It's a nice little side business.

And despite the surface-mount components, ever smaller ICs, and challenging construction, you can still buy a kit today. Most of these kits are smaller products, but a few larger ones require some skill to build. An example of some of the smaller kits can be found at Ramsey Electronics (www.ramseykits.com), which offers a wide range of kits like power supplies and amplifiers that hobbyists love. Ramsey also has many ham radio kits and some commercial radio kits.

Jameco (www.jameco.com), which you might recognize as a mail order parts house, also has a line of small kits for hobbyists and educational institutions. Some of the ham radio companies offer kits as well, like Elecraft (www.elecraft.com) and TenTec (www.tentec.com). Other sources include Elenco Electronics (www.elenco.com) and Kelvin Electronics (www.kelviin.com).

Most kits go light on the newer parts and stay with older but still good ICs with the larger through-hole packages. When newer ICs are used, they're often pre-mounted on a PCB or the assembly using them will be pre-wired to prevent damage from poor construction.

It is still fun and satisfying to build a kit—at least to some people. And if you have the patience, you will actually experience that "Eureka" feeling one gets from building a particularly large and difficult kit. It works! It is a rare, satisfying experience that few enjoy any more. Next time you want to encourage one of your kids or relatives to enter the electronics field, give them a kit.

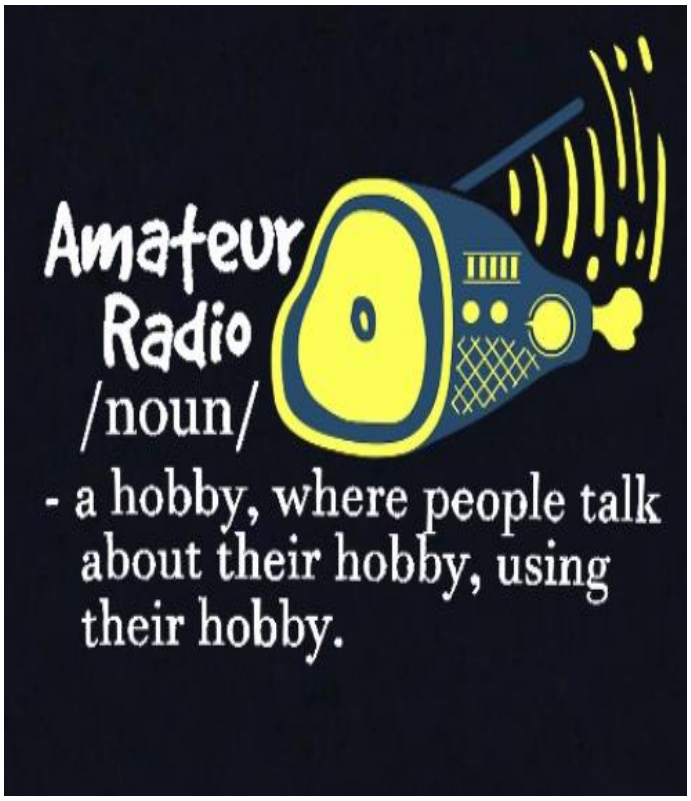
So, despite the fact that almost everyone thought heath kit died, it still exists and is still doing well. Check out its Web site at www.heathkit.com. The company's new address is 2024 Hawthorne Avenue, St. Joseph, Mich. 49085. Call 269-925-6000 or 800-253-0570. Many of the original heath kit employees are still with the company, and that "we won't let you fail" attitude still prevails.

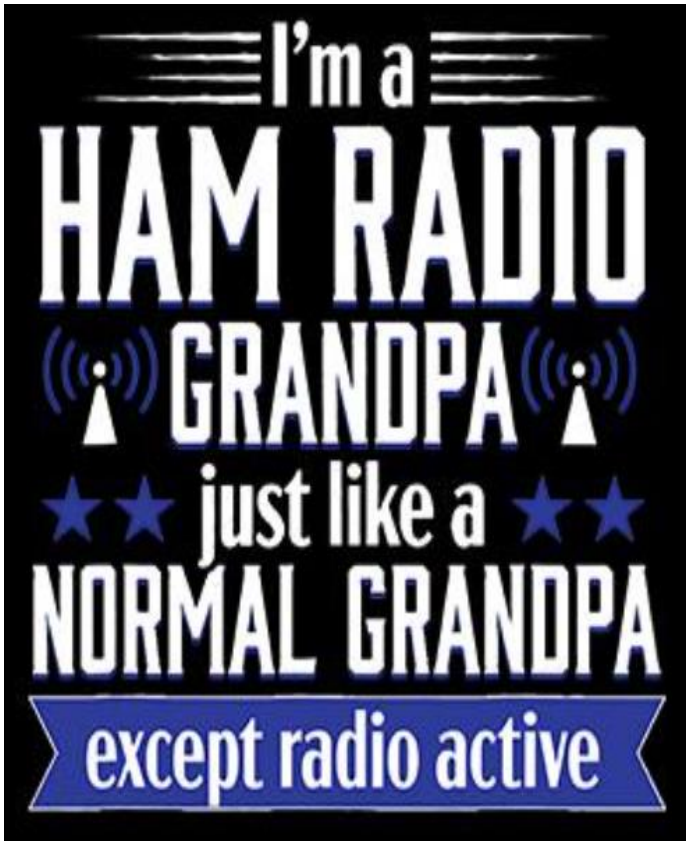
Acknowledgements

My special thanks to Chas Gilmore (W8IAI) of PPM Inc. as well as Doug Bonham and Randy Kaeding (K8TMK), both of heath kit, for clarifying some of this information. End

Lou Frenzel

More Humor





Have you ever heard or used any of these words from the past?

Some of the best words ever!

Gallivant • Britches • Codger • Rigmarole
Hoodwink • Ragamuffin • Fiddle-faddle
Humbug • Skullduggery • Jalopy • Kibosh
Bejeebers • Flibberty-jibbit • Hullabaloo
Bamboozled • Flabbergasted • Brouhaha
Discombobulated • Lollygag • Malarkey
Cattywumpus • Nincompoop • Skedaddle
Shenanigans • Flummoxed • Pumpernickle
Berserk • Periwinkle • Thingamyjig • Whatsit
Confuzzled • Kerfuffle • Poppycock • Bogus
Balderdash • Fuddy-duddy • Thunderation
Whosemegadget • Skewwiff • Lambasted
Flim-flam • Whatchamacallit • Concoction
Doohicky • Gobsmacked • Thingamebob
Camaraderie • Nucklehead • Wishywashy
Fiddlesticks • Caterwauling • Rigmarole
Tomfoolery • Bodacious • Fiddle-dee-dee
Willy-nilly • Decrepid • Persnickety • Egads
Audacity • Baloney • Kerfuffle • Numb-skull

List was compiled by adgrayvisions.

RCARC Newsletter Looking Back to January 1996

RAINBOW CANYONS AMATEUR RADIO CLUB

Cedar City, Utah 84757

4 JANUARY 1996

PRESIDENT'S PAGE

As your '96 president I wish to express my New Year greeting and hope the new year will bring you joy and prosperity as well.

For those who did not attend the elections during the December meeting, I will list those elected here.

As President:	Dick Parker, KI7DF
As Vice President:	Mike Warner, KC7NYH
As Sec./Treasurer:	Dave Lovell, KA7DQY
As Hist./Editor	Carole Roberts N6NVC

Please welcome them and help them complete their elected positions when they call and request your assistance. There may be some confusion as jobs are learned and out-going officers transfer data bases, rosters, information and operating procedures.

Other items covered during the meeting were:

1. What to do with the '76 repeater and where to move it?
2. Where will RCARC meet for monthly meetings?
3. Don Blanchard, WA7GTU, instructed us in the use of the linked repeaters around the state.
4. Dues were discussed, the amount, their use and possible future demands placed on remaining funds.
5. Jon Gray, KC7IHD, showed the final draft of the special event certificate to be submitted to the printers for printing.
6. A proposal by a club member to obtain land and build our own club house was voiced. (Not a bad idea!)
7. Refreshments were provided and enjoyed by club members.

The presidency is actively calendaring events for '96. If you or people you know have community activities (Centennial or otherwise) that could be improved by the use of Amateur radio, please let one of us know so the activity can be looked into as a future club event. If you have a special interest, need or topic and would like it presented as a meeting theme, Michael Warner would like to hear from you.

Continued on page 23

President's Page (cont.)

What's in store for January? As of this writing no permanent meeting place has been secured. Arrangements have been made to **MEET IN THE OLD CAP ROOM AT THE AIRPORT.** As this is a business no formal seating is available. YOU MUST BRING A FOLDING CHAIR to sit on (unless you like standing for an hour). I will continue to pursue leads on meeting places until favorable housing can be secured.

January's meeting theme will be "CC & R's". This subject will affect every urban Amateur radio dweller, if not now, most certainly in the future. Come out and learn what you agree to when you purchase land and sign on the dotted line! 73's

THE DECEMBER MEETING

The December meeting was held at the Elks Lodge and was well attended by the membership. Items discussed are stated in Richard's *President's Message*.

Don Blanchard, WA7GTU, spoke about the VHF Society and reminded us that they spent substantially last year - in excess of $3,200- in Southern Utah and they're not finished. The VHF Society is looking for members and certainly is a worthy organization. Dues are $10.00 per year. Anyone wishing to join can obtain further information from Don.

Following the business meeting we enjoyed refreshments and a fine social period. Regrets to those of you who missed the meeting, hope to see you in January.

THE JANUARY MEETING

Topic: CC & R's

Tuesday, January 16, 1996, 7:30 p.m.

at the OLD CAP ROOM AT THE AIRPORT

BRING YOUR FOLDING CHAIR

CC & R's are a hot topic in metropolitan areas and with our current growth it could affect us in the future...it can be a nightmare. Believe me, we've been there. So, come on out and let's learn more about it. See you there with my folding chair.