

RAINBOW CANYONS AMATEUR RADIO CLUB NEWSLETTER

CEDAR CITY, UTAH



Club Websites: www.rcarc.info OR www.rainbowcanyons.com

Number 1 – Volume 3 – April, 2019

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.

2019 Club Officer's

President:

Fred Govedich
KI7TPD
1-435-559-2682
fred.govedich@gmail.com

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Ron Shelley
K7HDX
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N7SND
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Presidents Message

Dear Fellow Amateur Radio Operators,
Spring is upon us and the weather is starting to look nice! This means that we are going to have more opportunities to get out and work on antennas, and try out new equipment! I encourage you to try something new, for example get out and drive up the mountain and try QRP, try a new mobile rig or antenna setup. Share you experiences with new and old HAMs and have fun. As we move closer to June, we will be ramping up our preparations for Field Day so start thinking about Field Day on June 22nd and 23rd and what you can do to get on the air. Our June meeting will be dedicated to getting everyone up to speed on logging and making Field Day contacts.

Many thanks to all of those who make our meetings great by asking questions, providing food and drinks, and by agreeing to lead a presentation or discussion. Bring your radio equipment if you need help with programming your radio, I am sure we can help!

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.

7:30 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.

8: p.m. Saturdays – SSTV – 449.925.

9:00 p.m. Daily – Friendship Net – 146.760.

Local Repeaters:

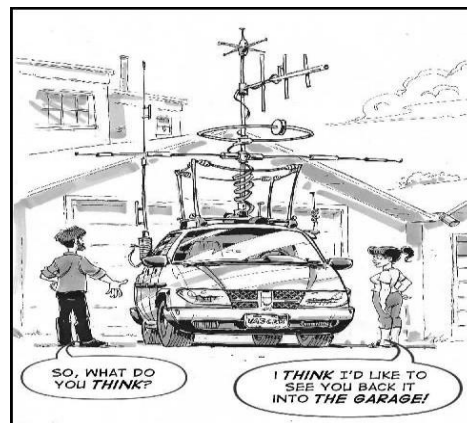
146.980 MHz – Tone 100.0 hz
146.940 MHz – Tone 100.0 hz
146.760 MHz – Tone 123.0 hz
147.160 MHz + Tone 100.0 hz.
448.800 MHz – Tone 100.0 hz

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

April 2019 RCARC Club Meeting Ham Radio Presentation

Presentation on the many different types of Antenna's by Ken Munford K7KM

See: [Page 1 for club meeting information.](#)

April 18th
UTAH 2019 Great Shakeout
Exercise
Duck, Cover and Hold On

May 2019 RCARC Club Meeting Ham Radio Presentation

Presentation on how to set up a type of remote-control radio

By Ken Richter KR7KR

See: [Page 1 for club meeting information.](#)

Dayton Hamvention

2019 ARRL National Convention
May 17-19, 2019

For additional information see:
www.hamvention.org

ARRL Field Day

2019 ARRL Field Day Activities
June 22 and 23, 2019

Tentative Location – 3 Peaks
Additional information to follow

Looking Ahead

June - RCARC Meeting Presentation will be Field Day Protocols.

July - Fox Hunt – More information to follow.

August – Fire Road Race. More information to follow.

Tuesday, August 13, 2019 - RCARC Barbeque. Location TBD.

September – Half Marathon. More information to follow.

Presidents Message cont'd from Page 1.

For the April meeting we will be learning more about antennas from Ken N7KM and in May we will learn about remote control from Ken KR7KR so we have a full schedule of fun learning demos coming up.

In service,
Fred Govedich (KI7TPD)

The phonetic alphabet

A	Alpha	N	November
B	Bravo	O	Oscar
C	Charlie	P	Papa
D	Delta	Q	Quebec
E	Echo	R	Romeo
F	Foxtrot	S	Sierra
G	Golf	T	Tango
H	Hotel	U	Uniform
I	India	V	Victor
J	Juliet	W	Whisky
K	Kilo	X	X-ray
L	Lima	Y	Yankee
M	Mike	Z	Zulu

MORSE CODE

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

PrinterProjects.com

RCARC Club Breakfast

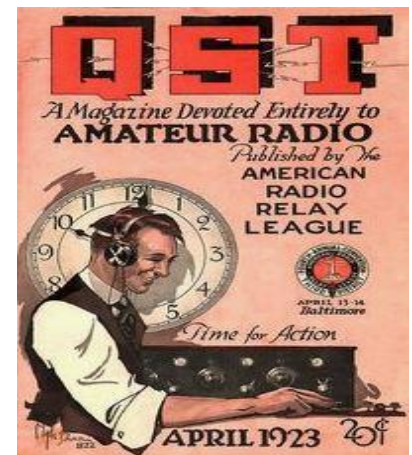
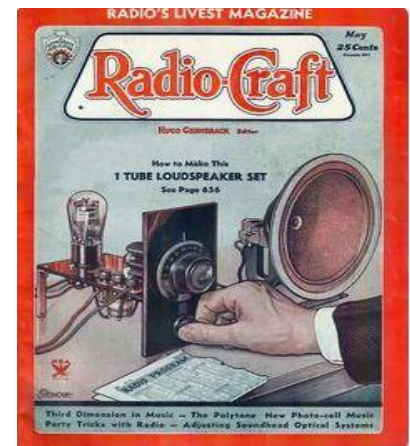
Come join us the first Saturday of every month at 9:00 a.m. for breakfast at the Pastry Pub located at 86 W. Center Street, Cedar City. Check out their website at:

www.cedarcitypastrypub.com

Looking for Topic's and Facilitator's

The RCARC will be hosting an Elmer Night on May 9, 2019. We are looking for topics and members to help facilitate the topic discussions. Please send us your ideas on what you would like to have discussed. If you would like to volunteer to lead a topic discussion please send an e-mail to www.rcarcnewsletter.com. With your name, phone number, call sign and the topic you would like to present.

Old Ham Radio Magazine Covers





BRIEF HISTORY OF HAM RADIO

In 1873, James Clerk Maxwell presented his theory of the electromagnetic field. In 1901 Guglielmo Marconi communicated across the Atlantic with a radio device using high power and giant antennas. To curb interference, Congress approved the Radio Act of 1912, which required amateurs to be licensed and restricted to the single wavelength of 200 meters. In 1914 the **American Radio Relay League** was founded by Hiram Percy Maxim, who found that messages could be sent more reliably over long distances if relay stations were organized. Transatlantic transmitting and receiving tests began in 1921 and by July 1960 the first two-way contact via the Moon took place on 1296 MHz

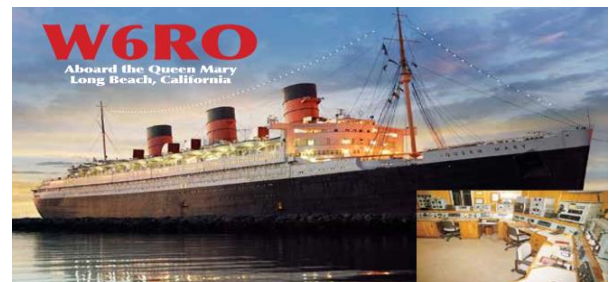
Today we're on CW, phone, SSB, FM, packet, TV, PACTOR, PSK31, RTTY, and other modes, bouncing signals off the ground, ionosphere, and the Moon. Hams are active in nearly every country of the world and from ages less than 10 years to more than 100.

**Field
Day
1939**



Why are Amateur Radio Operators Called Hams?

The first wireless operators were landline telegraphers who left their offices to go to sea or to man the coastal stations. They brought with them their language and much of the tradition of their older profession. In those early days, every station occupied the whole spectrum with its broad spark signal. Government stations, ships, coastal stations and the increasingly numerous amateur operators all competed for time and signal supremacy in each other's receivers. Many of the amateur stations were very powerful. Two amateurs, working each other across town, could effectively jam all the other operations in the area. Frustrated commercial operators would refer to the ham radio interference by calling them "hams." Amateurs, possibly unfamiliar with the real meaning of the term, picked it up and applied it to themselves. As the years advanced, the original meaning has completely disappeared.



W6RO'S 40TH ANNIVERSARY!

THE QUEEN MARY - PAST AND PRESENT The most luxurious ocean liner ever to sail the Atlantic, the Queen Mary is a piece of floating history. She played hostess to the rich and famous during the 1930's, transported more than 800,000 service men during WWII as the legendary "Grey Ghost", and carried a bevy of European war brides coming home to the US and Canada before resuming her status as a luxury liner. Today the Queen Mary is an elegant hotel, meeting place and event venue on the water in Long Beach, California. In 1993, she was honored with inclusion on The National Register of Historic Places.

The Associated Radio Amateurs of Long Beach, led by the tireless Nate Brightman, K6OSC (now SK), established and operated amateur station GB5QM aboard the Queen Mary during her Last Great Cruise from England to Long Beach in 1967. **Cont'd P4-C2**

The ARRL Rocky Mountain Division Convention comes to Ogden Utah

The ARRL Rocky Mountain Division Convention comes to Ogden Utah August 8th, 9th, and 10th

2019. Registration is now open at the website www.rmhc2019.org. More than 1200 are expected to attend this year's convention. All who register on or before May 15th will be entered into a drawing for a Yeasu FT D70R dual band handheld.

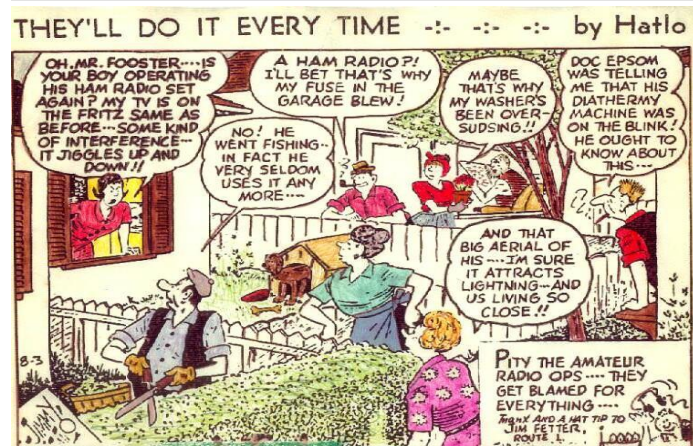
Bob Heil K9EID, CEO and founder of Heil Sound and host of the Ham Nation podcast, will be the keynote speaker on Saturday August 10th. Howard E. Michel (pronounced Mickel) the CEO of the ARRL will be the Friday keynote speaker.

A highlight of the convention is DX University, an all-day workshop taught by some of the best DX operators in the Rocky Mountain West. DX University will be held on Thursday August 8th and requires a separate registration.

The convention will feature vendors, forums, a swap meet, test session, a special event station, the infamous Wouff Hong, and much more. You can register and learn more by visiting www.rmdc2019.org. You can also find us on Facebook by searching for the “2019 ARRL Rocky Mountain Division Convention.”

We will be sending out additional emails and information as it becomes available.

Please direct questions to Marvin Match, KA7TPH,
mvmatch@ece.utah.edu,
801-328-3641

Continued from page 3 column 2. **W6RO**

After her arrival, Brightman worked steadily for the next 11 years to establish a permanent amateur radio station aboard the ship. Space and funds were finally granted in 1978, and W6RO - The Nate Brightman Wireless Room aboard the Queen Mary - was officially opened on April 22nd, 1979.

Opened on April 22nd 1979, W6RO will celebrate our 40th anniversary as a month-long on-air special event station during the entire month of April 2019.

We will make a maximum effort to be on the air for as many hours and days as we possibly can. A special limited edition QSL will be available for those requesting it per the SASE procedure below. Find us on: 7040 or 14048 kHz CW 7240 or 14340 kHz SSB Operation on other bands is possible as conditions permit. Look for us on frequencies ending in .x40. The station manager has set a goal of 1,000 logged QSOs for the month. Find us, work us, and help us celebrate our 40th anniversary.

When you are in Long Beach, call us on **145.510 FM** simplex. This frequency is usually monitored when there is a crew member on duty at W6RO

To receive W6RO's very popular Queen Mary QSL card, just follow these steps:

1. During your QSO with W6RO, be sure to copy your **QSO number**. Ask for it during the QSO if necessary.
2. Send your own QSL card, or a report on a piece of paper if you don't have a QSL card, to us. Be sure to include:
 - Your **QSL card** or report (report the contact date & time as UTC)
 - Your **QSO number** (preferably in the report area of your card)
 - A **Self-Addressed Stamped Envelope**. Our new QSL card is standard size (3.5 x 5.5 inches). (* DX stations see below)
 - Mail it all to:
W6RO – QSL
P.O. Box 7493
Long Beach, CA 90807
USA.
3. Your W6RO QSL card should arrive in your S.A.S.E. in about 6 to 8 weeks.

The Doctor Will See You Now!

ARRL The Doctor is In Podcast

Available on iTunes & Stitcher



www.DXEngineering.com



Sponsored by [DX Engineering](#), "ARRL The Doctor is In" is an informative discussion of all things technical. Listen on your computer, tablet, or smartphone -- whenever and wherever you like!

Every 2 weeks, your host, QST Editor-in-Chief Steve Ford, WB8IMY, and the Doctor himself, Joel Hallas, W1ZR, will discuss a broad range of technical topics. You can also email your questions to doctor@arrl.org, and the Doctor may answer them in a future podcast.

Enjoy "ARRL The Doctor is In" on [Apple iTunes](#), or by using your iPhone or iPad podcast app (just search for "ARRL The Doctor is In"). You can also listen online at [Blubrry](#), or at [Stitcher](#) (free registration required, or browse the site as a guest) and through the free Stitcher app for iOS, Kindle, or Android devices. If you've never listened to a podcast before, download our [beginner's guide](#).

GPS Network May Experience Errors in "Week Number" Rollback

The GPS network will encounter a small millennium bug of its own in April when the network's "week number" rolls back to zero. This known issue especially could affect those who use GPS to obtain accurate Coordinated Universal Time (i.e., UTC).

Continued on Page 6 column 1

How to Clean Up after a Battery Leak

Many hams have had the unfortunate experience of old batteries leaking in a piece of gear or a flashlight, creating a mess. Business technology news site ZDNet recently [offered its procedure](#) for cleaning it up. The brief online presentation recommends taking some precautions about coming in contact with the white discharge -- specifically potassium hydroxide in the case of alkaline cells, a caustic

irritant. An old toothbrush or something similar can start the projects, along with a small scraper, and

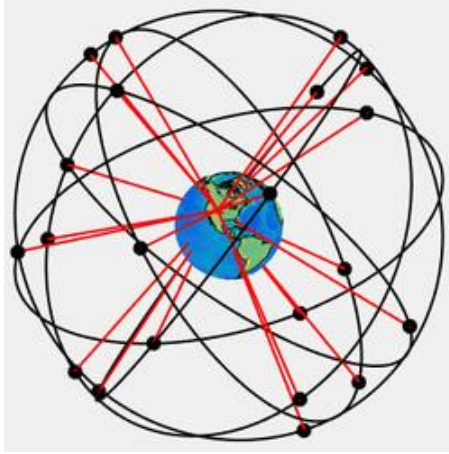


cotton swabs dipped in water. Start by removing and properly disposing of the bad cells and then brushing out the worst of the material -- preferably outdoors or over a container to catch the remnants.

The article advises against using any sort of acid such as vinegar or lemon juice, lest it cause corrosion problems of its own. It suggests a fiberglass scratch brush for scrubbing the battery compartment contacts clean, although other tools may work as well. Deoxit D5 or similar contact cleaner also comes in handy, with a tiny dab of dielectric grease or silicone paste as a finishing touch to inhibit future corrosion if a leak occurs. Other tips to head off problems down the road include using only name-brand batteries, avoiding mixing old and new batteries, removing batteries from devices not in use, avoiding exposing batteries to extreme heat or cold, and minding battery expiration dates.

In the GPS network, the number of the current week is encoded into the message the GPS receives using a 10-bit

field. This allows for weeks ranging from zero to 1023. The current period began on August 1, 1999. On April 6, 2019, the week number rolls over to zero and starts counting back up to 1023.



This should not affect later-model GPS receivers that conform to IS-GPS-200 and provide UTC, but testing carried out by the US Department for Homeland Security (DHS) raised the possibility that some units may misinterpret the rollover, shifting the date back to January 6, 1980, or possibly to another incorrect date. An affected GPS not only may report the incorrect date, but time accuracy that is critical to precise location data could be compromised. A nanosecond error in GPS time can equate to 1 foot of position (ranging) error, according to [DHS-published guidelines](#) that explain the issue and suggest how to address it.

SPRING CLEAN UP FIRE SAFETY TIPS

The snow has melted, the rain and wind is beginning to subside, the plants are budding and the trees are blooming. Spring is arriving and your thoughts may be turning to that dreaded ritual of spring cleaning. With it comes a timely reminder to keep your home safe from the threat of fire.

- Clean your garage of stored newspapers or other rubbish that can fuel a fire.
- Test your smoke alarms monthly.
- Change batteries in smoke alarms, flashlights and carbon monoxide detectors.
- Replace all smoke alarms every 10 years or as recommended by the manufacturer.
- Keep outdoor debris or dead vegetation away from the house.
- Properly dispose of oily or greasy rags. If these items must be stored, they should be kept in labeled, sealed, metal containers.
- If you store gasoline, keep it outside your home in a shed or detached garage. Keep only small quantities in tightly sealed containers. Use gasoline only as a motor fuel - never as a cleaning agent.
- Use outdoor barbecue grills with caution. Place in a safe area away from building, windows, heating, ventilation and air conditioning units or places with high/dead vegetation.
- Never use gasoline to start the fire, and don't add charcoal lighter fluid once the fire has started.
- Use barbecue grills outside only - not under overhangs or balconies, and away from combustibles.
- Check your propane barbecue grill hose for leaks and cracks; never store propane indoors.

Remember Always Put

Safety First



2019 Utah VHF Society Hand Books Are Now Available

If you are a paid member of the Utah VHF Society and have not received your 2019 Hand Book or would like to join the VHF Society contact Don Blanchard (W7GTU).

The Utah VHF Society is a non-profit (*IRS501c3*) organization founded in 1968 to promote the installation and use of VHF amateur repeaters throughout Utah. The Society also provides financial support for aligned repeaters and serves as frequency coordinator for the state.

Repeater Presentation

by Don Blanchard



Don Blanchard (W7GTU) was on hand at our March club meeting to address the members on the ABC's of repeaters. He spoke about repeater make up, costs, repeaters in our area, VHF, UHF, digital D-star and IRLP/Echo Link. Don provide detailed information on Frisco Peak and Blowhard as to the types of antenna's, radios, duplexer's, remote bases and links they each have.

Don is in the middle of the picture by the screen

Club members in attendance listening to Don Blanchard W7GTU talk about repeaters.



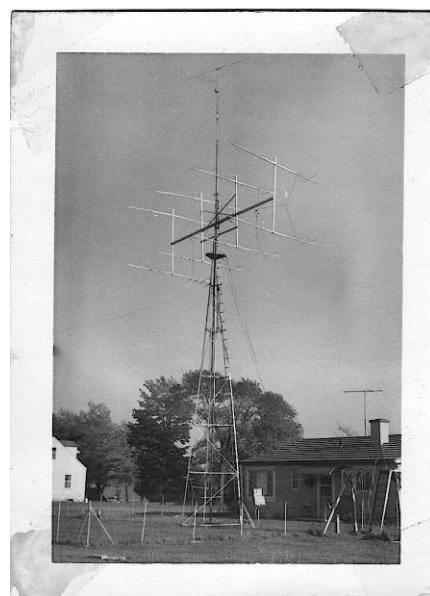
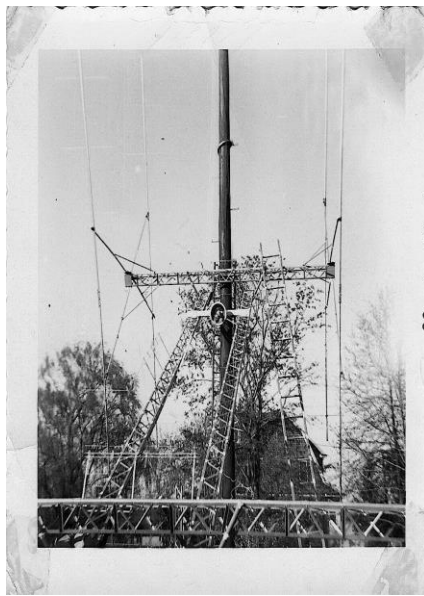
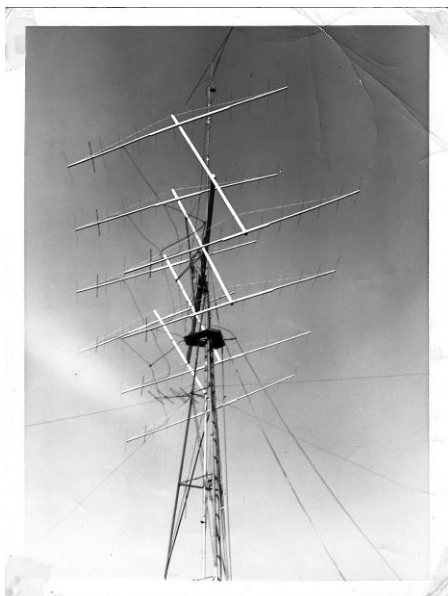
Rainbow Canyon Amateur Radio Club

Current Technician Class



George Gallis (AL7BX) interacting with participants during the current Technician Class being taught at the Senior Citizen's Center. The class started on Thursday February 28th and is meeting every Thursday night through April 4th. Testing will be on April 4th.

Ham Radio Antenna's Dating Back to the 1950's & 60's



Photos by - W6QKI, Herbert G. Johnson - SK

Agenda – RCARC Monthly Meeting March 12, 2019

Welcome and Pledge. Fred KI7TPD

Participation Ribbons awarded for 1st place on Friendship Net are: K7HDX Ron Shelley, KI7LUM Bruce Bishop, KI7WEX Bonnie Bain, KI7TPD Fred, W6DLW Dennis West. 2nd Place winner is: KI7WEZ Darlene Shelley. And 3rd place goes to: KA7J Lance Jackson. The Breakfast Net participants were just handed in. We will total them and report their names next month.

Introductions, news, and briefly tell how you have “played radio” recently:

1. Ed Padgett KK7ZL tried out a new type of antennae using his flag pole and grounding wires.
2. Tom Adams KI7LUI has 160-meter antennae in his yard.
3. Ron Shelley K7HDX has a vertical multi band antennae. First time he used it he had contact with Brian KD7NSH.
4. Linda Shokrain KG7PBX let those waiting for the backpack patches know that she hasn't heard anything yet.
5. Don Carter KB7OWE has an update on Tony Bennett WA7HGX. Tony is in Stonehenge as of today. He had a situation last week. He was fighting an infection and had seen his Physical Therapist and was in his recliner to relax and couldn't get up. His phone was out of reach, the pole to alert neighbors was out of reach. He sat in his chair for 2 days before a neighbor came and checked on him. The neighbor called for an ambulance and Tony was in the hospital until this afternoon. They stabilized his infection. He is in Stonehenge until he has passed his rehabilitation requirements to live on his own again. Room #307.
6. Bruce Bishop KI7LUM also visited Tony Bennett. He is doing well, but very tired. He would appreciate visitors.

Approval of Minutes by Secretary Tammy KI7LVB sent in the Newsletter.

Approval of Treasurer's report: Larry N7SND. He reported that our balance is \$2633.06.

Repeater Update: Don Blanchard WA7GTU. All repeaters are working. Only link down is from Blowhard to Navajo Mountain. This can't be fixed until it has thawed. Blowhard is talking to Frisco Peak and Potosi (Las Vegas). All the clocks have been reset to Daylight Savings Time.

Announcements:

1. Field Day update:
 - a. The food assignments were taken care of at the meeting last week. Ken Richter has been asked to provide some delicious smoked meat and Sylvia will provide a sign-up sheet for Pot Luck provisions a little closer to the event. The meat, plates, and utensils will be provided for by the club. We will need people to volunteer to bring Salads, Side Dishes, Bread/Rolls, (possibly drinks) and Desserts. This dinner will be 6 pm Saturday evening.
 - b. There will be a pizza lunch for those who come early Saturday to help set up the radios and antenna.
 - c. And a Sunday morning breakfast for those who spend the night.
 - d. 3 Peaks area has been locked in for this year. But when it thaws and we can look into other areas, we will take on other suggestions.
 - e. We will be a 5A Station again this year having 160 meter, Panguitch crew will be working the 80 meter like last year, SSB on 40 meter, and 20 meters.

There will be a Digital station and CW station that will change with conditions, but bring your own key.

f. There will be a generator to power a refrigerator and microwave.

g. We will need volunteers to help set up antenna and the trailer.

h. There is a request to keep the ambient noise level at a minimum. It is hard to hear the contacts.

i. N3FJP is the name of the software used to log-in.

j. **We want all sorts of volunteers to come and work the radios. This is a chance to work on HF even if you are “just” a Technician level operator. This is a good way to introduce friends and family to the hobby. However, warning to the new people, being in a contest is like drinking out of a firehose, contacts come fast and furious. Don't let that intimidate you. There will be mentors available to help you figure out the ropes.**

2. Fund raising

a. Club call sign badges. There have been a lot of the club members who have ordered and received them tonight. The cost is \$10 with about \$3.50 going back to the club.

b. Club shirts signup sheet. The men's shirts will have the logo over the pocket. The women's shirts don't come with pockets, so the logo will just be on the left side. The color will be the bright/florescent-yellow color (the ladies is a bit more orange in color). Other colors are available. Call signs can be added to the back in the vinyl-type lettering for \$3 extra.

c. Baseball caps are also available with call signs embroidered on them. The local company is “A & F Designs.”

d. Homemade Anderson Power Pole: Fred KI7TPD can use his 3D Printer and making boxes/cases for very little and Don WA7GTU says he can buy the power kits in bulk. We could sell a kit for members to make their own or sell it assembled for those who would like one without putting it together. Price will be determined after an approximate desired number is reached and the bulk price can be achieved.

Presentation: Don Blanchard WA7GTU spoke about Repeaters

Upcoming Events:

1. Burton Nichols told of the Iron Springs Resort open house and dedication of 5 incredible statues that embody the settling/livelihood of Cedar City and its history. Beginning at 10 am this Saturday, March 16, 2019.

2. April 9 Presentation: by Ken Munford N7KM about Antennae. We will also discuss and build up Elmer's Night. Tom Adams will provide water, Nesmith's will bring treats.

3. May 9th will be Elmer's Night.

4. May 14 Presentation: by Ken Richter KR7KR. He will be talking about a way to set up a type of remote control for your radio.

5. June 11 Presentation will be talking about the upcoming Field Day. George will go over the Log in Protocol.

6. July: Fox Hunt

7. August: Fire Road Race

8. September: Half Marathon

Close at 8:35 pm.

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Attendance:

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