

# Rainbow Canyons Amateur Radio Club

Cedar City, Utah

Jan 2017

## Club Officers:

### President:

KG7BPX  
Linda Shokrian

### Vice-President:

KR7KR  
Ken Richter

### Treasurer:

AL7BX  
George Gallis

### Secretary & Editor:

K6QOG  
Bill Stenger

### Local Repeats:

146.980 Mhz  
Tone 100 hz

146.940 Mhz  
Tone 100 hz

146.760 Mhz  
Tone 123.0 hz

Remote Base  
449.500 Mhz  
Tone 100 hz

Remote Base  
449.925 Mhz  
Tone 100 hz

IRLP/Echolink  
449.900 Mhz  
Tone 100 hz

Club meets on the second Tuesday of each month at Sheriffs Search & Rescue Bldg.

### RCARC NETS:

*Breakfast Net:* 7:00am 146.76 Mhz, 123 hz PL tone required, every weekday.

*Friendship Net:* 9:00pm 146.76 Mhz, 123.0 hz PL tone, every evening.

**Club Monthly Breakfast is Februray 4th, 9 am at the Pastry Pub.** Come in and place your order then come to the side room to be with other hams and your order will be brought to you. It is a most relaxing and friendly environment.

*Next club meeting is Tuesday, February 17th at 7:30 pm*

## TOPIC:

**Ionosphere Relationship to Communications**

by

Andy Christensen

## *Our Loss and their Gain*

### Final Tribute to Joel William Clements N7SIY



This is the final call for N7SIY Joel Clements. He was a very loving and devoted husband a long time devoted civil servant and avid amateur radio operator who loved to help anyone he could. He was very faithful in his church. I want to wish him the very best of 73s and Joel will go with God's love on your next step in your eternal progression with God's love and watch care, you will find your next journey to be easy. You are a good friend to one and all who knew you and you will be greatly missed by everyone. The best of 73s from your loving wife Sylvia KB7UMU. I love you lots.



### Robert Brown Jr. K6RLT,

1924 to 2016 Robert Brown Jr., 92 Cedar City, Utah passed away peacefully at home on 12/29/2016. Robert was born December 8, 1924 in Bard, California to Robert and Ventura Brown. Robert was most proud of being a Navy veteran and served in WWII as a radio man. His lifelong passion was Ham Radio and 2 and 10 meter radio. He talked to people all over the world under the call sign K6RLT. He was a member

of the Rainbow Canyon Amateur Radio Club and the Color Country radio club as well. He stored the radio antenna trailer on his property for many years and keep up the maintenance whenever needed. Bob was a McGuyver when he had a welding torch in his hands. He could solve any problem and make anything work. He was a great promoter of ham radio and will be greatly missed.

## Local Activities

### January 17, 2017, Southwest Utah Healthcare Coalition Radio Comm Drill

The drill consisted of the five Southern Utah counties: Beaver, Garfield, Iron, Kane and Washington. There were seven hospitals or medical facilities that participated: Milford, Beaver, Cedar City (two facilities), Garfield, Hatch and Kane.

Drill Objectives:

- 1) Gather names and call signs of all participants in each county during the Net.
- 2) Report the list of names and call signs to the Southwest Utah Public Health Dept in St George over HF via a HF Net coordinated out of the St George Location.
- 3) Transmit the names and call signs via digital transmission using FLDigi.

After we obtain our Iron, Garfield and Beaver County area check-ins, the hospitals only will test using the predesignated frequency plan. This aspect of the exercise forces the radio operators at each of the hospitals to become familiar with the radio's installed at each perspective hospital along with becoming

familiar with additional frequencies that might be used for the hospitals to communicate.

Drill Results: Nineteen (19) stations from Milford, Beaver, Cedar City, Garfield, Kanarrville, Minersville and Pine Valley. There were some technical difficulties with the radios and computers, but were fixed. HF communications were negative within the five counties. These pictures are the equipment



used at the Cedar City Hospital.

## ARRL News

### Illegal Drone Transmitters Could Interfere with Air Traffic Control, ARRL Complaint Asserts

*(We saw interference with local aircraft firefighters)*

In what it calls an "extremely urgent complaint" to the FCC, ARRL has targeted the interference potential of a series of audio/video transmitters used on unmanned aircraft and marketed as Amateur Radio equipment. In a January 10 letter to the FCC Spectrum Enforcement Division, ARRL General Counsel Chris Imlay, W3KD, said the transmitters use frequencies intended for navigational aids, air traffic control radar, air route surveillance radars, and global positioning systems.

"This is, in ARRL's view, a potentially very serious interference problem, and it is respectfully requested that the products referenced...be investigated and removed from the marketplace immediately and that the importers be subjected to normal sanctions," ARRL's letter said.

### FCC Dismisses Two Petitions from Radio Amateurs

The FCC has turned down two petitions filed in 2016, each seeking similar changes in the Part 97 Amateur Service rules. James Edwin Whedbee, N0ECN, of Gladstone, Missouri, had asked the Commission to amend the rules to reduce the number of Amateur Radio operator classes to Technician, General, and Amateur Extra by merging remaining Novice class licensees into the Technician class and all Advanced class licensees into the Amateur Extra class. In a somewhat related petition, Jeffrey H. Siegell, WB2YRL, of Burke, Virginia, had requested that the FCC grant Advanced class license holders Morse code operating privileges equivalent to those enjoyed by Amateur Extra class licensees.

"Thus, Mr. Siegell's proposed rule change is subsumed within the changes Mr. Whedbee requests, so our analysis is the same for both proposals," the FCC said in dismissing the two petitions on January 5.



## New Digital Modes Gain Traction for Moonbounce, but Occasionally Show Up on HF

In December, Joe Taylor, K1JT, released the latest version (1.7) of his WSJT-X software suite, designed to facilitate basic Amateur Radio communication using very weak signals (“WSJT” stands for “Weak Signal communication by K1JT”). Version 1.7 included the new modes MSK144 and QRA64, as well as ISCAT (ionospheric scatter). MSK144 and QRA64 (and QRA64A) are finding a home within the VHF Earth-Moon-Earth (EME, or moonbounce) and meteor-scatter communities, but QRA64A signals also have turned up on 160 meters, which poses its own challenges to weak signals.

“QRA64A QSOs are being made nightly on 160 meters, of all places, and QRA64 activity on 2-meter EME is becoming significant, especially on weekends,” Taylor remarked in a January 9 update posted to the Moon-Net reflector, pointing out that QRA64 is decoding signals down to about -28 dB signal-to-noise.

But Taylor does not advise a wholesale shift to the use of QRA64 on the HF bands -- at least just yet. “It’s okay to play with and test QRA64 at HF, if you wish,” he commented recently on the WSJT Development discussion group. “Some of our earliest tests of the mode were done on the 20-meter and 30-meter bands.” He suggested, though, that HF operators stick with JT65, “not least because, at present, we have included no ‘multi-decode’ capability for the QRA64 decoder. It’s made to decode just one signal in the passband.”

In the WSJT-X Version 1.7 User Guide, Taylor pointed out QRA64’s several advantages over JT65, including better performance on the very weakest signals. “We imagine that, over time, it may replace JT65 for EME use,” he wrote. “JT9 was originally designed for the LF, MF, and lower HF bands. Its submode JT9A is 2 dB more sensitive than JT65, while using less than 10% of the bandwidth.”

For more information for these articles see the (ARRL news for January 12, 2017.)

## Radio Club of America Announces New “Wireless Women” Section on Website

In an effort to encourage more participation of women and girls in the wireless industry, the Radio Club of America (RCA) has created a new “Wireless Women” section on its website, designed to assist women considering careers in wireless and encouraging them to get involved in technology. Information includes resources such as “Notable Women in Wireless,” “RCA’s Vivian Carr Award,” and “Professional Wireless Organizations for Women,” as well as web resources for women and girls interested in wireless. There’s also a list of universities that have an engineering focus and significant enrollment by women.



## What happened at the last Meeting?

January 10, 2017

The meeting was called to order by outgoing president Ken Richter KR7KR and handed over the gavel to the incoming president Linda Shokrian KG7PBX. Linda introduced the newly elected officers and asked everyone to introduce themselves and say what radio activity they have been doing.



Those present were:

KB7PBX	Linda Shokrian
KB7HHB	Mardi Biedermann
WA7HHE	Brad Biedermann
WA7GTU	Don Blanchard
K7ZI	Dick Parker
KG7WEN	Monti Rugebregt
WB7FET	Helen Johnson
K7VXV	Brody Johnson
KI7DRE	Larry Coles
KA7J	Lance Jackson
N7KM	Ken Munford
KB7UMU	Sylvia Clements
KG7VEJ	Jack Coulter
KG6LFU	Jim Beal
KF7OVD	Brian Amos
KF7WIY	Denice Sheffield

KF7GPZ Fred Sheffield  
 KD7SFS Brad Gunderson  
 N60JS Fred Getman  
 KI7DRA Burton Nichols  
 KI7DSF Billy Villareal  
 KG7MAY Larry Bilyeu  
 KE6ZIM John Ellison  
 KG7YIC Ken Bauer  
 KG7YIB Carolyn Bauer  
 KG7NYJ Devin Elliott  
 KA7SEZ Alan Chidester  
 KG7YIA Boyd Woolsey  
 KR7KR Ken Richter

Bill Stenger K6QOG Secretary asked for any corrections to the minutes. There were none. Jack Coulter KG7VEJ motioned to accept the minutes, seconded by Denice Sheffield KF7WIY. Vote was unanimous.

Treasurer George Gallis AL7BX reported the checking account balance \$2,003.81. Don Blanchard called to accept the report seconded by Monti Rugebregt KG7WEN.

Don Blanchard WA7GTU gave a report on the Intertie status. All up and working except one, Las Vegas which is turned off until someone can fix it.

Linda mentioned that we have lost two members: Joel Clements N7SIY and Bob Brown K6RLT.

Ken Munford N7KM gave a few remarks about his friendship with Joel and Bob. He concluded with a moment of silence.

#### Announcements:

Rual Preparedness Summit will be in February sponsored the Citizen Corp Council in St. George.

Iron Co. Court House will be moved to Cedar City for the duration of remodeling the Parowan Court House.

Please support our club and the VHF Society by paying your dues.

There is a new ham radio store in Las Vegas: Giga-Parts.

Tim from the KSUB radio station would like several people to come to the studio to talk about ham radio next week.

**Old Business:** None

#### New Business:

Beginning in April our club meetings will be held at the Senior Center on 200 South.

We need a place to park the antenna trailer before we move to the Senior Center.

A flier for the Participation Award 2017 is available in the back. The idea is to get everyone involved in the club and have a lot of fun. In December there will be a drawing for an FT 857 all band transceiver.

Up coming Technician Class will be held in the Heritage Center beginning February 8th from 6pm to 9pm.

Net Control operators are greatly needed. If you want to learn how to control traffic, develop more confidence talking on the radio and have a lot more fun, this is your opportunity.

We need a Field Day location. The Boy Scouts of America have taken our Three Peaks location for two weekends. We need a new location.

#### Presentation: How to use the remote Base:

by Don Blanchard WA7GTU

Don briefly explained the different components of a remote base. Then he had everyone with a handheld radio go through each step of programing the remote. The brave ones came forward and turned on the remote and change frequencies. The remote has some preset frequencies for repeaters that we can not reach from Cedar City.



After the presentation and demonstration Linda called for a motion to adjourn the meeting. Carolyn Bauer made a motion to adjourn the meeting and Monti Rugebregt seconded the motion. Vote was unanimous.

Linda adjourned the meeting at 8:53pm