





he Best of Amateur Radio

OARC e-Magazine

www.OgdenArc.org

JUNE 2018

Next Club Meeting/Activity

ARRL Field Day



Jason Miles KE7IET President



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Gil Leonard NG7IL **Program Director**



Dave Mamanakis KD7GR **Activity Director**



Val Campbell K7HCP Webmaster/NL Editor

PREVIOUS CLUB MEETING/ACTIVITY

May Meeting

Riverdale Fire Station

3rd Saturday 19 May 2018 @ 9:00 am

Riverdale Fire Station

- Direction Finding Techniques
- Field Day PP pics 2017, Golden Spike PP pics 2018

NEXT CLUB MEETING/ACTIVITY

June Event/Activity

- OARC—ARRL Field Day
- Sat 23 June (12:00 pm) thru Sun 24 June (12:00 pm)
- Antenna setup (Saturday 9:00 am)
- Dinner (Saturday 5:00 pm)
- Bring a dish to share

PREVIOUS MEETINGS PICS

Club Photographer ... Ceva Cottrell W7CVA













From the Shack of KE7IET







Jason Miles KE7IET

This month, I wanted to write about some of the portable homebrew antennas that have interested me. I've started building some of these and completed one of them.

Small Transmitting Loop

This one has interested me for quite a while. The versions I've seen are multiband HF antennas that would work well for portable use. It consists of two loops that inductively couple with each other. The ends of the smaller loop are connected directly to the shield and center conductor of the coaxial feedline. The larger loop is not connected directly to the feedline. The ends of the larger loop are connected to the two sides of a variable capacitor. The smaller loop is positioned inside the larger loop opposite of the variable capacitor. The variable capacitor is used to tune the antenna to the operating frequency.

The article that really caught my eye was from G4ILO (http://www.g4ilo.com/wonder-loop.html). He called his version the "Wonder Loop". It is a basic small transmitting loop that uses high quality coaxial cable as the larger loop. (Minimizing resistance in the antenna system is essential to making the antenna more efficient, which is the reason for using high-quality coaxial cable.) His design also integrates a Tayloe-style (N7VE) SWR indicator in the variable capacitor's box. This is helpful because the bandwidth of the antenna is very small. If you tune far enough off frequency, even in the same band, you'll probably need to re-tune the antenna to maintain a low SWR.

The small transmitting loop lends itself to creativity. For example, instead of using coaxial cable for the outer loop, you could use the rim from an old bicycle wheel or copper tubing from the hardware store. I've even seen a design where a single contiguous strip of roof flashing is bent and folded in such a way that it forms both the outer loop and the variable capacitor. The capacitance is varied by changing the spacing between the two capacitor plates. It is called the "Midnight Loop", and its plans are available at https://www.nonstopsystems.com/radio/pdf-ant/antenna-article-magloop-midnite.pdf.

The main advantage of a small transmitting loop is its size. Your HF antenna may be three or four feet across instead of 66 feet across.

There are a few disadvantages. First, as mentioned, the bandwidth is very small. If you tune the antenna to a certain operating frequency, you may need to re-tune if you move even a few kilohertz. Second, the antenna isn't as efficient as something like a full-size dipole. Third, even at low power levels, dangerous voltages may be present at the capacitor. You'll need a variable capacitor that can handle high voltages, and you'll need to insulate it so you don't accidentally touch it.

Linked Dipole

The linked dipole is a variation on a standard half-wave dipole. A standard dipole is cut to be approximately a half wavelength long on the desired operating frequency. It is simple to build, but it requires a tuner in order to work on multiple bands. A dipole can also be modified to work on multiple bands by adding additional wire segments. To use a lower-frequency band, simply connect these additional segments to your main dipole. To work a higher-frequency band, disconnect the outer segments.

The big advantage to a linked dipole antenna is its simplicity. To change bands, you just connect or disconnect segments of the antenna.

The "linked" part of the linked dipole is also its main disadvantage. To change bands, you must lower the legs of the dipole enough to connect or disconnect segments. This may not always be practical or convenient.

One of the hosts of "The Workbench" podcast suggested a way to overcome the need to lower the dipole legs for connecting or disconnecting segments. He suggested using wireless -capable microcontrollers (in his case, the Micro:bit) to control relays on the dipole legs. Commands issued wirelessly to the microcontrollers connect or disconnect the segments by opening or closing the appropriate relays.

A "trap" dipole works on the same principle, but a little differently. A linked dipole works by mechanically connecting or separating segments. A trap dipole works by using the RF energy itself to include or exclude antenna segments. The traps are combinations of inductors and capacitors that act as resonant circuits. Depending on the component values chosen and the operating frequency, they can either block the RF energy at the trap or allow it to continue down the dipole leg.

End-Fed Half Wave

When a half-wave dipole is fed at its center, the impedance is close to the 50 ohms we normally use in amateur radio. If you feed the half-wave antenna at its end instead, the feedpoint impedance is many times higher. On the surface, the end-fed half-wave antenna seems like it shouldn't work for us. However, the high impedance can be brought down to a usable level with a transformer. The impedance transformation ratio in the transformer can vary based on your needs, but a 9:1 ratio seems to be a popular value.

An end-fed half-wave antenna consists of the antenna wire (approximately a half wavelength long), a short counterpoise wire, and a matching unit. The matchbox contains the matching transformer and, in some cases, a variable capacitor. I've seen material saying the capacitor is necessary so the transformer's inductors can resonate. It may also be there to fine-tune the antenna.

I've started building my own matchbox. I'm using a polyvaricon capacitor along with a transformer I wound on a toroid core. The polyvarion capacitor will limit the power I can put through the antenna, but it is small and cheap. I decided to put a Tayloe SWR indicator in my matchbox as well. (The SWR indicator kit came from qrpkits.com.) The box will have two binding posts: one for attaching the main antenna wire and the other for attaching the counterpoise wire. By using binding posts, I can attach different wire lengths to work different HF bands.

By the way, even though the main antenna wire is a half wavelength long, the plans I've seen usually also include a short counterpoise wire. The antenna still needs something against which to work. The counterpoise should be much shorter than a half wavelength.

The big advantage with an end-fed half-wave antenna is the fact that it only needs to be supported in one place. (By contrast, a dipole is usually supported at the feedpoint and at the end of each leg.) If you can get a single wire in the air, you can put up an end-fed antenna. The feedpoint can be near the ground, and the counterpoise can run along the ground.

The disadvantage is the fact that you need a matchbox. A simple one (without an SWR indicator) can be just a transformer wound on a single core, but it still requires winding a transformer.

Buddipole

The Buddipole is available as a ready-to-deploy kit, but you can also build your own. It's a modular loaded dipole that, ideally, only needs to be supported in the center. To work different bands, you put together different combinations of antenna segments and loading coils. I believe the commercial version uses tapped inductors for the loading coils, but the homebrew version just uses different loading coils for different bands instead.

Plans for the homebrew version can be found at https://sites.google.com/site/ w3ffhomepage/homebrew-buddipole-plans. Most of the parts can be obtained at the hardware store. The exception is a pair of lightweight telescoping whips, which can be ordered from the Buddipole website.

The Buddipole has a few advantages. First, with its modular design and telescopic whips, it can be used on multiple bands. Second, it only needs to be supported in the center. Third, it should be fairly easy to build.

Stan WOKP has pointed out a big inconvenience with this antenna. Fine-tuning it to resonance may require you to lower and raise the antenna several times. Switching bands may be frustrating and time-consuming. In addition, its use of loading coils makes its effective bandwidth smaller. This means that re-tuning may be necessary even when changing frequencies in the same band.

Moxon

A Moxon antenna is a two-element yagi where the ends of the elements are bent inward so the antenna becomes rectangle-shaped. It is a directional antenna in a size smaller than a full-size yagi. Construction details can be found at http://www.moxonantennaproject.com.

Simple Dipole

Currently, my portable antenna is a simple dipole. A while ago, I found a "backpacker balun" kit online. It is a center insulator and 1:1 balun that came with a small plastic enclosure and binding posts. It looks like the seller from whom I purchased the kit doesn't offer them anymore. However, it's just a toroid-based 1:1 balun that connects to binding posts instead of connecting directly to the dipole legs. The binding posts allow me to connect different lengths of wire for different bands.

The first wires I cut for this balun were for 20 meters, and they turned out really well. I just used small-gauge speaker wire. I terminated one end of each wire with a two-prong spade terminal to connect to the binding post. I tied the other end of the wire to a plastic insulator.

For my 40m dipole legs, I used 14-gauge THHN wire. That turned out to be much too stiff and bulky for portable operation.

Hopefully these ideas spark some interest in building your own antennas.

73 de Jason Miles KE7IET



OARC COMING EVENTS



ARRL Field Day

Sat 23 June @ 12 pm thru Sun 24 June @ 12 pm

Antenna setup Saturday @ 9 am

Dinner Saturday @ 5 pm (bring a dish to share)

"T"-Hunt

3rd Saturday 21 July 2018 Starts @ 8:00 AM

Next VE Test Session

1st Wednesday 03 Oct 2018 @ 6:00 PM

CLUB NEWS

HAM and EGGS Net

Tuesday Evenings at 7:00 PM Mountain Time

Mt Ogden 70 cm repeater 448.600 Mhz (- offset, 123.0 PL Tone)

New, Intermediate & Old Timers. Elmering, Education, General Ham Discussion and Rag Chew.

New hams encouraged to check in. Get connected, learn new things and ask questions.

Questions: Larry Griffin AD7GL, ad7gl@arrl.net

CLUB NEWS

Another silent key - W7NDC

Norman Hansen was born on September 26, 1933 and passed away on Saturday, May 19, 2018.

Norman was a resident of Mountain Green, Utah at the time of passing.

Norm graduated from East High School in Salt Lake City and was blessed to meet Fay Devey through a family friend.

They fell in love, were married in 1954, and Norm shortly thereafter joined the US Navy.

A viewing will held on Monday, May 21, at Walker Mortuary in Morgan, Utah from 7:00 - 8:00 PM.

Interment will be at Lindon, Utah City Cemetery. Viewing at the Walker Mortuary from 7:00 PM to 8:00 PM on May 21, 2018.

HOBBY NEWS

Almost Ham Related

I saw this in a parking lot (18 May 18).

If you can imagine the apostrophe and 's' being omitted it would make a good signal report.



TNX Kent, WA7AHY



9th Annual Snake River Chapter ISRA Club Tailgate Swap Meet

Saturday, August 18, 2018

9:00 AM-1:00 PM

Minidoka County Fairgrounds 085 East Baseline Road Highway 25 Rupert, Idaho

HOBBY NEWS



15 September 2018

www.wyominghamcon.org

CLUB NEWS

Golden Spike Setup

The story behind why we had to setup out of the shelter:

We arrived at 8:00 AM

- Dave Mamanakas
- Kent Gardner
- James and Barbara Siddle

We got the antenna up and the coax run by 9:00, but when we started to set up under the patio cover where we usually do, the ranger told us to hold on until he pressure washed all the tables and floor in preparation for the big event the next day.

He started to do that, but kept blowing the circuit breaker which knocked out our power too. He tried another power washer, but it did the same thing. He then tried a gasoline version, but it wouldn't keep going. He did get us two table from the shed and some chairs and we finally got set up by about 10:30, but the sun was so bright you couldn't see the transceiver display, so we rigged one of our club signs to be sunshade reminiscent of the space station etc.

Since we couldn't use AC power because of the blown circuit breakers, I brought out my RV battery and solar panel, but it couldn't handle the 100 watts so Dave drove his pickup over by the fence and using his extra long jumper cables they finally got the station on the air. After awhile his batteries were draining, so they reduced the xcvr power to 50 watts and were able to last until about noon, when they were finally able to move inside. (The guy had to bring out a hose and wash everything manually.

TNX Kent WA7AHY

CLUB NEWS

Planning for the 150th Anniversary of the Driving of the Last Spike 10 May 2019

10 May 2018

We had some interesting experiences at the Golden Spike Special Events Station yesterday and today.

We had to go into emergency procedures mode since the two electric power washers that they wanted to wash down the gazebo area kept blowing the circuit breaker and the gasoline powered one wouldn't keep running. My RV battery and solar cell that I keep in my van for such purposes was not up to the task, but Dave's pickup on the other side of the fence and his jumper cables came to the rescue until they finished hosing down the covered area. More about such fun stories later and maybe we could talk about them at the upcoming club meeting..

I had thought that we might ask for a more noticeable spot to set up for next year to increase our presence. I obtained the business card of the head ranger, Justin Glasgow and was going to have you make contact with him to see how we could setup next year. As luck would have it, we were in the process of closing down and he came up and thanked us personally for being there and supporting their efforts etc.

I ask him if they had some ideas on how they were going to handle the 150th commemoration. Wow, what a story he told.

The NPS (probably the National Park Service and I think, in Salt Lake City) has overall planning authority and is just beginning the project.

Mr. Glasgow said that they would probably expect thousands next year, not just hundreds.

There might be a vendors area where things could be bought or demonstrated. Some areas to the East and West of the present visitor's center would be assigned to maybe government entities or for expanded seating.

They would maybe make the present center into a giant restroom and build other buildings etc.

There would probably be other parking lots like there was today. Wow cars were parked everywhere today.

A thousand things have been going through my head. Our station and antenna might have to be moved somewhere else on the grounds. The area where our antenna was may be now covered with bleachers etc. Real estate for our station might not be where it has been. He said he would try to accommodate us any way he could. With all the explosive growth that may happen next year we probably need to be proactive now and not wait.

We might think about a vertical antenna to take up less space unless we are placed at the site fringe where we could put up our regular G5RV-Jr. outside the fringe/boundaries.

Mr. Glasgow gave me the email address and telephone number of the Superintendent. My thought would be to formulate a letter to the Superintendent asking that OARC be included in the planning so as to accommodate us up front instead of trying to squeeze us in at a later date. I would suggest that we include a picture of our operating position and a picture of the antenna so they would know how to fit us in. I will try to formulate such a letter which would be studied at our next board meeting or club meeting.

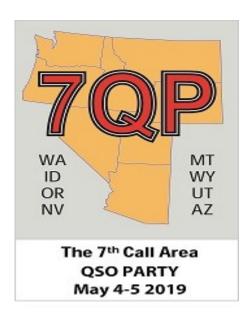
And to top that off, most of us had already heard that Rep. Bishop was going to push to make the Historical place a NATIONAL PARK. Such an effort may take longer than a year, but may be a part of the planning should that actually happen.

So, we have some exciting things to think and talk about.

We should give Dave a great pat-on-the-back for his yeoman effort in putting the Golden Spike Special Events together. It was really fun.

TNX Kent, WA7AHY

SPECIAL FEATURE ARTICLE by Gil Leonard NG7IL



7th Area County Expedition, NG7IL operating 7QP UTMIL

7th Call Area QSO Party occurred May 5th and 6th this year. Having participated in years prior to this event, I wanted to do something a little bit different.

Contesting or Radio Sport is an activity many ham radio operators participate in. There are thousands of different contests and special events available to suit every operating style and preference. Some people are extremely serious and competitive, others just want to have fun, while others use the opportunity to complete other radio goals. Some of those goals are as simple as getting the last state needed for Worked All States (WAS). Getting the most points, a printed certificate, plaque, or just bragging rights entice operators to participate. It is a whole lot of fun and a great way to exercise the license privileges we studied so hard to get.

What the heck is 7QP? 7QP is an organized event encompassing the states in the 7-area ham radio call district. Arizona, Nevada, Utah, Idaho, Montana, Oregon, Washington, and Wyoming. A weekend designed to allow 7 area operators to activate the county in the state they live in and give the opportunity to other amateurs to make contacts in those counties. Some hams set a goal to work every county in every state in the Union, WOW, can you imagine the pride and bragging rights you would earn by accomplishing such a feat!

What if there is not a ham that lives in or operates from a particular county? Ah-ha, drum roll please, enter the county expedition. Yup, you guessed it, some counties are a rare thing to collect. This so happens to be the case for Millard county in Utah. My research shows it to be a county that is sparsely populated and not a lot of hams operate 7QP. Millard county also is the home to many exciting rockhounding collection sites. That provided the perfect excuse to get out of the house, enjoy some time with my wife, and operate the radio!



Figure 1 Icom 706MKII with auto tuner, FT817 and tuner for QRP, and a portable lightweight straight key.

My county expedition grew from just such a desire. Debbie, my wife, really enjoys looking for and finding different rock specimens. I just happen to enjoy camping in the desert and operating a portable radio station. Imagine, as luck would have it, Debbie wanted to visit Painter Spring to look for smoky quartz, pink feldspar, garnets, and other minerals. Painter Spring just happens to be located in Millard county not far from the Nevada border.

We were treated to amazing views of mountains and sunsets. Fabulous weather with cool nights. NO crowds. Peace and quiet abounded. Quiet! can you imagine the only noise on my radio was actually just atmospheric noise (QRN). No buzzing, crackling, popping, rhythmic hum, or any other man-made noise (QRM). Radio operation was truly a pleasure.

"I haven't talked to it in years."



Figure 2 Is that a KL call coming in?

Arriving Friday evening, with the camping area of our choice just waiting for us, nicely placed on top of a small knoll providing excellent views. Did I mention it was even level? We set up our trailer and I set up my station as my wife prepared a light dinner. We ate dinner with a nice cool breeze and awe-inspiring mountains.

The portable station consisted of a 90 amp-hour battery, an Icom 706MKII, Buddy-pole antenna, and a simple portable straight key. The Buddy-pole is frustrating to some as it requires some effort to adjust and tune. I enjoy the challenge and once configured, found it to be repeatable in another area. We actually stayed in a different spot on Saturday evening. The antenna was configured in a dipole with coils that allowed me to simply change from 20 meters to 40 meters by only moving a jumper wire. The radio was happy and was adjusted to about 80 watts output, which put minimal drain on my battery.

My efforts were quickly rewarded with clear contacts from K7Q out of Douglas county Nevada and WS7L from Pacific county Washington. I had to search and pounce for a while until I could find a clear frequency on 20 meters I could run for a while. My goal was simple, just have fun. Personally, I prefer operating CW, out of the 50 unique contacts I made, only 4 were phone. Hey, I just wanted to see if the microphone still worked. I haven't talked to it in years. Propagation was nothing to jump up and down about. Most of my contacts were within a 1000-mile radius so I managed to work the other 7 states in the 7th call area. Logging Maryland, West Virginia, Tennessee, Alabama, and Alaska was truly a multiplier and made all the effort worthwhile.

I submitted my log as a County Expedition, single operator, low power, mixed station. Low power is defined as less than 150 Watts and mixed is defined as more than one mode (CW, Phone, Digital). How many points did I score? Who knows? I had a great time, got to see some amazing country, exercised my license privileges, and relaxed. It doesn't get much better.



Figure 3 Buddi Pole in a dipole configuration with taps on the coils for quick 20 and 40 meter band changes.

It doesn't matter if you are a new operator or a seasoned pro. Radio sport has something for everyone to enjoy. There is an event that is tailored to your experience and style. Give it a shot, who knows? You just might enjoy yourself. Follow some of the links below for more information on 7QP, special events, and other contests.

7QP http://ws7n.net/7QP/new/Page.asp?Content=start
ARRL Contest Listings http://www.arrl.org/contest-calendar
Route 66 Special Event http://w6jbt.org/
War Ship Museums http://www.arrl.org/news/it-s-museum-ships-weekend
13 Colonies Special Event http://www.arrl.org/field-day
Field Day http://www.arrl.org/field-day

I hope to hear you on the air soon!

73 de Gil NG7IL

FEATURE ARTICLE by Kent Gardner WA7AHY

An Interesting, Unusual and Maybe Never Done Before Continuous Wave (CW) Contact with Shanghai, China.

It happened while camping in St. Charles, Idaho RV Park over the 2018 Memorial Day Holiday weekend. I set up my QRP station outside my camper trailer on the picnic table along with my G5RV Jr. antenna. I had the good fortune of working the special events station earlier for the Indianapolis 500 race. The five watts from my Ten-Tech Argonaut 509 rode a very strong surge on 20 meters, enough to get a 20 over S-9 full exchange.

The next day, on towards evening, a Travel-America type Recreational Vehicle (RV) pulled into the next camping space. After awhile, I noticed one of the occupants looking at my trailer setup. I went out and said hello. He was interested in my solar panel that was connected to my trailer battery. His group of four was from Shanghai, China and we had some difficulty in communicating, but we did okay generally. I took him over to my transceiver on the picnic table and when he saw my telegraph key he immediately became very animated and excited. He began trying to show me that he had a grandfather on his mother's side that was a code instructor at a university in their home country. The grandfather was in China and probably had learned the code in their military. His hearing had been affected by listening to the code with headphones over his many years of life. My friend's excitement led him to call the grandfather long distance on his cell phone directly to his home in China.

My new friend was knowledgeable enough to speak in di-dahs instead of dots and dashes. He asked me to send some code into the cell phone mike so his Grandfather could hear it. He asked me to spell my name first.

I was caught in a quandary.....my CW key plugged into my transceiver had stopped working for some reason and I had not taken the time at home to find out why, but I noticed a few weeks back that I could key it by pressing my mike button when I switched into the CW mode. I couldn't explain this to my friend because of the language barrier, so I just spelled out my name using the side tone and my push-to-talk mike button. The tones were sent over the cell phone connection to China. His grandfather then repeated the letters he heard me send. His being hard-of-hearing didn't seem to matter because he repeated my letters almost verbatim. I sent him my call letters and he got them correct also. His being very old didn't seem to matter. He had the code burned into his brain. I was really impressed.

So, yes, it was not a qualified CW contact with China, but I did chalk up a contact over the cell phone's worldwide circuits and made some friends in the process. I have been smiling ever since, just thinking about what I had experienced.

Additional story: The foursome had just toured Yellowstone and were headed back to Salt Lake City to turn in their rented RV. About 15 minutes later while my friend's wife was cooking their evening meal, he brought out an amazing drone. I could see then, that he was technically minded and was interested in radio and radio waves.

He added a fresh battery pack and flew it out over the Northern end of Bear Lake which was at least a mile away and with an altitude so high I lost sight of it. He had a camera on-board and we were able to get a great view of several square miles. He flew it back over the campground and we saw ourselves on the ground. This brought out my wife Lauralee and another couple that we were camping with; to see what was going on. We introduced each other and made some good friends......a really wonderful experience, especially to see how ham radio makes the world a smaller and friendlier place.

GUEST ARTICLE by Dan KB6NU

Is the internet, millennials or FT-8 killing ham radio?

Amateur radio bloggers love to write about the demise of amateur radio. To wit, we have:

- * KONR's Is the Internet destroying amateur radio? (http://www.kOnr.com/wordpress/2017/11/internet-destroying-amateur-radio/)
- * NOSSC's Millennials are killing ham radio (http://nossc.com/posts/583-millennials-are-killing-ham-radio)
- * PE4BAS' Is FT-8 damaging amateur radio? (https://pe4bas.blogspot.com/2018/04/is-ft8-damaging-hamradio.html)
- * NZOT's Did Joe Taylor K1JT Destroy Amateur Radio? (http://www.ei5di.com/jt.html)

Of course, none of these posts are really saying that the internet, millennials, or FT-8 has killed amateur radio. What they are saying is that all of these are changing amateur radio as we know it. Well, duh, the way we live our lives changes every day. Why should amateur radio be any different?

For example, Bob, KONR, discusses how the operation of remote stations is changing the game of DX. Can you really claim that you worked a DX station if you rented time on a super station? I've written about that topic, too (https://www.kb6nu.com/dx-advisory-committee-wants-to-put-the-screws-to-remote-operation/).

There has also been much written about how FT8 is changing the amateur radio game. One blog post (https://ve7sl.blogspot.com/2017/10/160m-ft8-end-of-era.html), talking about the effect of FT8 on 160m operation, even goes so far to say that this is the "end of an era." On DX World, the results of the poll, "FT8 - Damaging to Amateur Radio?" (https://dx-world.net/yes-or-no-a-poll-on-ft8/) show more than half of the respondents think that FT8 is damaging amateur radio.

I specifically used the word "game" in the previous two paragraphs because that's exactly what's changing. The physics of amateur radio certainly isn't changing. Our transmitters are still generating electromagnetic waves like they have been for decades, and on the HF bands, anyway, those radio waves are bouncing off the ionosphere just as they have been for more than the past 100 years.

What's changing is the human component. By that I mean what's changing is how we think people should participate in the hobby. The hams that are complaining that the internet or millennials or FT8 is killing amateur radio are really just complaining that people aren't participating in amateur radio the way they want them to participate.

Here's where we talk about millennials. In his blog post, Sterling, NOSSC, suggests that setting up remote stations is one way to engage young people. He writes, "I believe that remote operating, and other internet-assisted means of ham radio operation, are critical to youth engagement."

He's also big on an idea he calls "ham radio hackathons." He writes,

"A hackathon isn't a coding competition. It's explained well in this Medium article (https://medium.com/hackathons-anonymous/wtf-is-a-hackathon-92668579601). It goes even further than that, not limited to coders and engineers, but open to thinkers, doers, philosophers, system engineers, math people, teachers, students, artists, stake-holders...anyone with an interest in solving a problem with technology."

I support both of these ideas, but I think that millennials (and, to be fair, it isn't just millennials we're talking about here, but any newcomers to the hobby) need to step up and get these things going. I don't think it's my job to try to get kids interested in amateur radio. I don't even know if that's really possible. What I can do, however, is be there to encourage and support kids (and anyone else that expresses a sincere interest in amateur radio).

For example, I'm not sure how fruitful it would be to set up my station to be remotely operable and then saying to some kids, "Hey, come and operate my station." What I think would be more fruitful is to say to a kid, "Hey, come help me set up my remote control station, so that we both can use it." Then, it turns into a learning situation, and we both gain from the exercise.

The same kind of thing has to happen with ham radio hackathons. The motivation has to come from the ground up, not the top down. I do hope that this idea gets off the ground, though, and I'm standing by, ready to support this effort however I can.

I think that millennials (I'm really getting tired of that term, by the way) need to grab the bull by the horns and take amateur radio in the direction they want it to go. Feel free to kill amateur radio as we know it. Make it better!

When he's not trying to figure out how to save amateur radio, Dan builds stuff, blogs about amateur radio at KB6NU.Com, teaches amateur radio classes, and operates CW on the HF bands. Look for him on 30m, 40m, and 80m. You can email him about what you think is killing amateur radio at cwgeek@kb6nu.com.



FCC Denies Petition Aimed at Preventing Interference from Digital Repeaters to Analog Repeaters

06/01/2018

The FCC has turned away a *Petition for Rulemaking* from a Michigan radio amateur that asked the Commission to amend Section 97.205 of the Amateur Service rules to ensure that repeaters using digital communication protocols do not interfere with analog repeaters. Charles P. Adkins, K8CPA, of Lincoln Park, had specifically requested that discrete analog and digital repeaters be separated either by distance or frequency and that digital repeaters be limited to 10 W output, the FCC recounted in its June 1 denial letter, released over the signature of Scot Stone, the deputy chief of the Wireless Telecommunications Bureau's Mobility Division. According to the letter, Adkins had characterized digital repeaters as "a major annoyance" to analog repeater operators.

"In 2008, we rejected a suggestion to amend Section 97.205(b) to designate separate spectrum for digital repeaters in order to segregate digital and analog communications," the FCC said in its letter to Adkins. "We noted that when the Commission has previously addressed the issue of interference between amateur stations engaging in different operating activities, it has declined to revise the rules to limit a frequency segment to one emission type in order to prevent interference to the operating activities of other Amateur Radio Service licensees."

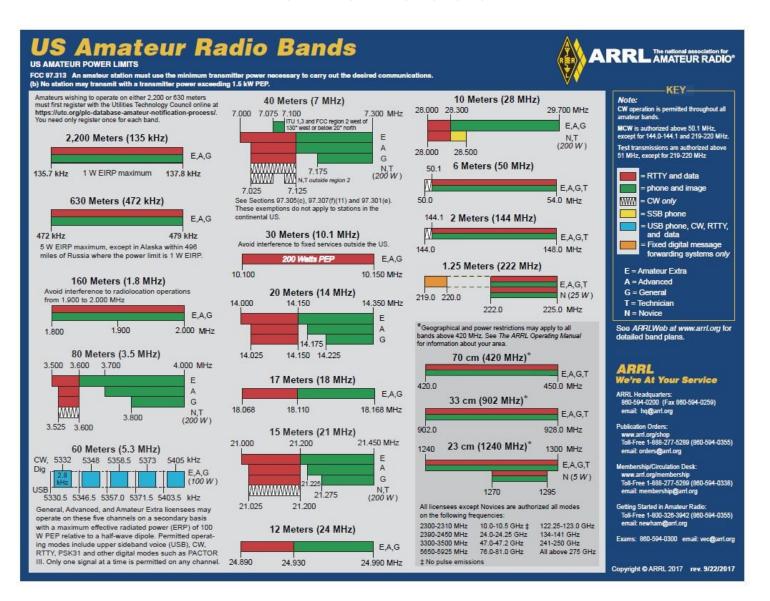
The FCC told Adkins that current Part 97 rules already address the subject of interference between amateur stations, prohibiting, among other things, willful or malicious interference to any radio communication or signal, and spelling out how interference disputes between repeaters should be handled.

"You have not demonstrated any changed circumstances or other reason that would warrant revisiting this decision," the FCC concluded. "Consequently, we dismiss your petition."

The FCC did not assign a rulemaking petition (RM) number to Adkins' petition nor invite public comments.

HOBBY NEWS

2017 Ham Band Chart



Download your own copy (.PDF) from the club website ... "Ham Links" page.

CLUB REPEATER NEWS

Old news—but worth repeating

The 146.90 repeater, on Mt Ogden, now uses a DCS squelch of 122. It used to use a PL or CTCSS tone of 123. Notice the 122 and 123 are really close to each other. This is on purpose, to help people remember the code number.

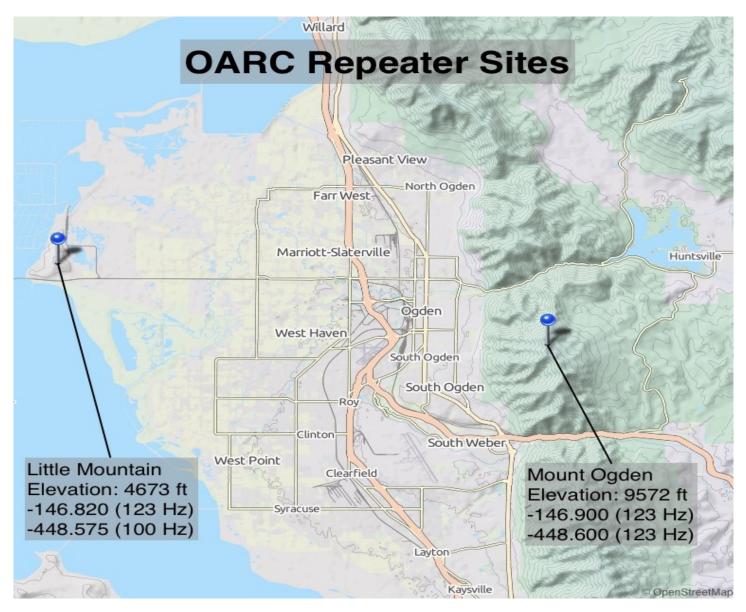
So, in order to use this repeater, it will be necessary to reprogram your radio. If you need help in doing this refer to your radio manual. If you cannot understand the manual, get help from another ham to assist you. There are plenty of people that are willing to assist you with this.

You will notice a few things about it use. If you are a person that likes to kerchunk repeaters, you cannot kerchunk this repeater. It will come up, but you will not hear it. The squelch tail at the end of your transmission is gone. When someone talks on the repeater, the moment they let go of the mic button, the signal goes away on your radio. Instead of the noise, it will just sound silent. This will take some getting used to. If you look at your S meter on your radio, you see that there is still a signal there for a moment, but you will not hear it.

Also, as long as you do not have tone squelch turned on, on your radio, you can still hear the repeater, but you will just not be able talk to it until you reprogram it.

Mike Fullmer, KZ7O Scott Willis, KD7EKO

CLUB REPEATER NEWS









Mike Fullmer KZ70

Scott Willis KD7EKO and Mike Fullmer KZ7O are the OARC repeater engineers that keep our club repeaters at Mt Ogden and Little Mountain operational.



Club Swapmeet



"SALE" or "WANTED" ITEMS NEEDED

OARC's O-bay (On-Line Swap-Meet) items needed for the web site...

Visit http://www.ogdenarc.org/ then click on Obay-Swap.

FEATURED ITEMS

SWAP ITEM # 177

FOR SALE: 60ft crank up tower. Aluma model T-60HN.

Includes 120V winch, tilt base plate, YAESU G-800SDX and G-500A rotators,

guy wires and house bracket.

PRICE: \$4000

CONTACT: John N7WZ, 208 520 3537 (leave message)

SWAP ITEM # 176

FOR SALE: 40ft mobile air pushup tower.

Includes spare tire for trailer, leveling feet for trailer and guy straps with ground stakes.

Trailer requires 2 in ball.

PRICE: \$3000

CONTACT: John N7WZ, 208 520 3537 (leave message)

NOTICE

OARC YAHOO GROUP



Did you know that OARC has a Yahoo Group?

We occasionally communicate with our OARC members via the Yahoo Group. Receive notices regarding upcoming club meetings and future e-newsletter release notices and much more like CHAT items of interest.

You can also send/receive notices to/from other group members yourself.

It's easy to sign up...

Just click on the **Join Now!** icon at the top of the club website home page and then follow the Yahoo Group instructions to create yourself a user ID and password.

OARC You Tube Channel



Did you know that OARC has a You Tube Channel?

A lot of our meeting presentations are recorded and posted to our OARC You Tube channel for you to view at a later date.

It's easy to view missed



Just click on the icon on the right hand panel of the club website home page to view recorded meetings preserved for your viewing pleasure.

Club Badges

OARC Club badges are available for all licensed club members.

The cost is \$10.00 each. The badge comes with a "MAGNETIC" clip. Badge includes your Call Sign in large letters and your First Name in a somewhat smaller font in white lettering on a pitch black background with the club logo. See example below.



Place your order along with \$10.00 in advance for each badge ordered and specify Call Sign and First Name. Contact webmaster or any club officer via email or contact the club treasurer at the next club meeting.

For additional information see club website left side menu and click "Join" to fill out a club application form to order a club badge.

OARC MEMBERSHIP DRIVE

SUPPORT YOUR RADIO CLUB

Don't forget to signup/renew your OARC membership now (\$15) which runs August to August. Consider signing up your spouse as well.

Ham + Spouse = \$15 + \$10 = \$25

THANK YOU FOR YOUR SUPPORT

Join OARC

Renew your membership now!

Membership in the Ogden Amateur Radio Club is open to anyone interested in Amateur Radio. You do not need an amateur license to join us. You do not need to join the club to participate with us. Dues are used to operate the club, field day activities, and repeater equipment maintenance.

Joining is easy. Come to a club meeting or fill out an application form from the club website (click "Join" from the left side main menu). Instructions for mailing on the form.

DUES: Dues are \$15.00 per person and runs August - August. (Ham + spouse = \$25.) More than one ham in the family? Consider the OARC Family plan for \$25.

NOTE: New Hams >>> Membership in OARC is complimentary for remainder of 1st year licensed.

ANNOUNCEMENTS

Next Club Meeting:

3rd Saturday of each Month

The Ogden Amateur Radio Club meetings are usually held on the **3**rd **Saturday** of each month.

Meeting/Activity:

See notices above

Talk-in: -146.82 (pl 123.0)

Check OARC web site for details

www.ogdenarc.org

Please invite a friend to join you. You do not have to be a member of the club to participate in our club meetings or activities. We invite all to join us.

If anyone is interested in doing a presentation on something or just have something unique to show at the meetings. - Please get a hold of any of the officers and let us know.

Next Weber Co VE Test Session:

1st Wednesday Feb, Jun & Oct

Exam sessions are held in Ogden every few months, *usually* the first Wednesday in February, June, and October.

Time: 06:00 PM Walk-ins allowed

Location: Permanent location

Weber County Sheriff Office Training Room 712 W 12th Street Ogden Utah

Contact: VE Liaison:

Rick Morrison W7RIK (Liaison)
morrisonri@msn.com (801-791-9364)

Jason Miles KE7IET (IT)

Cost: \$ 14.00

Two forms of **ID**, one of which must be a **picture ID**.

For "Upgrades" bring current license and a copy of current license, and any CSCE's

Most **calculators** allowed. Calculator memories must be cleared before use.

Club Web Site

Be sure to visit our club web site.

www.OgdenARC.org

Club membership is open to anyone interested in Amateur Radio. You do not need an amateur license to join us. Dues are used to operate the club, field day activities, and repeater equipment maintenance.

Club Call Sign

Listen to the club repeaters for this very familiar CW ID. You do know Morse Code don't you?

W7SU

ARRL Field Day is held on the last full weekend of June every year.

Location may vary each year so watch this notice for details as time draws near.

See you there.

OARC REPEATERS				
(*) Yaesu Fusion digital/FM compatible				
FREQ	CLUB	TONE	LOCATION	
146.900-	OARC (*)	122 DCS	Mt Ogden	
448.600-	OARC (*)	123.0	Mt Ogden	
146.820-	OARC (*) "Talk-in"	123.0	Little Mtn	
448.575-	OARC	100.0	Little Mtn (w/auto patch)	

OTHER AREA REPEATERS			
FREQ	CLUB	TONE	LOCATION
146.620-	UARC	none	Farnsworth Pk
147.120+	UARC	100.0	Farnsworth Pk
449.100-	UARC	146.2	Farnsworth Pk
449.500-	UARC	100.0	Farnsworth Pk
147.040+	DCARC	123.0	Antelope Isl
447.200-	DCARC	127.3	Antelope Isl
449.925-	DCARC	100.0	No Salt Lake
145.290-	GSARC	123.0	Brigham City
145.430-	GSARC	123.0	Brigham City
147.220+	GSARC	123.0	Brigham City
448.300-	GSARC	123.0	Brigham City
146.640-	BARC	none	Logan
146.720-	BARC	103.5	Mt Logan
147.260+	BARC	103.5	Promontory Pt
449.625-	BARC	103.5	Mt Logan
145.250-	WSU	123.0	* coming soon
449.250-	WSU	123.0	* coming soon
145.490-	K7HEN	123.0	Promontory Pt
146.920-	N7TOP	123.0	Promontory Pt
449.775-	N7TOP	123.0	Promontory Pt
147.100+	Morgan	123.0	Morgan Co
448.825-	IRLP/Echo	123.0	Clearfield City
449.950-	IRLP	123.0	Clearfield City
449.425-	IRLP	100.0	Nelson Peak
147.360+	Summit Co	100.0	Lewis Peak

AREA CLUB MEETINGS & WEB SITES

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CLUB	WEB SITE	DATE/TIME	LOCATION
OgdenARC	ogdenarc.org	3 rd Saturday 09:00 am	Check OARC web site
WC Sheriff		1 st Saturday 10:00 am	Weber Co. Sheriff Complex
Comm-O			West 12 th Street Ogden Utah
Barc	barconline.org	2 nd Saturday 10:00 am	Cache Co. Sheriffs Complex
			200 North 1400 West Logan Ut
CSERG	dcarc.net	Last Wednesday 8:30pm	Clearfield City Hall
	/ares.htm/		Clearfield Utah
DCarc	dcarc.net	2 nd Saturday 10:00 am	Davis Co. Sheriff Complex
			Farmington Utah
NU Ares	home.comcast.net/	3 rd Wednesday 7:00 pm	Cache Co. Sheriff Office
	~noutares/		Logan Utah
Uarc	xmission.com	1 st Thursday 7:30 pm	UofU EMC Bldg Room 101
	/~uarc/		Salt Lake City Utah
UVarc	https://uvarc.club	1 st Thursday 6:30 pm	Orem City Council Chamber Room 56
			North State St. Orem Utah
GSarc	Ubetarc.org	Check Website	Check Website
Utah DX	udxa.org	3 rd Wednesday	check web page for details
Association		check web page for details	Salt Lake City area
UvhfS	ussc.com	Each Tuesday 8:00 pm	Weekly 2 meter net
	/~uvhfs/	(refer to web site)	(no eye ball meetings)
WDArc	westdesertarc.org/	1 st Tuesday 7:00 pm	Tooele County Courthouse Tooele Utah
WsuArc	https:groups.googl e.com/forum/#!	3 rd Thursday 5:30 pm	WSU Blding #4 Room ?
	forum/wsuarc		Ogden Utah

LOCAL AREA NI	ETS

LOGAL MILITS				
DATE	CLUB	FREQ		
Daily @ 12:30 PM mt	Utah Beehive net HF	7.272 Mhz HF LSB		
Daily @ 07:30 PM mt	Utah Code net HF	3.570 Mhz HF CW		
Daily @ 02:00 UTC	Utah Farm net HF	3.937 Mhz HF LSB		
Sunday @ 8:45 AM	Ogden Old Timers HF net	7.193 Mhz HF LSB		
Sunday @ 7:30 PM	GS ARC	145.430 - 123.0 (training net)		
Sunday @ 8:30 PM	SATERN Net	145.900 - 123.0		
Sunday @ 9:00 PM	Morgan Co Net	147.100 +123.0		
Sunday @ 9:00 PM	UARC Info net	146.620- no PL tone required		
Monday @ 9:00 PM	2-meter SSB net	144.250 Mhz 2-meter USB		
Tuesday @ 7:00 PM	OARC—Ham & Eggs Net	448.600 -123.0		
Tuesday @ 8:00 PM	Weber ARES	448.600 - 123.0		
Tuesday @ 8:00 PM	VHF Society Swap	147.120 + 100.0		
Tuesday @ 9:00 PM	Bridgerland ARC	147.260 + 103.5		
Wednesday @ 8:00 PM	GS ARC	145.290-, 145.430-, 448.300- (all 123.0)		
Wednesday @ 8:30 PM	CSERG	145.770 simplex		
Wednesday @ 9:00 PM	No. Utah 10m HF net	28.313 Mhz HF USB		
Wednesday @ 9:00 PM	6-meter SSB net	50.125 Mhz 6-meter USB		
Thursday @ 6:30 PM	Davis Co Elmers Net	147.040 + 123.0 New Hams		
Thursday @ 8:00 PM	Weber State ARC	146.820 - 123.0 (coming soon)		
Thursday @ 8:00PM	State RACES VHF/IRLP	145.490 - 123.0, 146.680 - 123.0 3 rd Thursday - even months only		
Thursday @ 8:30 PM	Davis ARES	147.420 = simplex		
Thursday @ 9:00PM	Wasatch Back Net	147.360 + 100.0		
Saturday @ 8:00AM mst	RACES State HF	3.920 Mhz HF LSB 3 rd Saturday – odd months only		
Saturday @ 11:00AM mst	QCWA net HF	7.272 Mhz HF LSB		

OARC OFFICERS

OTHER CLUB APPOINTMENTS

President: Jason Miles KE7IET VE Liaison: Richard Morrison W7RIK

Jason Miles KE7IET (IT)

Vice Pres: Mike Taylor KE7NQH

Secretary: Ceva Cottrell W7CVA

Dave Mamanakis KD7GR

NL Editor: Val Campbell K7HCP

Repeater Engineers: Mike Fullmer KZ7O

Scott Willis KD7EKO

Treasurer: Jerry Cottrell KG7IGW Photographer: Ceva Cottrell W7CVA

Program Director: QSL Manager: Ceva Cottrell KE7IEV

Gil Leonard NG7IL

Historian/Librarian: Kent Gardner

Activity Director: WA7AHY

Equipment Manager: Val Campbell K7HCP

"WATTS NEWS" e-Magazine

Club Call Sign Trustee: Larry Griffin AD7GL

Advisors: Stan Sjol W0KP

<u>"OARC" web site</u> Mike Fullmer KZ70

Kent Gardner WA7AHY

Webmaster: Val Campbell K7HCP Kim Owen KO7U

Larry Griffin AD7GL