



OARC e-Magazine

www.OgdenArc.org

MARCH 2021

Next Club Meeting/Activity

Inside...



Dave Mamanakis KD7GR

President

Justin Hall KB7LAK Vice President

Secretary



J. Siddle KG7CJN

Treasurer



Mike Wilde KJ7HEX **Program Director**



Todd Shobe KW7TES Activity Director



Val Campbell K7HCP Webmaster/NL Editor



PREVIOUS CLUB MEETING/ACTIVITY

February Activity

3rd Saturday 20 February 2021

9:00 AM

Zoom Meeting

Show & Tell

NEXT CLUB MEETING/ACTIVITY

OARC

March Activity

Keep clicking...

PREVIOUS MEETINGS PICS

Photos by ... photographers have been quarantined



Tim Samuelson—KE7DOA



Rick Hansen—N7EGA

"Previous Meeting - pictures" ...

Photos located on the club web site home page.



OARC COMING EVENTS



Next Activity

One more click...

Next VE Test Session

1st Wednesday 02 June 2021 @ 6:00 PM

OARC

March Activity

OARC Meeting/Activity - March

3rd Saturday 20 March 2021

9:00 AM

HF Mobile Antenna Testing - Workshop (outdoors event)

Dee Event Center parking lot - South Side Will be testing 10 and 40 meters using field strength meters!

If you dont have a Mobile Antenna, come anyway, to learn about mobile antenna. If you dont WANT a Mobile Antenna, come anyway. The experience of seeing how to use a Field Strength Meter will be very useful. So it will be well worth coming just for that experience!

Stay tuned to the Tuesday Ham & Eggs Net for updates

Dave's Rag Chew







Dave Mamanakis KD7GR

Greetings My Friends!!!

Today is a wonderful day! I think Spring has finally dared to show its face!

AND, there are a couple things I think we need to DO:

1) This month's Club Meeting! We are doing a Workshop, if you could call it that...

Gene is going to help us play around with Antennas, specifically, Mobile Antennas.

We are going to meet up at the Dee Event Center parking lot...my guess? South Side (not too hard to find a bunch of Ham Radio Operators in a parking lot).

If you don't have a Mobile Antenna, come anyway, to learn about mobile antennas...

If you don't WANT an Mobile Antenna, come anyway, to learn about the Field Strength Meter that Gene is going to use to run the tests!

I believe we'll be testing 10 and 40 meters! The information you will get the experience of seeing how to use a Field Strength Meter will be useful anywhere! SO it will be well worth coming just for that experience!

2) The April Club Meeting! We are shooting for an "in person" meeting. I am in the final negotiations to be able to use space at UMA (Utah Military Academy)... I'll keep you all up to date on this, but I think we are in!

3) May... Normally, we don't have a club meeting in May because we do the Golden Spike Special Event Station, W7G. And this year? We may have an in person meeting, but we will definitely have the Special Event Station up at Golden Spike!

The rules and regulations for being up at the National Historic Park are allowing groups to go and enjoy the trains... they won't be holding the full reenactment, but they will be bringing out the trains for people to see.

May 8, 9, and 10... we might only be up there for the 8th and 10th, but I'll leave those details up to Todd (KW7TES) ... stay tuned to the Club Web Site and to the Ham-N-Eggs Net for more information!

We are getting back to something that resembles "normal". This is good!

Ok, I've been asked, several times by several people, what the difference is between FRS, GMRS, and Amateur Radio... questions like, "Can we use our HTs on FRS or GMRS frequencies?"

I thought I'd take a quick minute to tell you what I know:

FRS is the Family Radio Service. (462.5625 MHz to 462.7250 MHz)

The service allows FRS/GMRS hybrid radios. These radios will now be reclassified as FRS units using expanded FRS capabilities. These expanded capabilities now include usage of channels 8 - 14, and previously GMRS only channels 15 - 22, in addition to the existing FRS channels 1 - 7.

You will be allowed to use reclassified FRS units for personal or business reasons

Any radio above 2W of power is now classified as GMRS radio: and still requires a license from the FCC to operate.

GMRS is the General Mobile Radio Service. (462 MHz and 467 MHz)

GMRS requires a license. Licensing is now good for 10 years and cost \$70. This covers you and your immediate family and was previously only valid for 5 years.

GMRS has 30 total channels. This means 22 FRS/GMRS channels plus 8 repeater channels. If you are using a GMRS radio on channels 8 -14 you are still limited to a transmitting power of .5W

I'm going to throw 2 more into this mix, the Citizens Band Radio Service (CBRS) and Multi-Use Radio Service (MURS)...

CBRS (CB Radio, 26.965 MHz to 27.405 MHz) Cannot be greater than 4 watts on AM and 12 watts on SSB. It has 40 channels.

MURS is a little different, with five VHF channels being allotted for MURS. These channels are: 151.820, 151.880, 151.940, 154.570, and 154.600 MHz. Each MURS transmitter type must be designed to transmit on one or more of these channels.

Also, these services have special HARDWARE requirements.

They cannot be capable of transmitting on ANY frequency other than those allowed for that service. The hardware cannot be certified for Ham Radio Service.

Another important difference to note here, you CAN use these services for Business.

So, to answer the question...

NO, you CANNOT use your Ham Radio HTs (or any Ham Radio (Part 97)) to communicate on GMRS, FRS, MURS, or CBRS (Part 95). You can LISTEN to those frequencies. But you may NOT transmit on those frequencies with your Ham Radio.

NO PIRATE RADIO! We don't want anyone getting into trouble!

Thank you all for being members of our Club! And I hope to see you on the 20th!

--Dave (KD7GR)

HAM and EGGS Net

Tuesday Evenings at 6:30 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

Stan Sjol WOKP, stansjol@xmission.com

Ham & Eggs Net - 09 February 2021

Welcome to all OARC members, now 160 strong! Especially the 24 <u>new members</u> that were licensed for the first time at the February VE Test session where 34 hams licensed or upgraded. Congratulations!

A note to all OARC members:

Please check your membership record as posted on the OARC <u>Member-Roster</u> tab at the top of the OARC website home page.

Check the following items:

CALL SIGN changes? (...you may have obtained a Vanity call sign) LICENSE CLASS upgrades (...you may have upgraded recently) ARRL Membership status - Yes or No ? (please indicate this)

Check that the above items are correct and send an email to the club website for any corrections:

BREAK

We need to discuss your ARRL membership status because it affects OARC's ARRL affiliation status.

ARRL requires that 50% of our club members also be ARRL members in order for us to maintain OARC as an ARRL affiliated member club.

Currently only 40% of us are ARRL members.

You can sign up at ARRL.org Note that ... An ARRL Memberships include either the <u>QST</u> or <u>On-The Air</u> magazine subscription

As you probably already know:

OARC was originally organized 100 years ago May 1921 OARC became ARRL affiliated in January 1937 and we would like to remain that way.

Thank You and 73,

Val Campbell K7HCP

10 Meter Net

Thursday Evenings at 0200 UTC (7:00 PM MT)

10 Meters HF - 28.385 MHz SSB (USB)

Purpose is to promote activity on the 10 meter band (especially during low sunspot activity).

To give technician class operators an opportunity to operate phone, and to provide a venue for conversation and experimentation with antenna and ground wave propagation.

Questions and Net Control: Gene WB7RLX, ee_morgan@outlook.com

Congratulations to the hams that successfully tested at the 03 February 2021 OARC Weber Co VE Test Session

Sutton, Kathy	K8RYN	Extra
Sutton, Lonnie	NOINC	Extra
Disque, Robert L.	KJ7UFM	General
Ferguson, Max	ΚΑ7ΤΥΧ	General
Purrington, Mark	KB7ZOX	General
Shern, Beverly	KJ7UFG	General
Shern, Joseph C.	KJ7TVO	General
Wiberg, Reid	N7RPW	General
Bailey, David S.	KJ7UGA	Tech
Bailey, Kevin	KJ7UGB	Tech
Bailey, Kjersten	KJ7UGC	Tech
Buttars, Alan	KJ7UFN	Tech
Charlesworth, Jeffrey J.	KJ7UFT	Tech
Charlesworth, Marcus	KJ7UFY	Tech
Dickson, Allan	KJ7UFP	Tech
Eller, David Glen	KJ7UFE	Tech
Farnsworth, Wendy	KJ7UFU	Tech
Ferguson, Jeanette	KJ7UGG	Tech
Hall, Norman S.	KJ7UFR	Tech
Hietala, Martin	KJ7UFW	Tech
larossi, Eileen	KJ7UFJ	Tech
Jacobs, Breon R.	KJ7UFL	Tech
Jeppson, Kyle D.	KJ7UFQ	Tech
Johnson, Patrick	KJ7UFX	Tech
Keeler, Jolon	KJ7UFV	Tech
Martinson, Dana	KJ7UFF	Tech
Martinson, David C.	KJ7UFH	Tech
Mayoral, Leopoldo M.	KJ7UFI	Tech
Ortiz, Cory	KJ7UFK	Tech
Rapoza, Cody	KJ7UFS	Tech
Roberts, Larry	KJ7UGE	Tech
Robinson, Devon T.	KJ7UGD	Tech
Walker, Stephen	KJ7UFO	Tech
Wurm, Richard Jr.	KJ7UFZ	Tech

Club News Ogden Amateur Radio Club

Centennial 2021 QSL Card Contest

The Ogden Amateur Radio Club Centennial Committee would like to announce a QSL card contest. The Centennial committee will be scheduling a special event station to celebrate the 100-year mark for the OARC. Tentative date May 15, 2021. The final card design will be printed and mailed to all over the air radio contacts who request a card.

This contest is open to all club members. Contest will run from September 1, 2020 until April 15, 2021. Voting for the winning design will be held online to determine the final card design. In the event of a tie, the final winner will be determined by the board.

Original artwork, photographs, and drawings are all welcome. Desired theme should be radio related, and emphasize the Centennial milestone of the club.

Scoring will be based on: Originality. Centennial Theme. Aesthetic quality.

Grand Prize

\$100

All entries will become the sole property of the Ogden Amateur Radio Club.

Submit all entries electronically to:

w7su@arrl.net

Centennial 2021 QSL Card Contest Entry #1



Centennial 2021 QSL Card Contest Entry #2



Centennial 2021 QSL Card Contest Entry #3



OARC Centennial Celebration Special Event W7SU/100

I know this might seem premature to you but ARRL/QST magazine requires our submission for QST Special Events be submitted no later than 28 February for the May issue of the QST magazine.

05/15/2021 | Ogden Amateur Radio Club Centennial Celebration Special Event Station W7SU/100

May 15-May 23, 1500Z-2300Z, W7SU/100, Ogden, UT. Ogden Amateur Radio Club (OARC) - W7SU. 14.255 7.235 7.074 7.040. QSL. Ogden Amateur Radio Club -W7SU/100, P.O. Box 3353, Ogden, UT 84409. Ogden Amateur Radio Club Centennial Celebration Special Event Station W7SU/100 celebrating 100 years. Founded May 1921, ARRL affiliated January 1937. QRZ.com (W7SU/100/) or ogdenarc.org/100

In addition we have the following websites setup to support this special event.

http://ogdenarc.org/100

And at QRZ.com check out ... the call sign W7SU/100

http://qrz.com/db/w7su/100

OARC Golden Spike Special Event W7G

This also might seem premature to you but ARRL/QST magazine requires our submission for QST Special Events be submitted no later than 28 February for the May issue of the QST magazine.

05/07/2021 | Golden Spike Special Event - W7G

May 7-May 10, 1500Z-2300Z, W7G, Corinne, UT. Ogden Amateur Radio Club (OARC) - W7SU. 14.255 7.235 7.074 7.040. QSL. Ogden Amateur Radio Club (OARC) - W7SU, PO Box 3353, Ogden, UT 84409. Golden Spike Celebration Commemorating the Anniversary of the 1869 Driving of the Golden Spike, completing the Transcontinental Railroad at Promontory Summit, Utah. Golden Spike National Historical Park - National Parks Service 6200 North 22300 West, Promontory Summit, UT 84307. http://w7g.org

In addition we have the following websites setup to support this special event.

http://w7g.org

And at QRZ.com check out ... the call sign W7G

http://qrz.com/db/w7g

OARC HAM RADIO EQUIPMENT LOAN PROGRAM Launched on OARC Website

The OARC Ham Radio Equipment Loan Program is a new program that has been conceived to provide new or inexperienced <u>OARC member hams</u> use of donated/loaned equipment for a limited time use while deciding how to move forward in the hobby.

OARC experienced members with excess and often infrequently unused equipment can donate their equipment to the program so that other ham members can benefit from using the equipment on a limited time basis.

As time goes by, the list of available equipment in inventory should grow as the experienced members realize that some of their seldom-used equipment can be re-purposed for the benefit of other hams.

A spread sheet database catalogs the equipment donated to the program and inventories the status of each piece of equipment. The OARC equipment manager will maintain the inventory and status of the program equipment <u>except when the donor wants to do it themselves</u>.

Equipment can be checked-out for a period of two weeks. If requested, an additional two week extension may be granted if no one else has a request for the same equipment pending. More than one item can be checked out if the other items are related by use.

To check-out a specific piece of equipment, send an email to the OARC club email address w7su@arrl.net with the <u>subject="equipment loan"</u> indicating your choice of equipment. You must be a <u>current member</u> of OARC to participate.

73, OARC – W7SU

Check OARC Website home page for equipment loan inventory chart.

ARRL de WB7RLX



After the ARRL's letter regarding the use of the ham bands and public radio service bands to commit unlawful acts I sent an email to the ARRL sharing my perceptions of the ARRL and letting them know that I didn't feel like they were really representing us any longer, rather they were representing the FCC more than us. I also expressed my fear for the future that the government might consider certain political speech as unlawful that has heretofore been considered free speech. I ask the question, would the ARRL work to protect free speech or simply become a puppet of the FCC? I prefer to not include my email mainly because it's not important. However I thought Bob's response was important and I thought others might get something out of reading it

Gene Morgan WB7RLX

From: Inderbitzen, Bob, NQ1R [mailto:rinderbitzen@arrl.org]
Sent: Sunday, January 24, 2021 3:11 PM
To: Eugene Morgan <ee_morgan@outlook.com>
Subject: RE: New Antenna Physics Book from ARRL!

Thank you, again, Gene. ARRL knows that amateur radio provides the broadest and most powerful wireless communication capability available to private citizens anywhere in the world.

I can assure you that ARRL is THE most powerful advocate for amateur radio. ARRL has an incredible track record for both advancing and defending our federally licensed service. That requires a relationship with the FCC, and one that most certainly includes a fair amount of push and pull:

- · defending and expanding our spectrum;
- developing cases for enforcement (the FCC gives ARRL cases a priority);
- thwarting spectrum grabs through our extensive research and studies shared with FCC during rule making proceedings;

- seeking temporary waivers from the FCC during recent fire emergencies and hurricanes;
- seeking relief from commercial interests that have threatened our spectrum with interference (we conduct an extensive technical studies and equipment reviews shared with FCC to defend spectrum from bad players).

ARRL also participates in delegations in the US and internationally that shape the future of radio spectrum allocation. Many say that without ARRL, it's most likely there would be no amateur radio today.

Best wishes to you, and I hope we have an opportunity to meet on-air someday.

73 Bob NQ1R

Bob Inderbitzen, NQ1R - Product Development Manager

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By Justin Hall KB7LAK



How did a hobby lead to a career?

This story is for the young people in Ham Radio that are in far too short supply. There's a huge push to get kids involved in STEM (Science, Technology, Engineering and Math) today. It's partly because those fields need people to design new technologies that enhance our lives and partly to get people into those fields to defend freedom either in the military or industry. Being really good in a STEM field can get you into outer space, as there's more Scientists up there than Artists.

But I have a confession to make- I'm TERRIBLE at Math. I hate it. I don't get the patterns, or the order of it. I'm really bad at it, and it's so bad, I harbor a secret resentment towards those that can do it. I'd love to put them in a reeducation camp, where they can't do Math--and I'm not really sure how to get them there. But I'd probably forget to design the thing with enough fences and they'd get out and laugh at me. My wife does the Math in the family. I do the Language and History disciplines. I love History. It makes sense to me. I can link all the historic events and show they affect other events. And there's no Math there, so I'm safe.

There's Math in ham radio. There's Physics. There's a lot of STEM in Ham Radio. Why? Because it's technology, and it's still moving forward, getting more complicated and more capable. Like a lot of technology today- it has its roots in ham radio. I can tell you the History behind all this and how it affects us today. But I still struggle with the Math involved. And I'm starting to learn to not resent those that can do Math. They're the ones designing all the nice radios, after all.

History involves the study of a lot of wars. Why? Because that's where a lot of technology gets invented and improved. I've been to a few wars and they were mostly boring--individual results may vary. But that's not everyone's experience in war. Just mine. But war, modern war, involves a lot of technology. It didn't take a lot of genius to fight wars with rocks and sticks, you just needed more people, rocks, and sticks than the other guys in battle. Then rocks and sticks became swords, swords became guns and cannons, and then airplanes and missiles. Soon, that'll be railguns and directed energy weapons. STEM started to get involved in warfare very early on. Why? Because you stopped having just armies fight, the whole of the nation got involved. There needed to be a way to do more than rocks and sticks because not everyone was good at combat. It really was a fight for survival for everyone and specialization would get more done. By WWII, warfare wasn't just military forces, it was also factories and scientists accelerating technology and production. It took a lot of labor, material and knowledge to either take over the world, or keep the other nation from doing so. Wireless communication really changed the face of warfare, allowing decisions to be made faster. A new technology made the skies easier to defend and airplanes could start flying in all weather, that breakthrough was RADAR. RAdio Detection And Ranging was a miracle technology, developed by both sides in WWII. Now you could detect approaching aircraft long before you could hear or see them, and in all kinds of weather. This lets you get your defenses up to head off an attack, because fighters can't fly for very long, and they're not fighting when they're on the ground with an empty fuel tank and a tired pilot. And you can't keep gunners on the ground on alert forever, scanning the skies, because the human capacity to pay attention and look for something that's not there is exhausting--I've done a lot of that in a former career as well. Stick a radar in an airplane, and now you could navigate accurately in all weather, or detect other airplanes, and eventually tie weapons to the radar for a more accurate engagement. You could also drop fewer weapons with more accuracy, which lowers risk to your crews and aircraft--not to mention reduces collateral damage, because no one wins a war by bombing orphanages and hospitals.

So you have vehicles that can defy gravity and accurately carry a payload, you have the ability to communicate great distances wirelessly, and you have a means to detect aircraft and weather. That didn't really exist in WWI, so it limited the amount of damage the military could do in war. And I'm not even going to mention the ability that was developed to vaporize a city with one bomb. You see how these technologies came about?

After WWII, the jet age and atomic age came about, and the chess game continued. The radar technology was put on the airplane as more than a way to see through weather and navigate, but also as a way to observe the enemy's capabilities. Airplanes could fly much higher and faster now, so they needed weather radar to help them avoid storms that could damage them. And they needed a way to pick out targets on the ground to avoid terrain, and help them avoid hitting each other. And, most importantly, to keep from getting shot down. This is how Electronic Warfare started. Anything like a radar, looking for a target can be deceived or jammed. But anything transmitting can be detected as well. So the engineers on each side got together and built black boxes, and packed them full of electronics. Transmitters, receivers, timers, detectors, klystrons, transistors, etc. And they put them on funny looking antennas on airplanes and ground vehicles. And sent them out to do battle. Rocks and sticks, but designed with a more precise use in mind.

The electronic chess game really heated up in Vietnam. The air war now involved American-built supersonic fighters against Soviet-built MiGs and Surface to Air Missile (SAM) Systems and Anti-Aircraft Artillery (AAA). The idea was to get the Americans to fly high enough to get into the AAA heights, or if they tried to avoid that threat, fly in the SAM areas. Above that, MiGs were waiting. So we did the logical thing, we flew very, very fast, and very, very low. And we had aircraft that were designed to collect the radar data, they'd take that to a lab, and find a way to jam, spoof, or otherwise defeat those systems. Once the operators of those systems would report that to their superiors, they'd get their engineers to design a new way to do business. And so it went, and it's still going on today. They also built a radar system that followed terrain, so it could fly incredibly fast and low and deliver a weapons payload as well. There were jammers to blind the radars from a safe distance, and keep the enemy from communicating as well. All these technologies were the mainstay of our military air war doctrine.

That's where I entered the game, in 1999. I went to Joint Undergraduate Navigator Training at Randolph AFB, Texas entering in class 00-12. Once I got the hang of Air Navigation with Radar and VORTACs, I had a choice. Take fixes off Radar targets and use the GPS to get around for the rest of my career, or do this other thing, Electronic Warfare. I did notice that the Electronic Warfare Officers wearing the Black and Red patches in the 563rd Flying Training Squadron graded a lot easier in the jet and were more friendly and laid back. They were all Gulf War veterans as well with interesting war stories. One guy told the story about the time

he didn't have enough time to get to the lavatory when the shooting started on the opening night of the war in 1990......I'll save that for a different time- and not on the air, either! The panel Navigators in the 562nd Flying Training Squadron were a bunch of nit-picky pilot wanna-be jerks that didn't so much as teach you how to do the job, as critique everything you did wrong so as to shake your confidence. The Navy guys were hot and cold, but they mostly worked to teach you how to use the radar and do the job. The pilots were mostly critical of anything you did, but there was a U-2 guy that was really cool to talk to, he knew how to mentor. It made my choice all the easier being a Technician Plus operator.

The day came when you picked your 'scarf'. Blue for Navigator, and Red for Electronic Warfare Officer (EWO). I thought about it, and while I hadn't been on the radio in a few years, being a ham radio operator really meant that I needed to go EWO. Even if being a panel Navigator got access to an HF radio more often than an EWO. I had no idea which airframe I'd get at the end of it all. But I learned the different mission sets, Electronic Warfare Support meant the RC-135. I was not really interested in that, because it was a boring series of simulators- you tuned your 'pipper' to a signal (like the Utah SDR) and then you recorded the radar signal, took a direction finding (DF) 'cut' on the signal, and filled out the parameters in the log. Pulse repetition frequency, pulse, repetition interval, freeze it and measure the pulse duration, and frequency. Not really exciting, but you had to learn the procedures. It was something I mastered pretty easily, so it got boring fast. Then there was Electronic Defense. You had this rather poorly voice-activated pilot that you said "pilot, break right (or left)!" and the simulator would indicate that the plane was on a 90 degree bank to get away from a threat, and you had a touch screen of chaff for radar threats and flares for infrared threats, based on what threat radars you could see tracking/attacking you. Then you turned on the jammers and put them over the radar signals. All this with pretty crude touch screens and not very responsive voice-activated software, but it was the year 2000. Pretty intense, and a lot of fun. I wouldn't have held my lunch down in that kind of real flying in MC-130s, AC-130s, B-1 and B-52 bombers. And then there was Electronic Attack, more jamming of radar signals and "comm spikes". Basically using noise and barrage jammers to jam threat signals. All while you were on a chair with wheels, not in an airplane that was turning all over the sky and speeding across the ground at 540 knots, yanking and banking. What I didn't realize was that they had factored my airsickness into my training, and when I was nervous, hot, scared, or unsure of myself, and the jet was getting thrown around in the weather, I was going to puke. Combat flying of that sort was almost all the other airplanes I was trained for. My order of preference was MC-130, AC-130, EC-130, B-52, RC-135. But I probably would have gotten used to it. Everyone threw up in the B-1- they put the window at your feet- which is dumb, it's not going to do you any good there. They call it the "day/night indicator" because that's all it's any good for.

So I got my last choice, the RC-135--I was fortunate enough to get the "S" model, the COBRA BALL, which did ballistic missile reconnaissance. What I didn't realize, since it was before 11 Sep, 2001, was that I'd be deployed less than a lot of my compatriots that were sent on monthslong tours, and multiple times in the other airframes. I was still gone a lot, but nothing happened to my kids or marriage in my 30+ trips of varying lengths. I had to learn to like Nebraska, get used to flying real missions, and what's ironic about all that training was that I was assigned to the optical system with infrared sensors, metric and spectral trackers, and nothing I used really recorded electromagnetic signals! And I'd get sick in the jet about every July. We'd be getting overheated and bounced around in the back, flying sideways, and the pilots up front would practice landings. It was almost an annual requirement.

So where did I go? All over the world. I think I went to Diego Garcia, British Indian Ocean Territory about 14 times in my career. On one of my trips, I got the callsign VQ9JH, issued by the British Representative on the island. If you want to be popular, have a VQ9 callsign and get on HF. Instant pileup. It was during Operation: ENDURING FREEDOM, so postage was free and they had a huge stack of QSL cards there for you to use, and I'd just send those. My last few trips, I went to see if they still had the ham radio shack there, and there was a tower, but the antenna, the ham shack, and the radios were gone. They had 3 big radios, the big ones you'd have in a real ham shack. But they wanted you to be really careful with them, because halfway around the world, it's hard to get things like that fixed. The other locations, Eielson AFB, AK, Souda Bay, Crete (Greece), Kadena AB, Okinawa, Japan, and Al Udeid, Qatar, didn't really have any ham radio opportunities. And the ARC-190 HF Radio on the jet had thumbwheels, so you couldn't really scan the bands with that. Over the oceans, where we did most of our flying to and from the US, many times the HF bands were dead. I'd upgraded to General in early 2001- it wasn't all that difficult after Electronic Warfare School. And, talking on the HF radio on the way to an operational flight happened once, well- I'd called CQ anyway. That got me a stern talking-to from the Mission Crew Commander. It's not really a good idea to transmit from a jet when your intent is to NOT draw attention to yourself. I never did that again. On domestic training missions, there were a few minutes here and there to get on 20 meters and that was another instant-pileup. Kind of fun. 500 watts, from 30,000 feet in N Dakota, getting 59s from people in Louisiana. To this day, I still want to run HF mobile, because it's so fun to talk a long distance on the radio and fly in an airplane.

So study Science and Math, all the things that will empower you to do what you want in life. Take ham radio with you. It fits in with a few interesting careers, some of the boring ones, and all of your free time. You don't have to build things that kill people and break things. You can build things that defend people and keep things from being broken.

Justin Hall KB7LAK

Ham Shack Photos

Last month the unidentified Ham Shack Photo was ...

N7GJQ

Aaron Thomson



Ham Shack Photos

The <u>next</u> in the series of unidentified ham shacks is shown below.

Do you know whose ham shack this is?



STILL WANTED

Ham Shack Photos

We want you to submit pictures of your ham shack to us for future publication in the club newsletter. Submit home ham shack, mobile ham shack, handheld ham shack. Antennas too.

I will keep the submissions anonymous if you prefer.

My thinking is that I would publish one-set of ham shack pictures each month with the idea that all viewers could privately try to guess whose ham shack was featured that month.

I think it will be interesting to see the wide variety of equipment that each of us has chosen to populate our hobby work space with. This could be invaluable to each of us as we make future decisions about equipment upgrades.

Thank you in advance. 73, Val K7HCP

Submit to

k7hcp@arrl.net or w7su@arrl.net -Or- 801.389.0690

So send me your Ham Shack Photos soon!

Hi OARC:

I made a video about how to use HamStudy.org to study for your exams.

https://youtu.be/n8RK1REvIpI

Check it out! Kathryn Sutton K8RYN





Submitted by Alan Parks N7SHA

THIS NEW WRENCH IS AMAZING. One side is "Standard",

the other side is "Metric".

We truly do live in an age of technological marvels.



First picture from Mars

Submitted by Rick Hansen N7EGA



I think I had a QSO with this CW K-9 not long ago.

Can you believe it's been a year now.

OARC continues ...



146.52 MHz (2 meter band)

2 meters ~ 6 feet

Originally submitted by Mike Fullmer KZ7O

NEWS YOU CAN USE INFORMATION WORTH KNOWING

WEBSITE BROWSERS

Do you know that with most browsers, if you visit any website during any day and then revisit that same website later in the same day, your browser may NOT display the most recent website page. Instead the browser displays the webpage from the browser cache.

The result is that if that website has been updated during the course of that same day you may not see the updated page.

The solution is simple. Click on the "ReLoad/Refresh/Recycle" icon at the top of your browser window (near the Left & Right Arrow) and the browser is forced to reload the current website page.

Note: A permanent solution to this problem would be to change your browsers default cache settings. Each browser has it's own method of allowing you to do that.

73, Val K7HCP

NEWS YOU CAN USE

OARC members

Did you know ...

Each Wednesday, <u>at a very early</u> 8:00 am, some of the club members meet for an informal breakfast get-to-gather once a week at Warrens in Roy.

5523 S 3500 W, Roy, UT 84067

NOTE: Covid social distancing is observed.

See you there ... if you can get up that early.

73, Val K7HCP

HOBBY NEWS

FCC Protects Spectrum From Software Radio

By Mark Hachman on March 10, 2005

The FCC issued an order on Thursday to prevent software-defined radios from being modified to the detriment of the available spectrum.

The order would prevent software defined radios from being modified by users to affect the RF operating program and keep the technology in line with FCC rules, specifically frequency restrictions in the United States. The order was not immediately available, but was passed unanimously by all five commissioners.

The Federal Communications Commission is afraid that possible software modifications to a programmable radio will allow a savvy user to violate the spectrum restrictions, causing interference. Presenters noted that programmability is already built into some components, such as the handoff recognition used in cellular phones as well as the channel-management schemes and dynamic frequency selection used in wireless LANs.

The order also addresses the technical aspects related to interruptible spectrum leases.

"I think this item and these issues are way more important than is generally recognized," said chairman Michael Powell. "I think that software radios are slowly creeping up on the market. But when they do arrive in full force, you are talking about a massive revolution in radio technology that will enable fascinating new opportunities for the dynamic management of spectrum.

"The greater efficient use of spectrum and some of the problems that have plagued spectrum management and spectrum services for so long will find themselves suddenly resolved and so I would really encourage the world to watch these developments carefully," Powell added.

Now that you have read this notice go back and make note of the date of this posting. So I wonder, have SDR's threatened the spectrum?

Submitted by Rick Hansen N7EGA

HOBBY NEWS

New quantum receiver the first to detect entire radio frequency spectrum



A Rydberg receiver and spectrum analyzer detects a wide range of real-world radio frequencies

A new quantum sensor can analyze the full spectrum of radio frequency and real-world signals, unleashing new potentials for soldier communications, spectrum awareness and electronic warfare.

Army researchers built the quantum sensor, which can sample the radio-frequency spectrum—from zero frequency up to 20 GHz—and detect AM and FM radio, Bluetooth, Wi-Fi and other communication signals.

The Rydberg sensor uses laser beams to create highly-excited Rydberg atoms directly above a microwave circuit, to boost and hone in on the portion of the spectrum being measured. The Rydberg atoms are sensitive to the circuit's voltage, enabling the device to be used as a sensitive probe for the wide range of signals in the RF spectrum.

"All previous demonstrations of Rydberg atomic sensors have only been able to sense small and specific regions of the RF spectrum, but our sensor now operates continuously over a wide frequency range for the first time," said Dr. Kevin Cox, a researcher at the U.S. Army Combat Capabilities Development Command, now known as DEVCOM, Army Research Laboratory. "This is a really important step toward proving that quantum sensors can provide a new, and dominant, set of capabilities for our Soldiers, who are operating in an increasingly complex electro-magnetic battlespace."

The Rydberg spectrum analyzer has the potential to surpass fundamental limitations of traditional electronics in sensitivity, bandwidth and frequency range. Because of this, the lab's Rydberg spectrum analyzer and other quantum sensors have the potential to unlock a new frontier of Army sensors for spectrum awareness, electronic warfare, sensing and communications—part of the Army's modernization strategy.

FUTURE CENTENNIAL FEATURE EVENTS



ATTENTION READERS

January 2021 marks the beginning of a momentous year for the Ogden Amateur Radio Club (OARC). In May 2021, we will mark the 100th anniversary of the founding of the club.

The Centennial committee under the direction of Gil Leonard, NG7IL has already printed and handed out special commemorative certificates to all members

This issue of OARC's newsletter, *WATTS NEWS* continues with a series of special articles and stories about our history authored by our club historian Kent Gardner WA7AHY.

Stay tuned for upcoming features.

100th Anniversary of the Founding of the Ogden Amateur Radio Club





SPECIAL EDITION Volume 3 MARCH 2021

Radio can be many things. It can be fun, mysterious, strange and thought provoking.

Many of us can remember listening to the radio before television was invented. One could hear squeaks, squawks, whistles and other mysterious sounds that we thought could be coming from outer space. Early amateur radio operators were fascinated by what they could hear from catswiskers and crystals. There is a never-ending list of radio signals that could be tuned into from the mysterious "ether".

In one case in 2008, the club received a report from a woman who lived in downtown Ogden near the railroad station. She had a Sony Walkman with National Oceanic and Atmospheric Administration (NOAA) weather-band capability. She had been receiving strange Morse code-like signals and she had them figured to be clandestine or conspiracy-like transmissions and was very worried that they needed to be exposed for what they were.

I went downtown near the train station where she had been and was able to record some Morse code like signals using my handheld scanner. The frequency I picked them up on was near the NOAA weather frequencies at 162 MHz I know CW, but could not make any sense of the content. I let other hams listen, but to no avail. There were seemingly a lot of the letter A's sent, but all else didn't make any sense.

I took my recording to an old-timer friend of mine and he immediately suggested that it was Snotel (SNOwpack TELemetry). I did a scan of the 30-50 MHz band and found some similar Morse code transmissions, but these were more musical in nature where the ones near the NOAA frequency were raspy and buzzy. The frequency I found was on 40.53 MHz.

I found no exact correlation between the 40.53 and the fourth harmonic near 160 MHz, but still settled on the idea that harmonics of 40.53 were added to a frequency in the lady's Sony Walkman to produce the harmonics/frequency images where the "secret" messages were produced.

The main SNOTEL transmitters and receivers and the remote mountain transponders that measure snow levels made up the system. When polled, each transponder in the mountains turns on and with about 100 watts, tries to radio in, via data stream, its stored information, using meteor scatter. The receiver at Little Mountain was at 40.53.

Their setup at the Little Mountain site was bothered by vibrating wire and other interference to the point that they decided to move to somewhere on the Dugway Proving Grounds (also in Utah near the salt flats). Their new frequencies supposedly are to be 41.61 MHz transmit and 40.67 MHz receive. A central computer at the Natural Resources Conservation Service (NRCS) in Portland, Oregon controls the system's operation and receives the data for analyzing.

So, I have drawn the conclusions that the two aren't the same and that they **aren't** Morse code, but are data bursts that we know the SNOTEL was. I am sure that there is nothing clandestine about the signals,

There is another stranger-than-fiction story. Fast-forward to the Union Station's 150th year celebration for the Driving of the Last Spike. Both the following story and the mysterious Morse code signals of 2008 share an "ethereal" connection.

Unknowing Participant

By James Siddle, KG7CJN

In conjunction with the Golden Spike 150th Commemorative, the Ogden Amateur Radio Club had a public awareness booth on 25th Street in Ogden, Utah just at the East of Union Station. After trouping up and down 25th Street looking for the booth, I, my wife, one daughter, and 3 grandchildren without finding the booth, went into Union Station to attempt to find out from the organizers where the booth was.

We asked one of the volunteers and as she led us to the event manager to find the booth's location, she told us her dearly beloved father had been a ham. Whenever she thinks of a "HAM" she is reminded of him. As a child she would drift off to sleep at night listening to him in his shack. She would hear the continuous clickclicking as he "talked" to people all over the world.

Then she continued about a "strange" event that happened. Some 2 or 3 months after his death and funeral, she was awakened one night by the click-clicking sound coming from the area he had kept his radios. She went and looked and there was no one there---- just the clicking noise. So, she went back to bed. The next morning at breakfast she told her family about it. They just poo-pooed her and told her it was a dream. She accepted that and forgot about it UNTIL-----Lo and Behold! About 3 weeks to a month after the "dream", they received a "funny" postcard from someone they did not know. It thanked him for the "contact" received from Dad on the night she had had the "strange dream".

Humm! Could she have truly been the participant of a para-normal QSO contact from another dimension?

Most of you will remember the movies "Frequency" and "Contact." Both were science fiction. "Frequency" may hold a close resemblance to James' story in that the son communicated via an Aurora Borealis sunspot event with his father in the past using old Heathkit equipment that was found in his closet.

The mysterious QSO story stands on its own however; and lends credence to the strangeness of radio propagation and mystery signals.

TNX Kent Gardner, WA7AHY,OARC Historian

FEATURE ARTICLE

by Eugene Morgan WB7RLX



Worked All States Manager

By Eugene Morgan (WB7RLX)

One of the very first goals many ham operators set for themselves is working all the US States. It's a good test of one's equipment, antenna, and most of all, one's patience. At first glance it seems simple to keep track of which states have been worked. Of course the simplest is a written list with each state crossed off as each state is confirmed. Although it can be challenging when the number of states worked and the number of states needed are nearly equal and you find yourself constantly checking the list as you hear CQ's come through your stations speaker. Of course you ultimately reach a point where you know exactly which states you still need. However the irony is that sometimes getting that last state can take as long as it took to get the first 49 states.

The bigger challenge is knowing which states have actually been confirmed. In the old days we simply use the QSL card as our confirmation. And as each QSL card came in we crossed the state off our list. With the introduction of the electronic confirmation systems like QRZ, and LoTW I think it's fair to say that instead of getting easier it's actually become a bit harder to keep track. Especially if you're using multiple confirmation services such as: paper QSL, eQSL, LoTW, QRZ and even one of the many logging program that are available today. So now instead of managing just one source of confirmation, the paper QSL cards of old, we may be managing up to five sources of confirmation.

Fortunately some of the logging programs are able to sync up with the various online systems such as LoTW or QRZ. Unfortunately is it not always automatic. There almost always some kind of a manual process that must be followed in order to keep all these systems in sync. Being an advocate of the KISS principle, "Keep-It-Simple-Stupid" I got rid of my logging program, dropped eQSL and started relying on QRZ and LoTW as my source of truth when it came to confirming states and countries. To QRZ credit that have a very nice system for tracking your progress. However in the heat of the chase and the sometimes rare openings we don't always take the time to login and check our progress. This is where the WAS Manager comes in. It's a simple quick way of checking and you can sync it with QRZ at the press of a button. It's much easier using the WAS Manager during an operating session that using QRZ awards analyzer.

Yes there is still a manual sync process but it is much simplified only takes the press of an enter key a few seconds. In my day to day operations there are two potential sources of QSO's. The first is via FT8, aka C2C or computer to computer contact. The second is what I call P2P contact or person to person with no computer intervention. P2P QSO's can happen from my truck when I'm on the road or from my shack when operating CW or SSB. What I do in those cases is write down the four required criteria:

The Stations Call sign The date and time of the QSO GMT The Frequency The Signal Reports, what I sent him and what he sent me.

These are the four necessary criteria that must match up for a QSO to be confirmed. As to the time there is some latitude in how close the times must match. According to my conversations with the folks at QRZ the times must be within a 30 minute window. I don't know what LoTW's criteria is. With my P2P QSO's I record those in my QRZ log book when I'm online. That may be that same day or as in the case of mobile contacts, it may be as long as a few days later. Regardless the contacts are logged into QRZ. With FT8 I simply upload the new QSO's from my FT8 log to QRZ. I do not describe the process here but I will give you a thumbnail of how I do it.

I copy the new QSO's from the wsjt-x_log.adi to an upload.adi file and then upload that to QRZ. The process is only a few key strokes and only takes a minute or two. After you have done it a few times the process becomes fairly routine and automatic. I general I do this process after each operating session.

After uploading my new QSO's to QRZ I sync my QRZ log with LoTW. Again this is a simple process I'll not document here but if you need some help with it call me. The next step is to sync LoTW with QRZ. Again another simple process that takes less than a minute. There is a very good FAQ area on QRZ where they explain how to do many of the tasks I've touched on in this article. I have found it extremely helpful. You can find it here the QRZ logbook FAW at this link: <u>faq by QRZ.COM</u>

This next step in managing your logs and your WAS quest brings us closer to what this article is actually about, the Worked All States Manager, aka: WASMan. The Worked All States Manager (WASMan) is a simple program that I wrote that helps me to keep track of what states I need regardless if I'm trying to WAS on a given band or just WAS in general. The program scans a local copy of your QRZ log and then shows you what states you still need to confirm. You can select a particular band or all bands. Using the arrow keys you highlight the band of interest and it will display a list of the states you need for that band. If you select *"All"* it shows you what states you need regardless of band. The screen shot below is a list of the states I still need for WAS on 160 meters.

1 Select WAS Manager By Eugene Morgan WB7RLX v2021.03.02 – 🗆 🗙											
10m	12m	15m	17m	20m	30m	40m	80m	160m	A11	Updat	te
LOUI MASS MICH NEW NORT RHOD TEXA VIRG WEST	SIANA ACHUS IGAN ASKA HAMPS MEXIC H DAK E ISL S (TX INIA VIRG	(LA) ETTS (MI) (NE) HIRE O (NM OTA (AND () (VA) INIA	(MA) (NH) ND) RI) (WV)								
Co	nfirm	ed: 3	9 Un	confi	rmed:	11					

Installation

Required: XML Enabled QRZ account or higher, I think the cost is about \$30 a year. If you are unsure if you have the correct type of QRZ account go to the following link and test your account: <u>QRZ XML Account Checker</u> You can also go to the following URL to find out more about an XML QRZ account: <u>https://www.qrz.com/page/xml_data.html</u>

You will also need a copy of your QRZ Logbook API Key. Don't stress I will tell you exactly where you can find it on QRZ. If you have a log book you already have a Logbook API Key. To get this key login to QRZ and go to your QRZ Logbook. Select "*Settings*". If you look on the left hand side of the screen you will see an area labeled **Logbook Info**. If your look down you will see the words **API Key:** in bold black letters. Next to that in bold green letters you will see your log book API key. In will be in the form of: **AAAA-BBBC-CCCC-DDDD**. That is the key you need. Write it down or you can use the Windows copy feature and copy it to the Windows clipboard. That key is what the WAS Manager uses to tells QRZ which logbook you want to download. You will need this key when we configure the desktop shortcut.

Installation Instructions:

The installation is pretty simple but if you need some help give me a call: (801) 540-4907. I'll be glad to walk you through it and help you with downloading your QRZ log file.

- Download the program from the OARC web site. It should be located in the down load area on the OARC web site see: <u>http://ogdenarc.org/downloads.html</u>. Look for *Member downloads by Eugene Morgan*.
- After you have downloaded the setup utility run it. By default the program will install the program into your Documents folder. If you are running the FT8 Assistant **DO NOT** install the WAS Manager in the same folder. The QRZ log book files have a slightly different format. I will be addressing that in the next release of the FT8 Assistant.
- The next step will require that you configure the FT8 Assistant's window size and add you call sign and Logbook API key in the WAS Manager desktop shortcut. After running the installation on your desktop you will find the WASMan icon, it will look like an American flag. *Right Click* on it and select **Properties**. In the properties window you will see a number of tabs. It should be defaulted to the **Shortcut** tab. This first option is titled "**Target:**" On that line add a space and your call sign and your QRZ API Key, see example A below. Note that in some cases the target line may be enclosed in quotes. If it is your call sign and the QRZ key <u>must</u> be outside of the quotes as in example B:

Example A: c:\users\BigAl*WASMan.exe N7SHA ABCD-FB45-23DF-AAFB* Example B: "c:\users\Big Al*WASMan.exe" N7SHA ABCD-FB45-23DF-AAFB*

Next click on the *Layout* tab. In the middle of the *Layout* tab window you will see a box labeled *Windows Size:*. Set the Width to 60 and the Height to 43. Then click on the "*Apply*" button. That's it you are done. You are ready to now get serious about working all of the states.

Potential Warning from your anti-virus program: When executing the program for the first time you may experience a warning from Microsoft Defender or your anti-virus software warning you about this program. Don't worry. In the case of Microsoft Defender just click on the "*More info*" link then click on

the "*Run anyway*" link. This only occurs the very first time the program is launched and only on some computers. I do take extreme precautions to make sure that none of my programs are infected. However, if you are concerned use the scan feature in Windows Defender to make sure there are no hitchhikers included in the installation payload.

Running the Program: The first time you run the program it will automatically download your QRZ log book to the same folder the WAS Manager was installed. This process may take a moment depending how large your QRZ log file is. Running the program is pretty simple. Using your arrow keys highlight the band of interest. The program will display a list of states not yet confirmed for the band of your choice or if you selected "*ALL*" it will show you what states you need for the basic WAS award. To update your QRZ log file select "*Update*" and then press enter. To end the program using your mouse click on the "*X*" in the top right corner of the WAS Manager Window.

Please note that the WAS manager does not use the mouse to select a menu option. The author has found the keyboard to be a much faster way of selecting options than using the mouse. Maybe that's just comes from years of too many years of typing.

In Closing: I hope you find the WAS Manager as useful as I have for keeping track of my WAS progress. I long ago achieved WAS and now I'm trying to get WAS on all bands starting with 160 meters. I hope that as band conditions improve I'll be able to achieve WAS on the higher HF frequencies and I expect the WASMan will be a big help in achieving that goal. If you have any questions or if you have some ideas about additional features or improvements give me a call. If you find any bugs please do contact me with the specifics. I hope you enjoy using my program.

73,

Gene

(WB7RLX)

by member Eugene Morgan WB7R	LX
Antenna Best Practices (pdf)	
Building An End Feed Antenna (pd:	f)
An Antenna Autopsy (pdf)	
Prefix Locator Windows (zip) NEW!	
FT8 Assistant Windows (zip) NEW!	
WAS Manager Windows (zip) NEW!	

OARC Downloads page

GUEST ARTICLE

by Dan KB6NU



It's not a Begali, but....

One of the questions I'm most frequently asked is, "What is a good paddle for a beginner?" My usual answer to this question is to look for a used Bencher BY-1 at a hamfest or on one of the online venues. You used to be able to get them for \$60 or less. Now, however, there are few hamfests and the price has gone up. Now, used Benchers are close to \$80.

Another option that newcomers might consider is the CW Morse paddle (shown in photo below). They cost \$60 with a steel base (\$43 without), and are available from 3rd Planet Solar and Gigaparts. I purchased one recently, and used it for a couple of days. To be honest, I was prepared to hate it, but it actually works pretty well. It's not a Begali, but it's good enough that I'd recommend it as a starter key.



These keys are mostly made from 3D-printed plastic parts. You can tell this from the finish. While not as bad as some 3D-printed parts, they do look a little rough. I wouldn't be surprised if they go to molded parts, though, at some point. In high volumes, it has to be cheaper to mold the parts rather than print them.

The key does have metal parts where it counts, though. The contacts are all brass, the base is made from 1/2-in. cold-rolled steel, and the levers pivot on sealed ball

bearings. My key weighed 22.5 oz (1.4 lbs.), and was quite stationary on the silicone mat that I use for my keys. The Begali is, of course, a lot heavier at nearly 60 oz. (3.75 lbs.).

A spring between the levers provides the tension. Two screws allow you to adjust the contact spacing. Unlike the Begali, whose adjustment screws have a very fine thread to give you plenty of adjustability, these screws are standard thread screws. What this means is that it can be a bit tricky to set the contact spacing. The screws are spring-loaded to prevent the adjustment from changing, but the springs don't seem to be very beefy, and I can see where the adjustment might change after a lot of use.

The ball bearings give the key a nice action. During my tests, I had the speed cranked up to 23 wpm, and this key performed well at that speed. One thing I didn't like very much is that the arms tend to flex more than I like, but I actually have the same problem with the plastic Begali finger pieces. That's why I use the aluminum finger pieces on the Begali.

Overall, though, I'm quite happy with this key. And, for sixty bucks, which is about one-fifth of the price of a new Begali Magnetic Pro, I can certainly recommend this key to newcomers getting started in CW.

Dan Romanchik, KB6NU, is the author of the KB6NU amateur radio blog (KB6NU.Com), the "No Nonsense" amateur radio license study guides (KB6NU.Com/study-guides/), and often appears on the ICQPodcast (icqpodcast.com). When he's not testing new keys, he teaches online ham radio classes and likes to work special event stations and state QSO parties.



ARRL to FCC: Additional Volunteer Examiner Coordinators Not Needed

02/10/2021

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 <u>comments</u> on February 4 were in response to a January 5 FCC <u>Public Notice</u> in WT Docket 21-2 seeking input on possible expansion of the VEC pool.

"In response to the Commission's *Notice*, ARRL reviewed the amateur examination numbers for the past 5 years, including the COVID-19 pandemic period," ARRL said in its comments. "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."

Multiple web-based exam opportunities are available across the US, even on short notice, and in-person examinations are available in many areas where local regulation and special safety requirements allow.

"It has never been easier," ARRL asserted, noting that exam sessions often are available within 2 days but rarely more than 7, if taking advantage of a remote, web-based exam opportunity.

"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.

ARRL VEC — the nation's largest — has 30,000 accredited VEs, with 11,000 of them regularly participating in exam activities on a weekly or monthly basis.

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. New FCC licenses issued in January 2021 numbered 2,838, compared with 2,058 for a year earlier. Upgrades were also up significantly — 920 in January 2021 to 554 for the same month last year.

"The 14 separate and independent FCC-approved VECs readily accredit additional VEs whenever and wherever needed," ARRL concluded. "Increasing the number of individual VECs would have no discernible benefit."

Instead, 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.



FCC Issues Enforcement Advisory: Radio Users Reminded Not to Use Radios in Crimes

01/17/2021

The FCC has released an Enforcement Advisory for licensees and operators across radio services.

[Complete text of FCC Enforcement Advisory follows.]

FCC ENFORCEMENT ADVISORY

DA 21-73

Released: January 17, 2021

WARNING: AMATEUR AND PERSONAL RADIO SERVICES LICENSEES AND OPERATORS MAY NOT USE RADIO EQUIPMENT TO COMMIT OR FACILITATE CRIMINAL ACTS

The Enforcement Bureau (Bureau) of the Federal Communications Commission issues this Enforcement Advisory to remind licensees in the Amateur Radio Service, as well as licensees and operators in the Personal Radio Services, that the Commission prohibits the use of radios in those services to commit or facilitate criminal acts.

The Bureau has become aware of discussions on social media platforms suggesting that certain radio services regulated by the Commission may be an alternative to social media platforms for groups to communicate and coordinate future activities. The Bureau recognizes that these services can be used for a wide range of permitted purposes, including speech that is protected under the First Amendment of the U.S. Constitution. **Amateur and Personal Radio Services, however, may not be used to commit or facilitate crimes.**

Specifically, the Bureau reminds amateur licensees that they are prohibited from transmitting "communications intended to facilitate a criminal act" or "messages encoded for the purpose of obscuring their meaning." 47 CFR § 97.113(a)(4).

Likewise, individuals operating radios in the Personal Radio Services, a category that includes Citizens Band radios, Family Radio Service walkie-talkies, and General Mobile Radio Service, are prohibited from using those radios "in connection with any activity which is against Federal, State or local law." 47 CFR § 95.333(a).

Individuals using radios in the Amateur or Personal Radio Services in this manner may be subject to severe penalties, including significant fines, seizure of the offending equipment, and, in some cases, criminal prosecution. 47 U.S.C. §§ 401, 501, 503, 510.

Media inquiries should be directed to 202-418-0500 or MediaRelations@fcc.gov.

To file a complaint with the FCC, visit <u>https://consumercomplaints.fcc.gov</u> or call 1-888-CALL-FCC. To report a crime, contact your local law enforcement office or the FBI.

To request materials in accessible formats for people with disabilities (Braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at (202) 418-0530 (voice), (202) 418-0432 (TTY).

Issued by: Chief, Enforcement Bureau

SWAP ITEM # 218

FREE:

A box of tape measure yagi <u>parts</u> that I would like to donate to the club.

73, John Metcalf KE7VVT

CONTACT: OARC Webmaster email w7su@arrl.net



SWAP ITEM # 217

WANTED:

Good morning Ogden Armature Radio Club,

I'd like to start using the 6 meter band. Wanted to see if anyone in the club had for sale a 6 meter antenna (or even parts to build one) for a base station.

73,

CONTACT: Mark Hutchinson, KJ7RIZ, 720-917-8165,

electronsworking@protonmail.com

SWAP ITEM # 216

Kenwood TH-22AT and TH-28A

Folks I have two old hand held's to give away. They both work when plugged into their power supplies. The batteries should be replaced. Includes Manuel's.



For free: 0

CONTACT: Reed Kotter, K7PRH, lskotter@q.com, 801-388-7848

SWAP ITEM # 214

Kenwood MC-60 Desk Microphone



Cost New: \$120 to \$160

For Sale: \$40

Contact: Kent Gardner WA7AHY, wa7ahy@arrl.net

SWAP ITEM # 213

MFJ-299 w/RJ45 data plug to 8 pin round plug for Kenwood



	8 Pin Round Mic Plug	8 Pin Modular Mic Plug
ICOM	MFJ-5397I	MFJ-5397MX
Kenwood	MFJ-5397K	MFJ-5397MX
YAESU	MFJ-5397Y for MFJ-297 MFJ-5399Y for MFJ-299 MFJ-5399Y2 for MFJ-299 and FT-847	MFJ-5397MY for MFJ-297 MFJ-5397MX for MFJ-29

Has switchable impedance for mike from High-Medium-Low. Also has VU Meter, Equalizer w/ output level, PTT and Lock and Up/Down frequency change.

Cable is for Kenwood. Icom and Yaesu cables can be ordered online. \$19 to 24\$

Price new: \$120

For Sale: \$40

Contact: Kent Gardner WA7AHY, wa7ahy@arrl.net

SWAP ITEM # 209

Hi Utah ARRL Club Contacts,

I have a pneumatic Ham Radio Antenna at my home in Layton, UT.

Would you know of anyone who might be interested in it or have a referral for any resource to sell it?

>>> \$100 OBO <<<

Please feel free to share my contact info: Thank you,

Christopher Robinson: 303-257-4454 pangeaao@hotmail.com

Esther Robinson: 720-577-8704 estherdrobinson@hotmail.com

Mast height: ~16 ft (above ground), ~ 13.5 ft to first knuckle Mast circumference: 20.5 in Four tiered, presumed extended height ~ 40 ft Anchored in ground



CLUB REPEATER NEWS





Scott Willis KD7EKO

Mike Fullmer KZ7O

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

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

Join or Renew your membership now!

Joining & Renewal is easy. On the club website home page click Join/Renew tab and fill out the membership form. You can pay using your PayPal or mail a Check or Money Order to the club PO Box listed. Or print a hardcopy of the membership form, fill it out and mail it to the PO Box along with your payment. Better yet, Come to a club meeting and bring the completed membership form with you.

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.

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.

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 prepaid in advance for each badge ordered and specify Call Sign and First Name.

Visit the club website home page Join/Renew tab and fill out a membership application form to order your badge.

Or come to our next club meeting or event and make contact with our club treasurer via club website email to order your club badge.

Club Badges



UNCLAIMED OARC CLUB BADGES

New members have ordered pre-paid club badges that have not been claimed. You can claim your badge at any club function, meeting, activity or event or contact the club badge czar / club treasurer J. Siddle KG7CJN via club website email. If you are reading this and you are one of the following hams, please collect your badge. Even if you are not reading this, come collect your badge.

NO UNCLAIMED OARC CLUB BADGES...

Not sure how to handle this. It has never happened before!

OARC YAHOO GROUP



Did you know that OARC has a Yahoo Group? Discontinued after 15 December 2020 .. sorry

We occasionally communicate with our OARC members via the Yahoo Group. Receive email notices regarding upcoming club meetings and future enewsletter 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

icon at the bottom 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

You Tube meetings...

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

ANNOUNCEMENTS

Next Club Meeting:

3rd Saturday of each Month

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

Meeting/Activity:

See notices above

Talk-in: - 448.600 (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 (*)	125 DCS	Mt Ogden (w/WiresX)			
448.600-	OARC (*) "talk-in"	123.0	Mt Ogden			
146.000		102.0				
146.820-	UAKC (*)	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

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	3 rd Thursday 5:30 pm	WSU Blding #4 Room ?
	e.com/forum/#! forum/wsuarc		Ogden Utah

LOCAL AREA NETS				
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 @ 6:30 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 @ 7:00 PM	Am-Con Northern Utah	448.600 -123.0		
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 @ 7:00 PM	OARC - 10 Meter Net	28.385 MHz USB (all hams invited)		
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 (W 8:30 PM	Davis AKLS	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" web site

Webmaster: Val Campbell K7HCP

President: Dave Mamanakis KD7GR	VE Liaisons:	Richard Morrison W7RIK
		Jason Miles KE7IET (IT)
Vice President: Justin Hall KB7LAK	Repeater Engin	eers: Mike Fullmer KZ7O
		Scott Willis KD7EKO
Secretary: Barbara Siddle WB7FWW		
	Photographer:	Tim Samuelson KE7DOA
Treasurer: J. Siddle KG7CJN	Asst Photograp	her: Rick Hansen N7EGA
	QSL Manager:	Pete Heisig WB6WGS
Program Director: Mike Wilde KJ7HEX	Historian:	Kent Gardner WA7AHY
Activity Director: Todd Shobe KW7TES	Equipment Ma	nager: Val Campbell K7HCP
	Club Call Sign T	rustee: Larry Griffin AD7GL
	Club Elmer:	Stan Sjol W0KP
"WATTS NEWS" e-Magazine		
	Centennial Cor	mmittee Chair:
NL Editor: Val Campbell K7HCP		Gil Leonard NG7II

Gil Leonard NG7IL

Advisors: **Mike Fullmer KZ70 Kent Gardner WA7AHY** Kim Owen KO7U Larry Griffin AD7GL **Gil Leonard NG7IL Jason Miles K7IET**

