



WATTS NEWS



The Best of Amateur Radio

OARC e-Magazine

www.OgdenArc.org

AUGUST 2020

Next Club Meeting/Activity

August Activity



Dave Mamanakis KD7GR

President



Mike Taylor KE7NQH

Vice President



Barbara Siddle KB7FWW

Secretary



J. Siddle KG7CJN

Treasurer



Gil Leonard NG7IL

Program Director



Bob Smith KG7EIZ

Activity Director



Val Campbell K7HCP

Webmaster/NL Editor

NOTICE

Topic: Steak Fry, Membership Renewals, Officers Elections, Auction

Date: 3rd Saturday 15 August 2020

We need to know IF, or if NOT, you plan to attend the OARC event this year!

We need to know ASAP, as we struggle to make plans for this event during the current Covid-19 situation.

Please send an email to the OARC website email address (w7su@arrl.net), or any officer or board member.

State your intentions to attend or not to attend.

Do it today. Time is running short.

Check OARC web site for latest Details and MAP of club meetings location.

<http://OgdenARC.org/>

73, K7HCP (Val Campbell)

PREVIOUS CLUB MEETING/ACTIVITY

JULY Activity

OARC "T"-Hunt

3rd Saturday 18 July 2020

8:00 AM

NEXT CLUB MEETING/ACTIVITY

AUGUST Activity

OARC Steak Fry

Membership Enrollment

Elections & Auction

3rd Saturday 15 August 2020

5:00 PM

PREVIOUS MEETINGS PICS

Photos by ... photographers have been quarantined

“Previous Meeting - pictures”



"T" Hunt winner - Ray White K7RFW

More photos located on the club web site home page.



OARC COMING EVENTS



Next Activity

OARC Steak Fry

Membership Enrollment

Elections & Auction

See the following page for details

Next VE Test Session

1st Wednesday 07 October 2020 @ 6:00 PM

Dave's Rag Chew



Dave Mamanakis KD7GR

My Good Friends!

I hope all is going well with you, you know, with the whole Coronavirus thing and all! My problem has been some boredom from repetition and part of that is yardwork... ug. But I have been taking some time to learn some new things... and I'd like to share one of those things with you in this month's Rag Chew.

But first, and I know, we haven't had that break in the clouds to give us a clear way forward, so we need to talk about the Yearly Event, the Steak Fry!

We do plan on having the Steak Fry. The location we have traditionally picked does have enough room to properly distance. So I hope you will all join us.

But, because of the "great unknown" we would like to know how many plan to join us for the Steak Fry so we know how many steaks to buy. Please, email us or text us to let us know if you plan to come!

Kd7gr@arrl.net or 801-710-0365.

Our Treasurer, J Siddle (KG7CJN), has asked that we not wait until the Steak Fry to Renew our Memberships!

We have the ability to do ON LINE Joining and Renewal!

<http://ogdenarc.org/join.html>

You can also Mail in a Check... all the information is at the link above!

We will have someone at the Steak Fry to take your Membership Dues, but because we aren't used to doing it, it might take longer than using PayPal.

We would still like to have our Auction... so if you decide to skip the food, we'd like to see you after for the auction!

... continued ...

Oh, and don't forget, it's election time! If you want to be considered for a position on the OARC Board or support staff, NOW is the time to nominate someone (or even yourself)! This club relies on the support of its members! To do Nominations, send us the name and position you think they'd be good at.

NO! DON'T WORRY! We won't hold any election for any position for someone who has no idea they've been nominated! We'll always talk to the individuals nominated and see if they'd be willing to help! You won't get railroaded! It is perfectly safe!

Unless you are nominating yourself, then, all bets are off!

What positions, you ask?

Here is what we have, currently:

President: Dave Mamanakis (KD7GR)

Vice President: Mike Taylor (KE7NQH)

Secretary: Barbara Siddle (KB7FWW)

Treasurer: J. Siddle (KG7CJN)

Program Director: Gil Leonard (NG7IL)

Activity Director: Bob Smith (KG7EIZ)

There are other positions, if you are interested in volunteering!

Please check out <http://ogdenarc.org/officers.html> and see if there is anything you'd like to help with!

If you need more information, just ASK. Maybe we'll spend a little time on it via the Ham & Eggs Net on Tuesday!?

September is normally the Tri-County Swap Meet. I haven't heard, but we should assume it will be on as normal in Bountiful. I'll keep you updated!

Thank You all who joined us for the Fox Hunt! We had a good time and a good breakfast! Ray, K7RFW won, showing up and finding the Fox.

I would like some feedback... should we do more of these Hunts in the future? They don't need to have a prize associated, or breakfast... but it would be good practice and could be fun! Thoughts?

Ok, thank you for listening to my ramblings. Now, on to the Rag Chew!

--Dave

Dave's Rag Chew follows next...

Dave's Rag Chew

How many have heard of APRS?

The Automatic Packet Reporting System (APRS) is an Amateur Radio based system for Real Time Digital Communications. Being Digital, it sends "data".

What kind of data? GPS information, Weather Station Telemetry, Text Messages, Announcements, Queries, Etc.

It can be used to track objects, or in search and rescue (and other disaster) scenarios, or to just communicate.

It has been around since the '80s!

Many of us use it for fun, I guess. I've had it going in my truck for a little bit now. It shows people where I am.

How? At <http://aprs.fi>. It is a Google Maps based system that shows real time tracking information for APRS in your area. If you want to find someone, there is a "Track Callsign" box on the Right.

I knew my radio, the FEM-400XDR, "could" do APRS, and I set it up to work a while back... but there are some interesting settings and (in my opinion) some deficiencies in the menu system...

But I decided to play with it some more. I have the GPS modem turned on, and have it sending out a "Truck" symbol. I still need to give it a message to send out, but haven't gotten that far yet.

Text Messaging on your phone (SMS) is very similar to what APRS offers you. Yes, it can be a pain to "type out a message"... because you do it via the touch interface, so PLEASE don't do it while DRIVING! But the point is, you CAN do it!

APRS works by "beaconing". It collects some data via whatever you have it set for, then sends out all that information, including your call sign (like many Digital Systems, MMDVM, etc) so you don't have to worry about your ID.

"Smart Beaconing" can be used which only sends a beacon when the telemetry changes beyond a certain point. I.e. you speed up, slow down, turn, or every couple minutes while traveling straight.

Regular Beaconing will just send out all that information every few minutes.

Now, I'm not so sure how it all works from radio brand A to radio brand B, I have the Yaesu products (FTM-400XDR and the FT-2D), but I understand the setups in other radios is very similar.

AND, you don't even need to spend all that money on a radio that supports APRS...

Do you have a Cell Phone? Check out the App "APRS Droid" (or others). You can set up APRS on your Cell Phone. It doesn't "radio out" your APRS information, it uses the internet via your Data Plan. But the effect is the same. For you with iPhones, there are a couple options "APRS Mobile" and "Pocket Packet". Read the reviews, pick an app you like.

Or, if you like to do projects, like a n MMDVM, you can build an iGate, (Internet Gateway) for APRS. It is a ONE WAY, Receive, for APRS data. You'll need to search out one of several web sites that tell you the "How To" of it, but from my understanding you might only need an MMDVM. I believe you can also make an APRS Digipeter.

So... how does it work? The "National APRS Frequency" is 144.390 MHz. Your radio may use the A side or the B side, or might be configurable to use either side for APRS. But, here is the Kicker. With beaconing, your radio will send out the APRS data, regularly, on whatever frequency you choose... and anyone listening to that frequency, well, their Radio, anyway, can receive your APRS data and decode it. This means, if you have the local 448.600 repeater on that side, your beacon will hit the repeater and be bounced to everyone listening to the repeater. This can be a little annoying to most people. Remember those old acoustic modems? That is what it sounds like. Just a second's worth of screeching noise every few minutes. But, at least everyone's radios will decode your location information!

This could actually be useful. If you are out camping, hunting, riding ATVs, hiking, or any other activity where you might be separated from others in your group, 70cm is great for those types of communications. So, if everyone picks a simplex frequency and everyone has APRS, everyone knows where everyone is. No getting lost, unless you end up in a "radio black hole" or run out of power. The APRS information includes GPS data, and your radio decodes that, compares it to your location data, and gives you a heading. Yes, Really! APRS is NOT limited to VHF/UHF FM. You can use it on HF, SSB, etc.

There is one last thing... and I didn't even know this was a thing...

When you program in your callsign, to let others know it isn't "you" you, but your "APRS you", you have to put a number designation after your call sign:

- 0 Your primary station usually fixed and message capable
- 1 generic additional station, digi, mobile, wx, etc
- 2 generic additional station, digi, mobile, wx, etc
- 3 generic additional station, digi, mobile, wx, etc
- 4 generic additional station, digi, mobile, wx, etc
- 5 Other networks (Dstar, Iphones, Androids, Blackberry's etc)
- 6 Special activity, Satellite ops, camping or 6 meters, etc
- 7 walkie talkies, HT's or other human portable
- 8 boats, sailboats, RV's or second main mobile
- 9 Primary Mobile (usually message capable)
- 10 internet, I gates, echolink, winlink, AVRS, APRN, etc
- 11 balloons, aircraft, spacecraft, etc
- 12 APRStt, DTMF, RFID, devices, one-way trackers*, etc
- 13 Weather stations
- 14 Truckers or generally full time drivers
- 15 generic additional station, digi, mobile, wx, etc

I may have to go check mine on the HT and Mobile (even my MMDVM) to make sure they have the proper numeric designations.

Just remember... there is something for everyone in Ham Radio. APRS is "just another one of those things" you can do!

We'll hopefully see you all at the Steak Fry, or at least, on the Repeater!

--Dave (KD7GR)

CLUB NEWS

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 W0KP, stansjol@xmission.com

CLUB NEWS

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

CLUB NEWS

OARC Membership Drive

August is OARC membership renewal month.

Memberships are current from August of the current year thru to August of the following year.

We coordinate membership renewals either of two ways:

- 1. Attend the OARC Steak Fry activity event held on the 3rd Saturday of August each year and renew your membership as you arrive.**
- 2. Renew in advance by using the OARC online membership Application Join/Renew form. You can pay your dues online using the optional PayPal process or by mailing a check or money order to the club PO box.**

Be sure to join or renew you membership so that you are eligible for a \$FREE steak at the Steak Fry and to ensure that you are eligible to participate for the events Grand Door Prizes.

Thank you.

OARC officers and board members.

CLUB NEWS

WANTED

Nominations for OARC Club Officers (2020-2021)

August is OARC "Officers Election" and "Membership Renewal" month ...

Elections will take place at the OARC steak fry meeting 3rd Saturday August @ 05:00 pm

Volunteer yourself or Nominate any member in good standing that you would like to see lead OARC to new highs next year to serve from September of this year thru August of the following year.

eMail nominations to OARC email nomination committee (w7su@arrl.net) or contact any club officer.

Remember to include the following: "Club Office", "Nominee Name", "Your Name".

CLUB NEWS

NEWS YOU CAN USE?

J. Siddle, our club treasurer, has started sending the following “Welcome to OARC” email to all members that join/renew through the new OARC online membership application process.

Using the online process applicants can pay their membership dues using our new OARC PayPal process or can mail a check or money order to the club PO box.

Name

Welcome to Ogden Amateur Radio Club.

Your membership is paid through August 2021.

As of this date your membership information has been entered into the club roster at our website - ogdenoarc.org - where the monthly newsletter is published and future events are announced.

Many of the major tabs, such as “About/History” and “Downloads”, lead to an array of additional information which you may find of interest.

We hope we meet your expectations as an amateur radio information and learning source.

We look forward to your participation in the club. If there is anything we can assist you with or if you see any areas of the club that might be enhanced for the benefit of all please let us know.

J. Siddle, OARC Treasurer

CLUB NEWS

Repeat

DID YOU KNOW?

For you to receive OARC correspondences such as club emails, meeting notices and activity notices you must sign up at OARC Yahoo Group.

This is because OARC does not maintain a email CC: list but instead uses the OARC Yahoo Group as an email forwarding service to distribute our emails to members. You can be assured that you will not receive but a very few, but very important, email per month.

It is easy, just create a user name, and specify your email address. Be sure to choose the “email option” to receive OARC email notifications.

OARC has 159 Yahoo Group members. You should be one also.

At the bottom of the OARC home page is the OARC Yahoo Group icon that you can use to link to the OARC Yahoo Group .



[Join OARC Yahoo Group](#) Receive club related notices and information

CLUB NEWS

Preliminary 2020 OARC Field Day Score

Field Day Entry

http:

Bonus Points:

Bonus	Points Status
100% emergency power	200
Youth participation (1 x 20, max of 100)	20
Entry submitted via web	50
Total bonus points	270

Score Summary - Cabrillo log/dupe sheet file: W7SU.dup

	CW	Digital	Phone	Total	
Total QSOs	0	0	227		
Total Points	0	0	227	227	Claimed Score = (QSO points x power mult) = 454

Band/Mode QSO Breakdown:

Band	CW QSOs Pwr(W)	Digital QSOs Pwr(W)	Phone QSOs Pwr(W)
160m			
80m			5 100
40m			129 100
20m			93 100
15m			
10m			
6m			
2m			
222			
432			
Other			
Satellite			
GOTA			
Total	0	0	227

CLUB NEWS

OARC Field Day Score w/previous year comparisons

Previous Field Day Comparisons

Year	Location	Catego- ry	Section	Power Class	Partici- pants (*)	CW QSOs	Digital QSOs	Phone QSOs	Total QSOs	Total Score
2020	West We- ber	2A	UT	100 w	26	0	0	227	454	724
2019	Marriott	2A	UT	100 w	58	56	0	231	287	1676
2018	Marriott	2A	UT	100 w	20	66	0	339	405	1312
2017	Marriott	2A	UT	100 w	18	42	45	120	207	758
2016	So Ogden	2A	UT	100 w	16	101	0	209	310	1472
2015	Marriott	2A	UT	100 w	43	71	0	264	335	1422
2014	Marriott	2A	UT	100 w	45	54	0	220	274	1006
2013	Marriott	2A	UT	100 w	29	131	0	300	431	1874
2012	Marriott	2A	UT	100 w	25	0	0	395	395	1870
2011	Uintah Park	2A	UT	100 w	40	75	5	178	258	1656
2010	WOKP Ranch	2A	UT	100 w	44	61	7	299	367	1120
2009	WOKP Ranch	2A	UT	100 w	10+	0	0	610	610	1470
2008	WOKP Ranch	2A	UT	100 w	32	0	0	443	443	1456
2007	Eden	2A	UT	100 w	12+	0	0	427	427	1144
2006	Eden	2A	UT	100 w	12+	123	0	478	601	1798
2005	Eden	2A	UT	100 w		6	0	282	288	588

Note:

- (*) Some years "Participants" = numbers of operators/loggers.
Other years "Participants" = number of attendees (excluding dinner time).

CLUB NEWS

Ham Shack Photos

Last month the unidentified Ham Shack Photo was ...

Mike Fullmer KZ7O



CLUB NEWS

Ham Shack Photos

The next in the series of unidentified ham shacks is shown below.

Do you know whose ham shack this is?



CLUB NEWS

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

801.389.0690



So How About it?

Send me your Ham Shack Photos soon.

FEATURE ARTICLE by Alan N7SHA

Made contact with the Ham Station on board my old home when I was in the US Navy the USS Midway.

20M (14.320)

N7SHA Alan

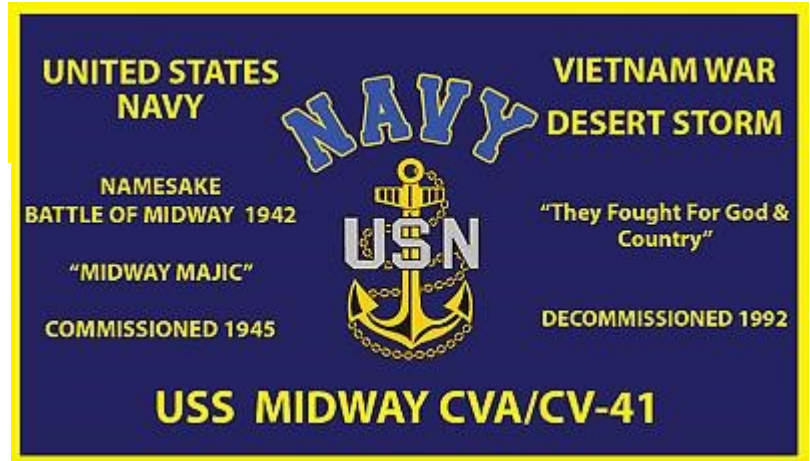


N7SHA
Alan Parks
Ogden, Utah USA

DN-41



73





USS MIDWAY CVA41

In the early 1960's I served in the United States Navy on board the aircraft carrier USS Midway. The conflict was just starting in the Far East at that time. We spent a lot of time in the South China Sea. I'm a Vet Nam veteran.

I had joined the Navy for three reasons. First I felt I had an obligation to my country, second I wanted to see some of the world, and thirdly I wanted the GI Bill benefits so I could get an education. I accomplished all three.

The USS Midway is the last of the oil burners prior to the now nuclear powered ones. It was commissioned in 1945 and decommissioned (out of service) in 1992. It is now established as a world class museum in San Diego, California. While on board I worked in the engineering department (A Division, Steam Heat and Catapults).

On board the ship is a ham radio station (N16IW) manned by past crew members who are now licensed hams. Saturday 7-11-2020 on 20M, I made a contact with their station! They are on 14.320 every second Saturday of month from 0900-1400 PST. Made my day!

N7SHA Alan



Little Mountain 448.575 Repeater Report

The 448.575 repeater is no longer DEAF!

Over the last several years, the 448.575 has slowly deteriorated to the point of not being useful. Despite the continued efforts of our repeater engineers, there was an unseen gremlin in the system that prevented reliable use of this system. Thanks to the unending determination of these same engineers, I am happy to present this report based on my recent personal experiences.

The importance of the 448.575

The 448.575 is the only repeater of the 4 - W7SU repeaters that has an operational autopatch system. This system allows direct radio to phone operation when outside of the cell tower service radius. Even though the now common cell phone usage by the general population has all but eliminated the need of an autopatch phone system, it is now useful again to our emergency responders that find themselves outside of cell coverage.

My general goal whenever I am outside the Weber and Davis County area

Ever since I was first licensed, I have marveled at the repeater coverage we enjoy in the state of Utah. I have yet to travel anywhere in Utah, on or off road, where I have not been able to get into an operational repeater system. I constantly find vast areas without any cell coverage. That's not to say it's easy, it takes a little thought, planning, and knowledge.

The knowledge is easy. A good map of the state and a copy of the Utah VHF Society repeater book will provide you with everything you need to know in order to find one or more repeaters you can make contact with.

Whenever I leave the area, I will test my ability to reach any repeater within the range of my equipment. Sometimes that means I have to position myself in a more optimal position to make contact. My experience to date has proven it is not too difficult, but occasionally, it does take a little effort.

How I happened to be listening and what happened next?

Saturday, July 11, 2020 found us in Rush Valley just south of the little town of Vernon on some random dirt road. Having been in the area several times before, I knew there were several repeaters in range so I hadn't changed the channels on my Kenwood TM-D710A. We weren't too far from State Road 36 in Tooele county when I received a phone call from an old friend. I stopped the truck so we could talk, I didn't want to lose cell service. While we were stopped, I heard the 448.575 repeater ID. I was kind of shocked but experience told me that it is not unusual to hear repeaters that I could not reach. We continued on our way at the end of the call, my mind starting to wonder.

An hour later with a little thought and planning I wondered if we could get into the 448.575. I knew exactly where I wanted to stop and was quickly rewarded by hearing Jerry, KG7IGW, testing the auto patch. I picked up the microphone and threw out my call, not really expecting to be heard. Instantly, Jerry returned my call. There was a lot of noise and static but he was still readable. I just assumed we were on the edge of the repeater coverage. As we chatted and I indicated our locations, Scott, KD7EKO, joined us. Scott gave me a full quieting report. It turned out Jerry was on a handheld in a shadow of the 448.575. Well, OK. I checked my radio and it was set to the high-power setting, about 50 watts. Not bad I thought, how about medium power? Scott came back with a full quieting report again. Now I am a little in dis-belief, so how about low power? Same report from Scott, full quieting! Now we are both not really believing what was happening.

I mistakenly assumed my radio put out 50, 25, and 5 watts on the UHF band. A review of the manual indicated a power output of 50, 10 and 5 watts.

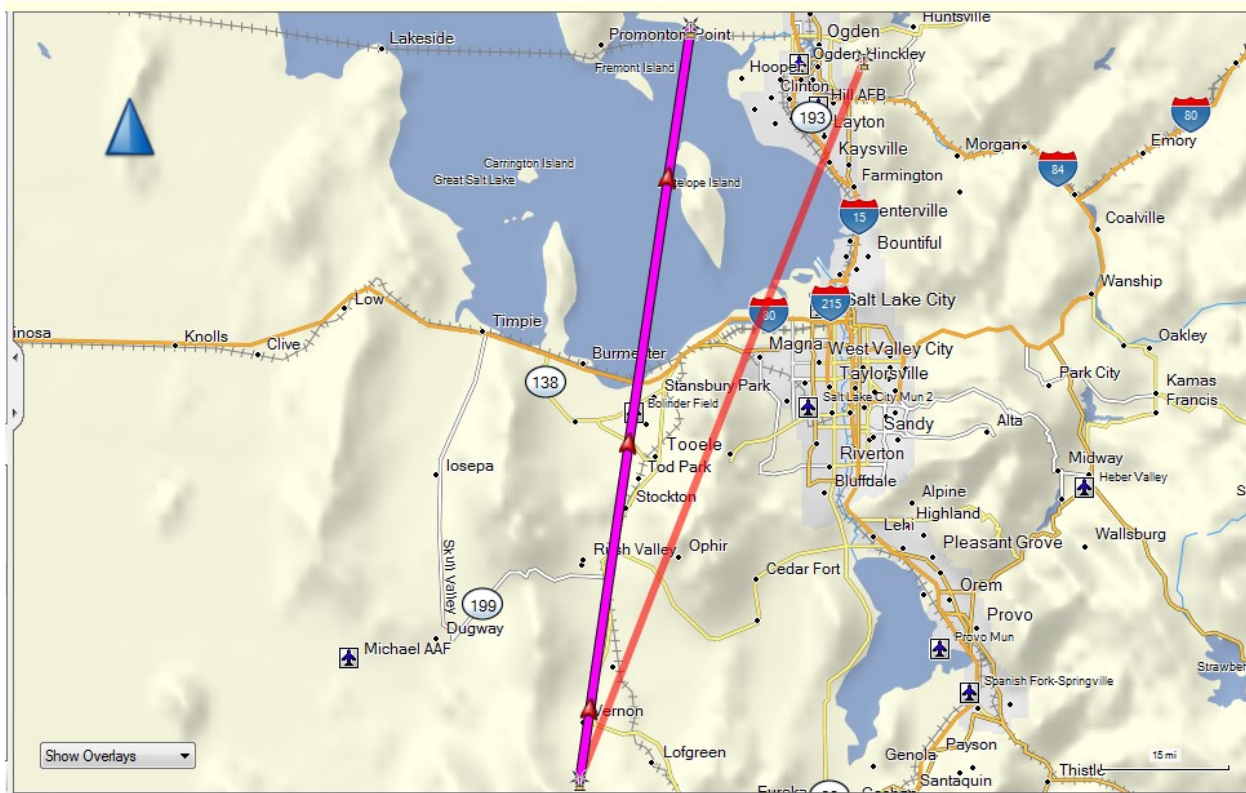
I say goodbye to Scott and Jerry and Alan, N7SHA calls me. Alan gives me the same report. As we are talking, Jared, KB7YAL, jumps in. That should be reliable evidence as to our contacts.

I promised Scott that I would take a photo or two and get some GPS coordinates for him. As I am changing the batteries in my GPS, I hear Jared and Alan on the 448.600 repeater up on Mt Ogden. OK I thought, this will be easy. Hmmm? High power OK; medium power, OK; low power, NO CONTACT!

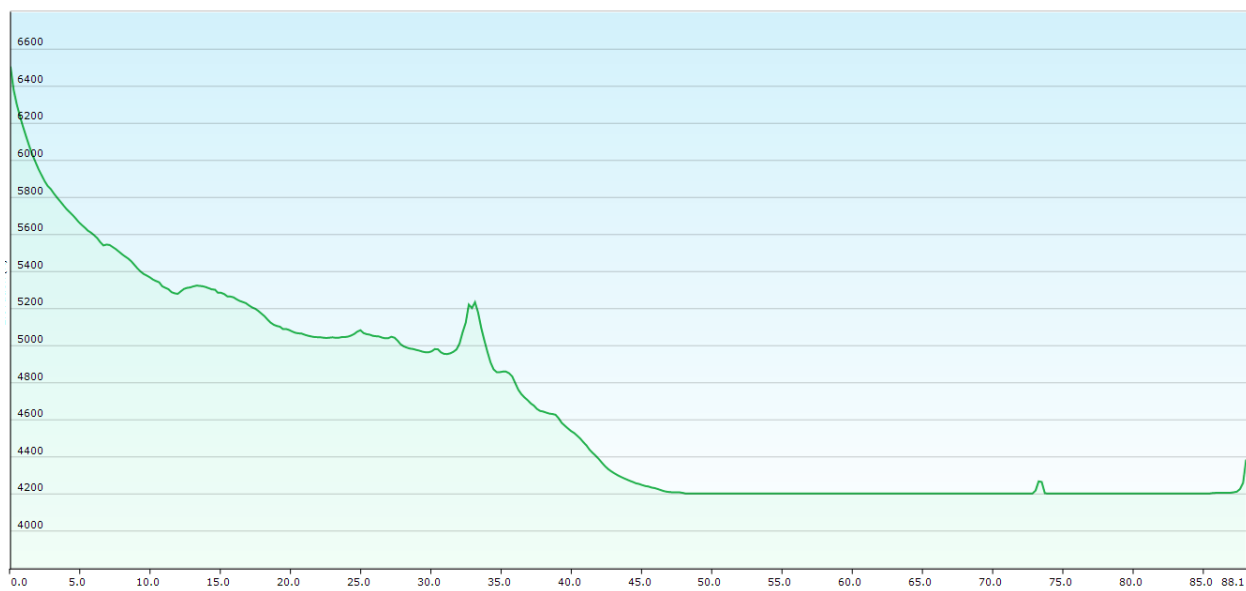
In my mind, I figured Mt Ogden should be easy, given its superior elevation. Now I am wondering what is going on. As I learned later, Mt Ogden is in the shadow of the Oquirrh mountains. Farnsworth Peak and Nelson Peak totally block my view (line of sight) of Mt Ogden. I am still amazed!



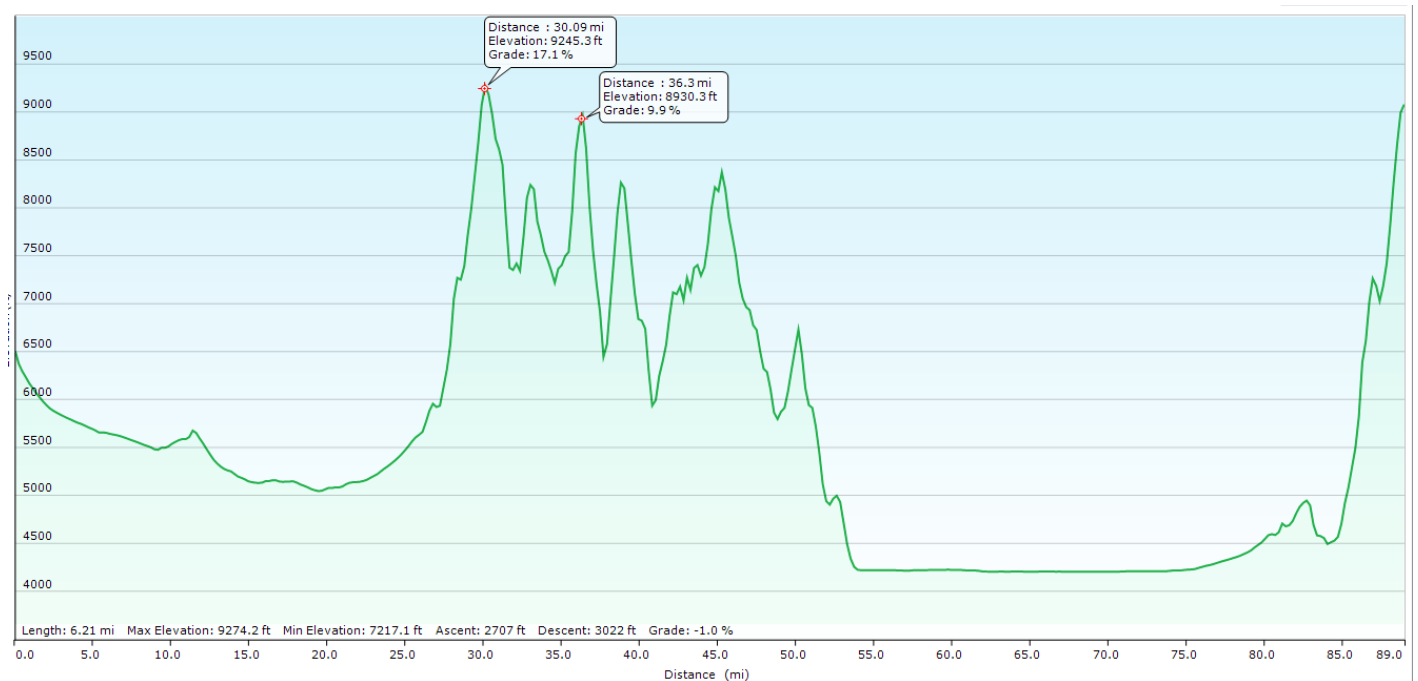
As you will see, my line of sight turns out to be directly in line with Little Mountain. Check this out!



As luck would have it, I had a clear line of sight to the Little Mountain repeater. 88 miles!



The above chart shows my location and elevation on the left with the Little Mountain location and elevation on the right. Compare this with the Mt Ogden Repeater.



As you can see, Mt Ogden has a superior location as far as elevation goes, but I am deep in the shadow of the Oquirrh mountains. My location on the left and Mt Ogden on the right. I am even more impressed that I made contact through Mt Ogden. About 89 miles.

Equipment and details

As I write this, I realized there was much more that could have been done. What about trying a handheld with a rubber duck and then an after-market antenna. Should have had APRS running. What about the 2-meter repeaters?

Here is a list of my equipment used. A trusty Kenwood TM-D710Aa, about ten years old. A Comet SAR 2X4 antenna magnetically mounted on a 38" diameter steel plate secured to the top of my fiberglass truck shell. Mag mounts don't work on aluminum trucks. As you will see in the following photos, the antenna is the highest point on the truck hopefully with a really good ground. Please note, the steel plate is only bonded to the fiberglass and secured with screws. Grounding is capacitive via the mag mount and the coax cable.

Radio, Kenwood TMD-710a. UHF rated output, 50, 10, and 5 watts.

Antenna, Comet SAR 2X4. Advertised gain, 3.8/6.2dBi. VHF/UHF. Did the gain of this antenna make the difference? I can only assume it did. Remember, a 6 db gain is about 4 times so, 5 watts X 4 = approximately 20 watts to an isotropic antenna. I don't know how this relates to the repeater system. This would explain the difference between Little Mountain and Mt Ogden.





Thank You

A big thank you for a job well done, to our repeater engineers.

Mike, KZ7O.

Scott, KD7EKO

I know there have been several others that have assisted Mike and Scott in making our repeaters some of the best in the state. Please forgive me, I don't know who all of you are.

Special thanks to the Utah VHF Society for all of the monetary support in addition to the Ogden Amateur Radio club repeater fund.

Challenge to Others

I would like to issue a challenge to all of you who enjoy the repeater system we have available in our Great State.

Get on the air and exercise your license privileges.

Join a local club. Find out more about the Ogden Amateur Radio club here: <http://ogdenarc.org/join.html>

Become a member of the Utah VHF Society: http://utahvhfs.org/uvhfs_join_renew.html

Provide feedback on your experiences with the repeaters that you enjoy. Consider making special note of the GPS location where you are able to make reliable contact. [OARC email w7su@arrl.net](mailto:w7su@arrl.net)

73 de Gil

NGIL

FEATURE ARTICLE

by Kent Gardner WA7AHY



T-hunts LA Style

Congratulations to the winner and participants of the July 2020 T-hunt for the Ogden Amateur Radio Club (OARC). Good planning, good execution, a little bit of luck and good food made for a fun time. The hunts for bunnies, a hidden T or a hidden RF treasure have been part of OARC's history for a very long time. I thought I remembered reading somewhere in some old by-laws that it was a required activity every year.

The latest club efforts have the rules that everyone starts from wherever they are and try to triangulate a city park within the boundaries of the hunt. I lived in Fullerton, California for 24 years and saw many hunts, even that were state wide. Even though we were in Orange County we still fell under the umbrella of being near Los Angeles (LA). A local club favorite had a different way to accomplish a hunt.

All T-hunters met at the same take off point, such as a parking lot. The hunt conductor wrote down everyone's odometer mileage on a log sheet. The hunter with the lowest mileage to the "T" was the winner, **well almost**. There were differences in the odometers of different vehicles and it caused some hard feelings from time to time. So, they had to come up with a more scientific way to determine the winner. The answer was the Crenshaw Factor.

What is a Crenshaw Factor and why do I need one?

A: The Crenshaw Factor has been used for many years in southern California T-hunts to normalize mileages and account for odometer differences between various vehicles. Your vehicle's Crenshaw Factor is the odometer mileage you get when you drive a standardized course that runs along Crenshaw Boulevard for about 9 miles. The course was chosen because it is relatively straight and goes up to the start point of the All-day hunts. This makes it easy for hunters to check their factors regularly on the way to a hunt.

A big problem right now is that the landmarks at the start of the Crenshaw have changed. The official start point is in front of a now-gone telephone booth in front of a now-gone Winchell's Doughnut shop on the southwest corner of Artesia Boulevard and Crenshaw. If you can find this point, then all you do is record your odometer reading and drive in the left-hand lane along Crenshaw to the stop sign at Crest Road in Rancho Palos Verdes. Your elapsed mileage to that point is your Crenshaw Factor.

Nobody knows exactly what this distance is, but it doesn't matter. To normalize mileages on a T-hunt, each vehicle's elapsed odometer mileage is divided by its Crenshaw factor. The result is in "Crenshaw Units." The team with minimum Crenshaw Units wins.

Example: Say your odometer mileage on the hunt is 35.7 and your Crenshaw factor is 8.8. Your Crenshaw Units are 4.057. You think you won, but another hunter has odometer mileage of 36.8 and Crenshaw factor of 9.3. That means his odometer reads higher than yours for the same distance traveled. His Crenshaw Units are 3.957, so he beat you.

It is commonplace for two or more hunters to have low mileages within a few tenths of one another. Crenshaw Factors are needed to determine winners on many of our mileage hunts, so it is important for every hunter to have one.

I am not particularly suggesting that we change our T-Hunts since I sort of like the way the club does it now, but, if we did, we would have to come up with our own factor. Maybe the Smith and Edwards to the airport exit on 1900 West distance. It could be called the Airport Turnoff Factor.

The Fullerton Radio Club sponsored such hunts. One member Joe Moell, K0OV, wrote the book on Transmitter Hunting along with another member of the club Thomas Curlee, WB6UZZ. The book is entitled *Transmitter Hunting Radio Direction Finding Simplified*. I have my own autographed copy. Joe writes regularly for the CQ Magazine in the column "Homing In", I think four times a year. Other styles of hunts are mentioned in the book.

TNX

Kent Gardner, WA7AHY

GUEST ARTICLE

by Dan KB6NU



Tech Classes Move Online

By Dan Romanchik, KB6NU

I've been teaching ham classes for more than a dozen years now. My specialty has been the one-day Tech class. In this type of class, you review all of the questions in the question pool with the students over the course of six to eight hours, and then immediately give them the test before they can forget anything.

I would hold these classes three or four times a year and regularly have 20 – 30 students in each class. The pandemic, of course, has put the kibosh on these classes. The last one I taught was in January.

Frankly, I was wondering if I'd ever teach one again. A little over a month ago, however, I was approached by a fellow in Portland, Oregon about teaching an online class for some folks that he'd corralled there. After giving it some thought, I said yes.

So, now, in place of face-to-face classes, I'm teaching online Tech classes. There are plusses and minuses to this approach. One negative is that I miss the face-to-face interaction with the students. On the plus side, teaching online allows me to offer classes more frequently. My first was in June. Last week, I completed the second class, and in August, I will teach a third class.

I have had to make some changes to the format. Making people sit in front of a computer for six hours or more seemed like cruel and unusual punishment. So, instead of a one-day class, the online class consists of four, two-hour sessions, spanning two weeks:

Session 1

Electrical Principles

Electronic Components and Circuit Diagrams

Session 2

Radio Wave Characteristics

Antennas and Feed Lines

Session 3

Amateur Radio Signals

Electrical Safety

Amateur Radio Practices and Station Setup

Sessions 4

Station Equipment

Operating Procedures

Rules and Regulations

This seems to be working out pretty well. I'm using Zoom, and most people have been able to attend without too much hassle. To simulate the whiteboard that I use extensively in the face-to-face class, I'm using the Autodesk Sketchbook program (<https://www.sketchbook.com/>) and sharing my screen with the Zoom meeting attendees. To write on the "whiteboard," I'm using a Gaomon M10K2018 drawing tablet.

Sketchbook allows me to build up a document in layers, and the result is kind of a hybrid PowerPoint presentation and whiteboard. I can make layers appear when I start discussing a particular topic and then write over them. For example, when I go over the questions that use Ohm's Law to calculate current in a circuit, I display the later with " $E = I \times R$ " and on a second layer, show how to calculate the answers to the questions

To take the test, students have to sign up for an online test session. Fortunately, several VE groups are offering online, remote testing. To sign up for one of these sessions, all students have to do is go to <https://hamstudy.org/sessions>. For the first two classes, the W5YI VEC scheduled a special test session.

I foresee teaching these classes monthly until the demand wanes. The next class will start on Monday, August 3. To register for the class, go to <https://www.kb6nu.com/product/next-online-tech-class/>. To find out when these classes will take place in the future, potential students can sign up for my mailing list by going to <https://landing.mailerlite.com/webforms/landing/m6l6t4>.

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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 teaching ham radio classes, he likes to operate CW on the HF bands, go for long walks around Ann Arbor, MI, and volunteer for Rotary Club service projects.



QST

SEPTEMBER ISSUE CORRECTION

Because you are a *QST* print subscriber, we wanted to alert you to a printing error in the forthcoming September 2020 issue.

The Table of Contents states that the *QST* columns “100, 50, and 25 Years Ago” and “Silent Keys” will appear on pages 96 and 97, respectively. However, due to a printing error, these pages do not appear in the print edition of the magazine.

The digital edition of the September issue does contain all the content listed in the Table of Contents. You can access the digital issue at arrl.org/qst.

The missing September columns will also be printed, along with their October counterparts, in the October 2020 print edition of *QST*.

Thank you for your understanding and continued support of ARRL.

Barry Shelley, N1VXY
Interim CEO

ceo@arrl.org



FCC Fines HobbyKing Nearly \$3 Million for Marketing Unauthorized Drone Transmitters

The FCC has issued a *Forfeiture Order* ([FO](#)) calling for HobbyKing to pay a fine of \$2,861,128 for marketing drone transmitters that do not comply with FCC rules. An FCC Enforcement Bureau investigation stemmed in part from a 2017 ARRL [complaint](#) that HobbyKing was selling drone transmitters that operated on amateur and non-amateur frequencies, in some instances marketing them as amateur radio equipment. The fine affirms the monetary penalty sought in a June 2018 FCC *Notice of Apparent Liability* ([NAL](#)).

The FCC said its investigation found that dozens of devices marketed by the company transmitted in unauthorized radio frequency bands and, in some cases, operated at excessive power levels. "Such unlawful transmissions could interfere with key government and public safety services, like aviation systems," the FCC said. The ARRL EMC Committee and Lab also determined that potential interference to the secondary (transponder) air traffic control radar system on 1030 - 1090 MHz could occur.

"We have fully considered HobbyKing's response to the *NAL*, which does not contest any facts and includes only a variety of legal arguments, none of which we find persuasive," the FCC said in the *FO*. "We therefore adopt the \$2,861,128 forfeiture penalty proposed in the *NAL*."

The FCC pointed out in the *FO* that it has previously made clear that "[d]evices used in the Amateur Radio Service do not require authorization prior to being imported into the United States, but devices for other services, including the CB service, require Commission approval." The FCC investigation found that 65 models of devices marketed by HobbyKing should have had FCC certification.

Responding to the *NAL*, HobbyKing claimed to have ceased marketing the 65 models the FCC identified, but promised only to make "best efforts" not to market other noncompliant RF devices.



Club Swapmeet



“SALE” or “WANTED” ITEMS NEEDED

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

Visit OgdenARC.org then click O-Bay Swap

FEATURED ITEMS

SWAP ITEM #208



O-Bay items for sale



(Mary <Hazard> Jewett - W7SU)



Club Swapmeet



“SALE” or “WANTED” ITEMS NEEDED

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

Visit OgdenARC.org then click O-Bay Swap

FEATURED ITEMS

SWAP ITEM # 207

FOR FREE:

MFJ Deluxe Electronic Keyer, Model MFJ-8043 IC (used).

Still works, but needs a 9 volt battery.

Free, that \$0 to the first person who comes and picks it up and who really wants to learn Morse code.



ASKING PRICE: \$0 FREE

CONTACT: Gene, WB7RLX 801 540-4907

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.

AC7GV - JOHN

K7YZU - BRYCE

KA7TYX - MAX

KD7RPT – SPARKY

KF6CCK – DAVID

KF7HNU – RALPH

KT7JIM – JIM

K8RYN - KATHY

NOINC - LONNIE

WOOSI - RON

OARC YAHOO GROUP




Did you know that OARC has a Yahoo Group?

We occasionally communicate with our OARC members via the Yahoo Group. Receive email 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  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



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: **-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 (*)	125 DCS	Mt Ogden (w/WiresX)
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

CLUB	WEB SITE	DATE/TIME	LOCATION
OgdenARC	ogdenarc.org	3 rd Saturday 09:00 am	Check OARC web site ...
WC Sheriff Comm-O		1 st Saturday 10:00 am	Weber Co. Sheriff Complex 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 /ares.htm/	Last Wednesday 8:30pm	Clearfield City Hall Clearfield Utah
DCarc	dcarc.net	2 nd Saturday 10:00 am	Davis Co. Sheriff Complex Farmington Utah
NU Ares	home.comcast.net/ ~noutares/	3 rd Wednesday 7:00 pm	Cache Co. Sheriff Office Logan Utah
Uarc	xmission.com /~uarc/	1 st Thursday 7:30 pm	UofU EMC Bldg Room 101 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 Association	udxa.org	3 rd Wednesday check web page for details	check web page for details Salt Lake City area
UvhfS	ussc.com /~uvhfs/	Each Tuesday 8:00 pm (refer to web site)	Weekly 2 meter net (no eye ball meetings)
WDArc	westdesertarc.org/	1 st Tuesday 7:00 pm	Tooele County Courthouse Tooele Utah
WsuArc	https://groups.google.com/forum/#! forum/wsuarc	3 rd Thursday 5:30 pm	WSU Blding #4 Room ? 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 @ 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

President: Dave Mamanakis KD7GR

Vice Pres: Mike Taylor KE7NQH

Secretary: Barbara Siddle WB7FWW

Treasurer: J. Siddle KG7CJN

Program Director:
Gil Leonard NG7IL

Activity Director:
Bob Smith KG7EIZ

"WATTS NEWS" e-Magazine

NL Editor: Val Campbell K7HCP

"OARC" web site

Webmaster: Val Campbell K7HCP

OTHER CLUB APPOINTMENTS

VE Liaison: Richard Morrison W7RIK
Jason Miles KE7IET (IT)

Repeater Engineers: Mike Fullmer KZ7O
Scott Willis KD7EKO

Photographer: Tim Samuelson
KE7DOA

Asst Photographer: Rick Hansen N7EGA

QSL Manager: Pete Heisig WB6WGS

Historian/Librarian: Kent Gardner
WA7AHY

Equipment Manager: Val Campbell K7HCP

Club Call Sign Trustee: Larry Griffin AD7GL

Club Elmer: Stan Sjol W0KP

Advisors: Mike Fullmer KZ7O
Kent Gardner WA7AHY
Kim Owen KO7U
Larry Griffin AD7GL
Gil Leonard NG7IL
Jason Miles K7IET

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www.OgdenArc.org