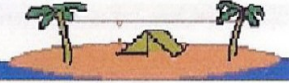


WATTS NEWS



The Best of Amateur Radio

OARC e-Magazine

www.OgdenArc.org

July 2023

Next Club Meeting/Activity/Events

Look Inside



Dave Mamanakis KD7GR
President



Justin Hall KB7LAK
Vice President



Colleen Pike KJ7EAY
Secretary



J. Siddle KG7CJN
Treasurer



Gary Hudman KB7FMS
Program Director

(open)
Activity Director



Val Campbell K7HCP
Webmaster/NL Editor

OARC Watts News Masthead

www.OgdenArc.org

OARC OFFICERS

President: Dave Mamanakis KD7GR
Vice President: Justin Hall KB7LAK
Secretary: Colleen Pike KJ7EAY
Treasurer: J. Siddle KG7CJN
Program Director: Gary Hudman KB7FMS
Activity Director: open

OARC ADVISORS (past presidents)

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

Executive Operations Manager

Val Campbell K7HCP

"WATTS NEWS" e-Magazine

NL Editor: Val Campbell K7HCP

"OARC" web site

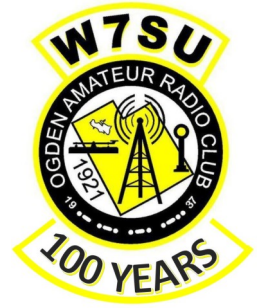
Webmaster: Val Campbell K7HCP
Postmaster: Val Campbell K7HCP
Membership Clerk: Val Campbell K7HCP

OARC VOLUNTEER APPOINTMENTS

10m Net Control - Gene Morgan WB7RLX
Antenna Manager – Gene Morgan WB7RLX
Assistant Photographer - Rick Hansen N7EGA
Badge Manager – Barbara Siddle KB7FWW
Club Call Sign (W7SU) Trustee – Larry Griffin AD7GL
Club Caterer - Ceva Cottrell W7CVA
Club Chef - Dave Mamanakis KD7GR
Club Elmer – Stan Sjol W0KP
Club Technical Support – Rick Morrison W7RIK
Equipment Loan Program - Val Campbell K7HCP
Equipment Manager - open
FD Log Manager - Jason Miles KE7IET
Field Operations Manager - Gene Morgan WB7RLX
Ham & Eggs Breakfast – Dave DeHeer KJ7DAD
Ham & Eggs Net Control - Kenny Pronschinske KI7UFN
Ham & Eggs Net Control – Larry Griffin AD7GL
Ham & Eggs Net Control – Stan Sjol W0KP
Historian/Librarian – Kent Gardner WA7AHY
Media Manager—Kent Gardner WA7AHY
Photographer – open
QRZ Manager – Tim Samuelson KE7DOA
QSL Manager – Pete Heisig AI7GV
Repeater Engineer – Mike Fullmer KZ7O
Repeater Engineer – Scott Willis KD7EKO
Social Media Manager - open
YouTube Videos - Jason Miles KE7IET
VE Liaison Operations – Rick Morrison W7RIK
VE Assistant - open
VE IT – Jason Miles KE7IET



OARC COMING EVENTS



Next Meeting/Activity

OARC "T"-Hunt

(plus breakfast)

15 July 2023

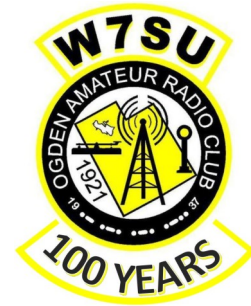
8 am (start from your home)

Next VE Test Session

1st Wednesday 04 October 2023 @ 6:00 PM

A MESSAGE FROM OUR PRESIDENT

Dave's Rag Chew



Dave Mamanakis KD7GR

Greetings Friends!

Field Day! SUCCESS! We had a great Field Day! From the minute we hit NOON on Saturday, we were making contacts. Lots of contacts!

I don't have all the actual numbers to report on, I'm hoping you will find them elsewhere in the newsletter, I'm excited to find out myself!

We had a great dinner. In fact, we had more people show up than I was expecting! I bought the same amount of food we did last year, and we ran out... so we ran up to the store and got more!

It was a good group of people, and a very good meal!

Our next activity is the T-Hunt, or Bunny Hunt, or [insert name here]... Join us in looking for the Transmitter hidden somewhere in Weber County, from the mountain on the east, to the water on the west, and the county line north and south...

We will have Breakfast waiting for you! It will be good! I don't think anyone has complained yet!

And, if you are the first to find the transmitter, you get a \$25 gift card!

There are several good YouTube videos on Transmitter hunts, how to do it with nothing more than your radio... how to build directional antennas... how to track down the transmitter...

And this year, I am going to find a really good spot. But I won't be the one giving clues... last year, I gave it away. I'm not very good at giving clues, I guess.

It is fun and a useful skill!

Keep your eye on the Club Website for Details!

I think we might have a Club Meeting where we explain the T-Hunt and how to be successful at it. The right equipment, the right strategy... tips and tricks... I think it'll be fun and informative.

Next Month, about this time, I'm headed to Washington State to help out with the Bigfoot 200. They are looking for more Ham Radio Operators. If you are interested in going up there, contact me and I can get you the information! KD7GR@arrl.net

And the Steak Fry is coming up! But, we still need people who want to join us in the Ogden Amateur Radio Board! If you'd like to help the club by serving as President, Vice President, Secretary, Treasurer, Activity, or Program Director, we'd like to hear from you!

All positions are always open for nominations! If you know someone in the club that you would like to see occupy one of these positions, talk to them first, then see if we can get their nomination in for that position!

Double Check your memberships! Only active (paid) members get the free steak at the steak fry! If you get the “family” membership, that is a steak for you and your significant other. We will also have hot dogs for the kids. EVERYONE is welcome!

Bring a Side to Share, and, as with Field Day, the Club will bring the Chips and Drinks. Come Hungry!

There is always so much going on in Ham Radio! I hope you are all finding something you enjoy doing! From building projects, to contesting... there are activities for everyone! If you need help or aren't sure what you would like to do, we have club members involved in just about every activity. Don't be shy about asking these other members if they'd like to share their activity with you! You may have a great time learning about something new!

Doing activities together is a great way to learn and to build friendships.

Here is a monthly one, digital contacting via JS8 Call. I will try to participate tomorrow evening, but we'll have to see how tomorrow turns out.

<https://groups.io/g/js8call/viewevent?eventid=1597213>

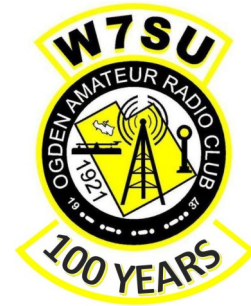
Thank you all for being great Members of the Club! I'm glad to see more active participation in our activities! Field Day was GREAT for that very reason!

Let's run out of food for the T-Hunt as well! (honestly, I'll bring extra, just in case!)

--Dave (KD7GR)

A MESSAGE FROM OUR VICE PRESIDENT

Vice President



Justin Hall KB7LAK

OARC- another successful Field Day has come and gone. It was nice to catch up with as many of you as I did. I was on the radios a bit, but it was nice to see people eating and visiting, and getting on the radios as well.

Lesson #1 - check the power settings! We were on the huge sky loop Gene set up and we heard a lot of stations (conditions were OK- I think we had a solar flux index of 170) but not all of them heard us. Why? The power was set at 25 watts. Once we rectified that situation, it got better.

Lesson #2 - get faster at CW or let the other guy drive and do the logging. I was watching Evan and Neil on the CW rig and they were making twice the points I was in probably less time. Since those are worth more, maybe I should have been more serious about it. I did try to get a CW QSO going, and the guy wanted to ragchew, so that didn't work....

Lesson #3 - learn how to use the rig! We switched the Ft-991A over to SSB from CW, and there was some setting I couldn't find to make the SSB sound halfway normal. So I just switched VFOs after 20 minutes of fiddling with settings and menus.

We did run the Icom on solar for the better part of day one. So that's bonus points. We had my Utah House Representative show up, and Farr West's mayor as well. More bonus points.

The crowd seemed a little thinner this year, but invite everyone to come and get on the radios and eat and visit- do all three at once if you can. I look forward to Field Day all year long.

This month is the Fox Hunt/Breakfast. I usually struggle for an hour and then I have to give up and ask where it is. But it's progress.

Have a healthy and safe summer~!

DE KB7LAK

Justin Hall, OARC VP

CLUB ANNOUNCEMENTS

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

Kenny Pronschinske (KI7UFN), kennypron@hotmail.com



Larry Griffin

AD7GL



Stan Sjol

W0KP



Kenny Pronschinske

KI7UFN

CLUB NEWS

10 Meter Net

Thursday Evenings at (18:30) 6:30 PM MT

10 Meters HF - **28.375 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.

NOTICE: **“Work toward getting your “10 on 10 Award”**

“Work toward getting your “10 meter WAS Award”

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



Gene Morgan (WB7RLX)

CLUB NEWS

Ham & Eggs Breakfast

Each Wednesday, at a very early 8:00 am, some of the club members meet for an informal breakfast get-to-gather. Everyone is welcome.

Now at:

The Rusted Spoon-Ogden (previously The Stagecoach)

1310 Wall Ave, Ogden, UT

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

73, Dave KJ7DAD



Dave DeHeer (KJ7DAD)

PREVIOUS CLUB MEETING/ACTIVITY

CLUB NEWS

PREVIOUS CLUB MEETING

Saturday 24 & Sunday 25 June 2023

ARRL Field Day

[See website for complete photo log](#)



W7SU



100 YEARS

Ogden Amateur Radio Club

W7SU

www.ogdenarc.org



VISITORS WELCOME



CAMP BELL

SPOT NO. 111111

Rubbermaid
H2O
GOT
DRINKING WATER











PREVIOUS MEETING PICTURES

Photos by ... **club photographers**



Rick Hansen—N7EGA

Note: We need a 2nd club photographer. Consider volunteering!

"Previous Meeting/Activity/Event" ...

Photos and links located on the club web site home page.

ALSO

Check out the OARC Facebook page

"Ogden Amateur Radio Club"

OARC SOCIAL MEDIA MANAGER ... needed

NEXT CLUB MEETING/ACTIVITY

CLUB NEWS

Next Club Meeting/Event/Activity

OARC "T"-Hunt + Breakfast

3rd Saturday 15 July 2023

Start Time: 8:00 am (start from your home)

1st to find the hidden transmitter: **\$25**

Location: Weber County (West of Mtns) and will be located in a Park somewhere within the county.

Activity: "T"-Hunt followed by Breakfast in the Park (**locate the bunny and then enjoy a free breakfast**)

Details: **The bunny will be hiding in one of the PARKS in the greater Ogden area, probably one with a bow-ery.**

FREQUENCY >>> 145.41 MHz simplex :

Monitor 146.90 repeater for info

Over-the-Air Hints: Call in on 448.575 for hints - if you need them.

Give Up?: Call in on 146.90 for the bunny and breakfast location.

(no hints before 9:00 am)

Hone your skills at tracking down the location of the hidden transmitter. It will require a bit of skill and will require driving, so bring a designated driver to assist you with the challenging activity. There will be a prize for the first contestant to locate the hidden transmitter.

You can hunt the fox with your HT and a paper clip. Hold the unit down close to your chest and pirouette around and find the direction where the signal sounds the weakest. If the signal is full quieting, de-tune the radio 5 or 10 kHz until some noise is heard with the signal. When you have found the direction of weakest-sounding signal, the signal is coming from behind you. This is the direction from which your body provides the most attenuation.

>>> Check website for details <<<

CLUB & HOBBY NEWS

Updated 2/10/2023

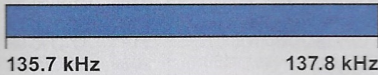
US Amateur Radio Bands

Operator license classes: **E** = Amateur Extra **A** = Advanced **G** = General **T** = Technician **N** = Novice
 CW operation is permitted throughout all amateur bands. Except as noted, all frequencies are in megahertz (MHz).

■ = RTTY, data, phone, image
 ■ = USB phone, RTTY, data and CW
 ■ = RTTY and data
 ■ = phone and image
■ = SSB phone
 = CW only

LF – Low Frequency band

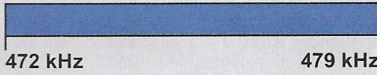
2200 Meters (135 kHz) E,A,G
1 W EIRP maximum



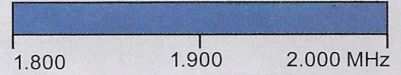
Amateurs wishing to operate on 2200 or 630 meters must first register with the Utilities Technology Council online at <https://utc.org/plc-database-amateur-notification-process/>. You need only register once for each band.

630 Meters (472 kHz) E,A,G

5 W EIRP max, except in Alaska within 496 miles of Russia where the limit is 1 W EIRP



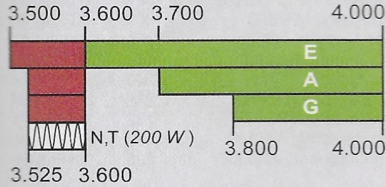
160 Meters (1.8 MHz) E,A,G



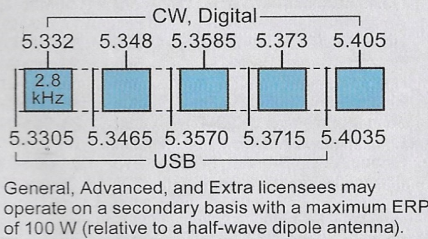
MF – Medium Frequency bands

HF – High Frequency bands

80 Meters (3.5 MHz) E,A,G,T,N

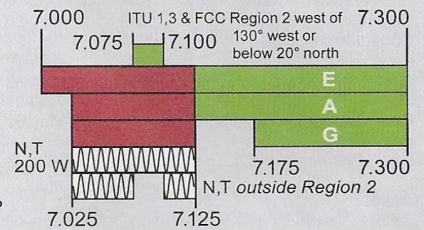


60 Meters (5.3 MHz) E, A, G (100 W)

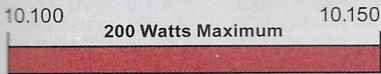


General, Advanced, and Extra licensees may operate on a secondary basis with a maximum ERP of 100 W (relative to a half-wave dipole antenna).

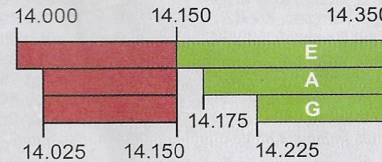
40 Meters (7 MHz) E,A,G,T,N



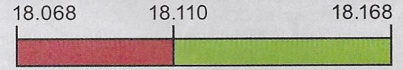
30 Meters (10.1 MHz) E,A,G



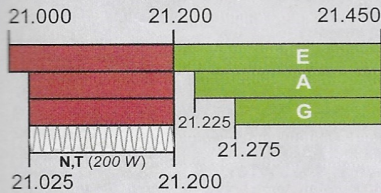
20 Meters (14 MHz) E,A,G



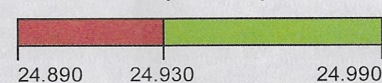
17 Meters (18 MHz) E,A,G



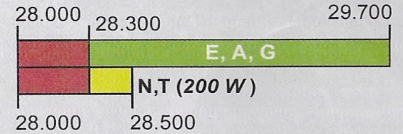
15 Meters (21 MHz) E,A,G,T,N



12 Meters (24 MHz) E,A,G

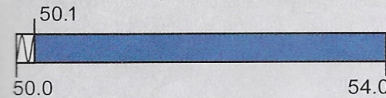


10 Meters (28 MHz) E,A,G,T,N

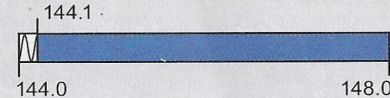


VHF – Very High Frequency bands

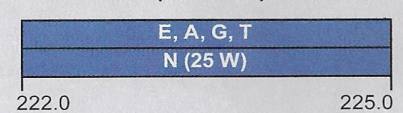
6 Meters (50 MHz) E,A,G,T



2 Meters (144 MHz) E,A,G,T

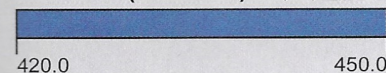


1.25 Meters (222 MHz) E,A,G,T,N

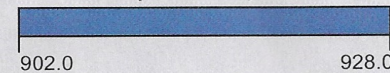


UHF – Ultra High Frequency bands

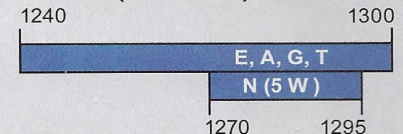
70 cm (420 MHz) E,A,G,T



33 cm (902 MHz) E,A,G,T



23 cm (1240 MHz) E,A,G,T,N



SHF&EHF – Super and Extremely High Frequency bands

All licensees except Novices are authorized all modes on the following frequencies:

2300-2310 MHz	3400-3450 MHz	10.0-10.5 GHz	47.0-47.2 GHz	122.25-123.0 GHz	241-250 GHz
2390-2450 MHz	5650-5925 MHz	24.0-24.25 GHz	76.0-81.0 GHz	134-141 GHz	All above 275 GHz

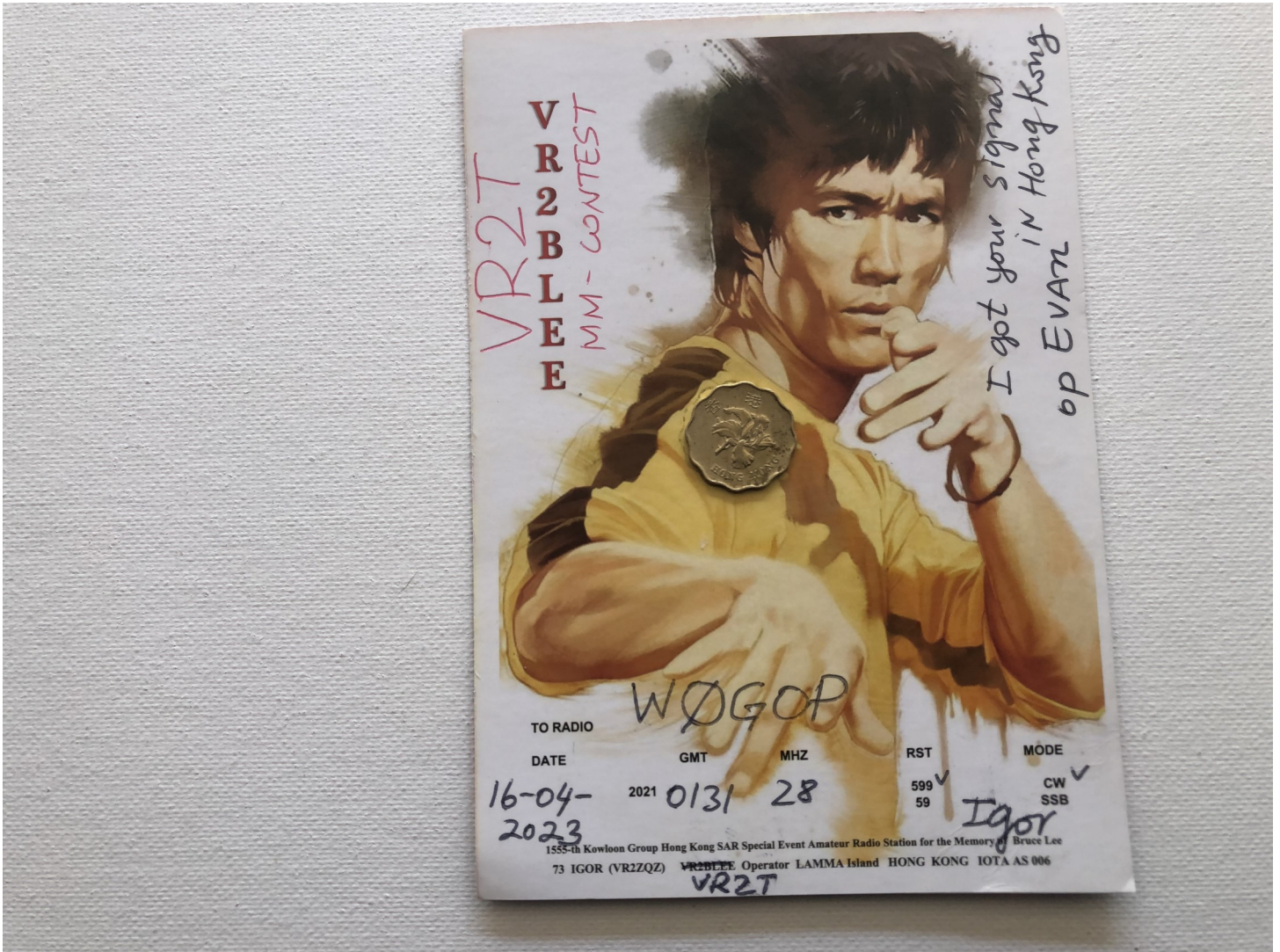
See www.arrl.org/band-plan for detailed band plans.

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 OTAbands rev. 2/10/2023

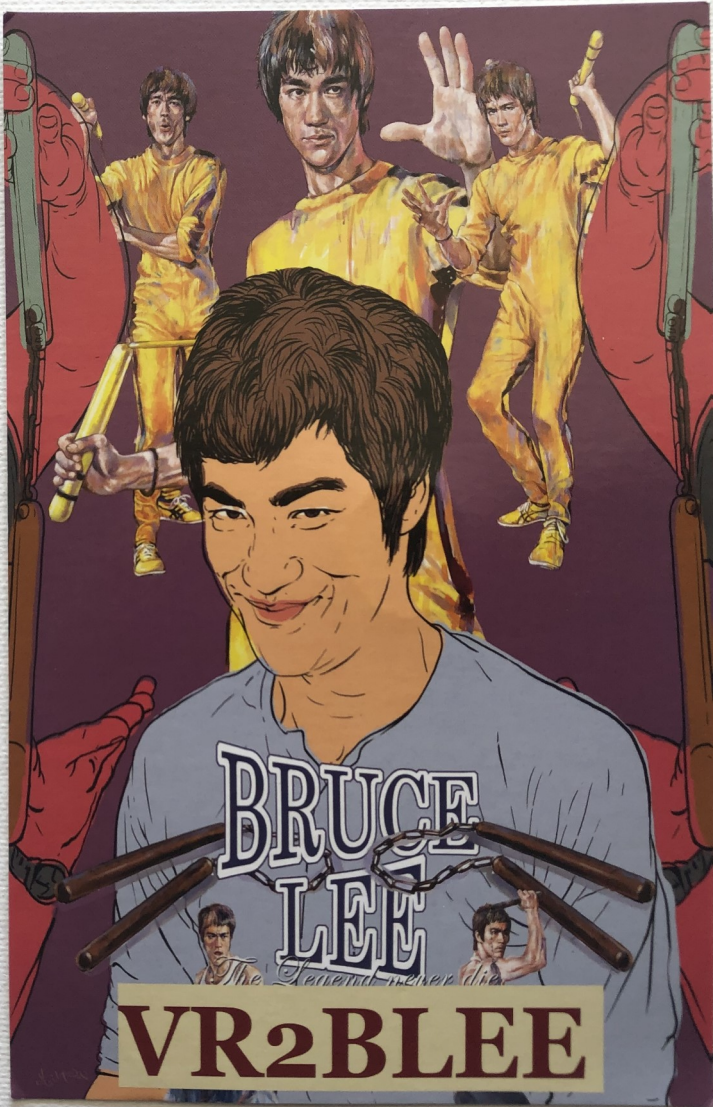
Unique QSL Cards



QSL card recently received by Even Day W0G0P



Continued...





BY AIR MAIL
航 空 郵 票

EVAN DAY
WØGOP
509 HIGHLAND BLV
Brigham City
UT 84302 USA

寄

FROM
MR. IGOH
37 LO/ TIK WAI
LAMMA island
HONG KONG



CLUB NEWS

Unique QSL Cards

STILL WANTED—STILL NEEDED

Send me your QSL Card Photos soon!

Submit to: k7hcp@arrl.net or w7su@arrl.net or 801.389.0690

CLUB NEWS

Ham Shack Photos

STILL WANTED—STILL NEEDED

Send me your Ham Shack Photos soon!

Submit to: k7hcp@arrl.net or w7su@arrl.net or 801.389.0690

CONTRIBUTING EDITOR SUBMISSIONS

GUEST CONTRIBUTION

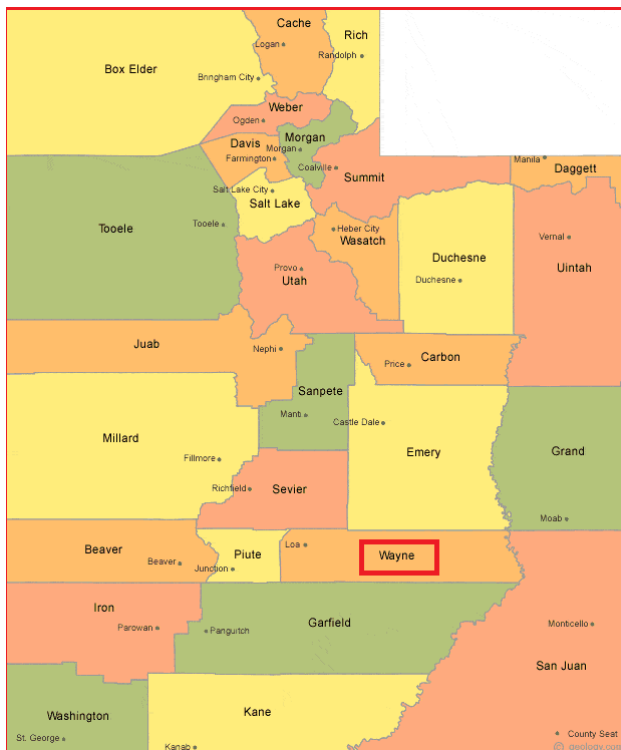
By Mike Fullmer KZ7O



Remote 7QP Operating

Once again, Mike Fullmer, KZ7O operated his remote HF station for the 7th call district QSO party. This QSO party is known as 7QP. The entire 7th call district bands together for a QSO party, which where hams in the 7th call district get on the HF bands from as many of the counties as possible in the district. This occurs one Saturday a year, the first Saturday in May. Hams get on HF from home or go remote and operate from counties that do not have very many hams. The following is Mike's description of his "activation" of Wayne County, Utah.

I like to look for counties in Utah that do not have very many hams. These counties are typically in places where there is not a lot of people in general. This year I chose to operate from Wayne County. A lot of people in Utah in Northern Utah may not know where Wayne County is, so I will show you. See the map below:



Wayne county is listed as having only 2,645 people living in it as reported in the latest census. That is not a lot of people.

The tiny town I operated from was called Torrey. Torrey is kind of the gateway community to Capital Reef National Park. Capital Reef is not exactly one of the most visited national parks, but it is one of the 5 national parks in southern Utah.

Continued ...

I combined this operating activity with a trip my wife Joan (N7OLZ) and myself took through northwest New Mexico and southeast Utah.

I operated from the parking lot of our motel in Torrey. I just parked in a corner of the lot, where there was a large sage covered empty field and set up my 22ft vertical antenna. I have my HF radio (Yeasu FT-100D) permanently mounted in my truck, so it makes it easy to set it up. I have a portable desk that clamps onto my steering wheel to set my laptop (for logging) and microphone on.

I was in the truck operating from about 9am to around 4pm. I did take a few breaks to walk around and have lunch.

The results of the HF operating were pretty poor this year. I started on 40 meters and made a few contacts, then moved to 20 meters. It was just luck, but the band conditions were really bad that day. 15 and 10 meters never did open up. My contacts were all on phone. If I would have been on CW I would have made more contacts, but I usually choose to do phone when operating remote. I made a total of 46 contacts. 80% of them were into Washington and Oregon. No contacts at all into the southern U.S. In the mid afternoon I made a few contacts into the New England States.

It was a fun time, but I do wish that the HF bands would have been open a lot more. It is a lot more fun when I can make contacts all over the country.

Mike, KZ7O

GUEST CONTRIBUTION

By Stan Sjol W0KP



Certificate of Achievement

2023 7th Call Area QSO Party

Presented To

W7SU

Third Place

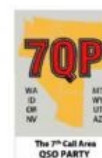
7th-Area Multi-Single Low-Power

Operators: KJ7WME W0KP

Sponsored by The Central Oregon DX Club

Dick Frey, K4XU
Contest Manager

AOCC
SDXA
SNARS
CODXC
GSLCC
RCR



GUEST CONTRIBUTION

By Rick Hansen N7EGA



Check out this link about how our Ham calls came about. I found it very interesting.

Rick Hansen N7EGA

<https://youtu.be/Su76QvChuEU>

<https://www.youtube.com/watch?v=UDQpfBCh1zU>

GUEST CONTRIBUTION

By Dave Sanders K7RGY

Hams and our Most Important Relationship

Fun article.

https://www.qrz.com/articles/node_1682458782

GUEST CONTRIBUTION

By Evan Day W0GOP



SIMPLE WINDOW FEED-THRU

Attached is photo of really simple cable feed-thru I made from a piece of 1 1/4" PVC pipe. The pictures show a 1 1/4-in PVC pipe used to feed cables through a sliding window into my shack. This diameter fits nicely into the 3/4 inch gaps in window and sill to hold the pipe securely when closed. The 3/4-inch holes through the pipe spaced 3-in apart accommodate coax & PL-259 connectors with isolation while maintaining structural integrity. At the top is a 1/2" slot to allow feeding long cable without uncoiling, or to feed a power line from a generator. A similar slot at the bottom holds my grounding line, which is firmly anchored at both ends.

Evan Day W0GOP



GUEST CONTRIBUTION

By Craig Howe W0VRM



We are all learning

A while back my first experience working an event, we met at 6:00 am at a crossroad before a mountain marathon run. One of the operators had a radio that needed to be programmed and was looking for help. I was relieved when another operator offered to help, took the radio and promptly started putting in the frequency, offset, and tone. I decided that I would not be the person who didn't know how to manually program radios in the future.

I have since had the opportunity to try and work with several radios that aren't mine and that I was not familiar with. Some were HT's some were mobiles. Having a quick reference on the internet to a manual can be helpful. **Manualslib.com** is a great source of manuals for many makes of radios.

A few events later and feeling better about my preparation in programming radios prior to an event. I arrived at an event with two mobiles and two HT's all ready to go. Or so I thought. It turned out that I was given the wrong tone for the main repeater and when I tried to check into Net Control for the event, I was not being heard. An hour away from home and RT-Systems on my computer, it was time to dust off my manual programming skills (still pretty green at it). I surprised myself by being able to manually reprogram the mobile and HT, check into Net Control and was ready for the event. I had some motivation as I had invited a friend to ride along who had interest in the hobby but he was not yet licensed. It was embarrassing but turned out OK since I didn't have to go home with my tail between my legs in shame.

All of this to say that we are all learning. Every trip out to use our equipment is an opportunity to get more comfortable, gain skills, and sometimes have an experience that reminds us to be better prepared, and have backup capability.

Some of our best available resources are the several club websites. **OgdenARC.org**, **DCARC.net**, and **Noji.com** each have a wealth of information from equipment, to classes, to Elmers, and videos of presentations, training documents and so much more.

There are Facebook groups for just about every make and model of radio with forums to answer questions.

With all of these resources available, my greatest challenge with the hobby is focusing on one area long enough to become "conversational" in that aspect of ham radio. It is a great problem to have.

The more we indulge in the hobby, the more proficient we become and the more fun we have.

73 all, Craig W0VRM

GUEST CONTRIBUTION

By Gene Morgan WB7RLX



BONUS POINTS ADD UP!

Use this [Bonus Points Calculator](#) to keep track of your Field Day Bonus Points (see Rule 7.3 for details). All bonus points require submission of proof and will be verified before being added to your score. Maximum bonus points are listed unless otherwise noted.

POINTS	ACTIVITY	AVAILABLE CLASSES
	100% Emergency Power. 100 bonus points per transmitter; max. 20 transmitters, max. 2,000 points. Bonus stations (such as the GOTA station and satellite station) do not count toward determining the number of transmitters for the class and do not qualify for transmitter bonus points.	A, B, C, E, and F
	Media Publicity. 100 bonus points. Bonus points may be earned for obtaining publicity from the local media. A copy of the media publicity received (newspaper article, news website post, etc.) must be submitted to claim the points.	All
	Set Up in Public Place. 100 bonus points.	A, B, and F
	Public Information Table. 100 bonus points. A copy of a visitor log, copies of club handouts, or photos are sufficient evidence for claiming this bonus.	A, B, and F
	Message to ARRL Section Manager or Section Emergency Coordinator. 100 bonus points. See Rule 7.3.5 for message format. This message is separate from the messages handled in Rule 7.3.6 and may not be claimed for bonus points under that rule.	All
	W1AW Field Day Message. 100 bonus points. Copy, via amateur radio, the special Field Day bulletin transmitted by W1AW or K6KPH, and include an accurate copy of the message with your Field Day entry.	All
	Message Handling NTS/ICS-213. 0 to 100 points maximum, calculated by taking the Number of Messages (max. 10 messages): _____ × 10 bonus points for each formal message originated, relayed, or received and delivered during the Field Day period. Copies of each message must be included with the Field Day entry. The message under Rule 7.3.5 does not count. All messages claimed for bonus points must leave or enter the Field Day operation via amateur radio RF.	All
	A Satellite QSO. 100 bonus points. Satellite QSOs also count for regular QSO credit. List these contacts separately on the summary sheet as a separate "band." The QSO must be between two Earth stations through a satellite. Stations are limited to one (1) completed QSO on any single channel FM satellite.	A, B, and F
	Natural Power QSOs. 100 bonus points. Complete at least five QSOs without using power from commercial mains or a petroleum-driven generator. A separate list of natural power QSOs should be submitted with your entry.	A, B, E, and F
	Site Visit by Invited Elected Official. 100 bonus points.	All
	Site Visit by Invited Served Agency Official. 100 bonus points. Visits from ARRL officials (SM, SEC, DEC, EC, etc.) do not qualify for this bonus.	All
	Educational Activity. 100 bonus points.	A, D, E & F. See website for D & E rules
	Youth Participation. <input type="checkbox"/> For Class A, C, D, E, or F groups: 20 bonus points per participant age 18 or younger who completes at least one QSO; max. 100 points. <input type="checkbox"/> For a one-person Class B station: 20 bonus points if the operator is age 18 or younger; max. 20 points. <input type="checkbox"/> For a two-person Class B station: 20 bonus points for each operator age 18 or younger; max. 40 points.	All (see specific points per class)
	GOTA Bonus. For 2023, there are changes to how the GOTA Bonus points are calculated. See rule 7.3.13 for the bonus point breakdown.	A and F
	Use the Field Day Entry Web App. 50 bonus points. Submit your entry using the web app at https://field-day.arrl.org/fdentry.php .	All
	Safety Officer Bonus. 100 bonus points. Include a statement with the supporting documentation for your entry, verifying that a designated Safety Officer completed the ARRL Field Day Safety Check List.	A
	Social Media Bonus. 100 bonus points. Promote your Field Day activation to the general public via social media (Facebook, Twitter, Instagram, etc.). Individual participants do not qualify for this bonus. Club websites do not qualify as social media. Available to all classes who welcome visitors to their operation.	All
	TOTAL BONUS POINTS CLAIMED	

GUEST CONTRIBUTION

By Gene Morgan WB7RLX



Field Day raffle winners for the \$50 Amazon gift card:

Evan Day W0GOP, and
Gary Hudman KB7FMS

Congratulations to the winners and thanks to all those of you that came out to help with the field day operations.

GUEST CONTRIBUTION

By Gene Morgan WB7RLX



RADIUS SCALING

Gene Morgan has released a new document for those of us that might be interested in antenna ‘radius scaling’. Just what does that mean? Be sure to read the article imbedded below on the following pages., It also available for download from the clubs “Downloads” page/tab.

Thank you Gene for keeping all of us educated and informed.

<http://Ogdenarc.org/downloads.html>

Article Follows:

Revisiting Yagi Element Scaling

By Eugene Morgan WB7RLX

For a long time I have been interested in Yagi antennas. The Yagi, or more technically correct, the Yagi-Uda antenna was first described in 1926 in a paper written by Shintaro Uda and Hidetsugu Yagi (1). The first English language reference was published in 1928. I'll not go into the history of the Yagi or specifics of the design properties of the Yagi given the amount of material that has been published over the years. There are numerous references that I have included at the end of this paper if you want to find out more about how they work, how to optimize them, and other research specific to the performance properties of the Yagi's. The intent of this paper is to focus on one of the more misunderstood properties of the Yagi that is often overlooked, element scaling.

What do I mean by "*element scaling*?" One of the challenges an antenna designer faces is scaling. This happens when you want to take an antenna designed for a given frequency and scale it to a different frequency. Programs like EZ NEC and others have a scaling feature but there is one problem, they will often scale the element diameter to a size that may not be mechanically strong enough for use in the real world or it may scale the elements to a size that is not manufactured or readily available. By allowing the designer to select the element diameter as a part of the scaling inputs the designer can design an antenna that is ideally suited for the environment it will exist in and with materials that are readily available.

Let me cite an example. Let's say we have a design for a 2 meter Yagi that uses small diameter .2" aluminum rod. If we use EZ NEC to scale the antenna down to 432 MHz we end up with extremely small elements that are unrealistic to use. When we go back and resize the elements in our model we find that the properties for the 432 MHz model are no longer electrically ideal and we end up having to redesign the antenna and manually scaling the elements.

The solution is to allow the designer to specify the element diameter for the target antenna and then let the software properly size the element lengths so that our 432 MHz model has approximately the same electrical characteristics as our 144 MHz model and is using element diameters we specified. This is the problem we are attempting to solve with these formulas.

Radius Scaling: Giving Credit where credit is due

In 1980 Dr. James Lawson published several articles in "Ham Radio" about the Yagi antenna beginning with the January issue (3,4,5). The specific area of focus of this paper is based on his article published in the December issue (5). Dr. Lawson later compiled his articles into a book titled: "*Yagi Antenna Design*" published by the ARRL in 1986. It is one of the most widely cited books on Yagi design. Much of the content of this paper is taken directly from his article published in December 1980 and from supplemented by material found in chapter 7, pages 7.3-7.5 of his book (6). I must give credit where credit is due, I used much of his original text, formulas and examples. That's why this article is entitled "Revisiting" Yagi Element Scaling. We will be revisiting his work. My intention was to leverage his approach but to restate the formulas using a form consistent with many of today's programming languages and spreadsheet programs. I also added some additional text to help explain some of the areas that I struggled with. I hope this will make it a bit easier to understand his process and to allow the reader to use his excellent formulas in designing and scaling their own Yagi designs.

Below is an example of how I converted some of his formulas. The equation on the left is how it would be stated by Dr. Lawson, the equation on the right is how it would be entered as a spreadsheet formula.

$$b = 5 \log y^{(-2)} = 5 * \log(y)^{-2}$$

Also note the formulas are specific to elements with a consistent diameter, elements that are cylindrical rather than tapered. There is another set of formulas to use when scaling tapered elements which we will not cover in this article. It's my thought that before tackling the formulas for scaling tapered elements one should master the formulas for cylindrical elements.

Radius Scaling: Introduction

Any Yagi antenna design, such as those shown in Table 1, can be scaled either to other frequencies or to elements of different diameter at the same center frequency. Since all design parameters are dimensions expressed in wavelengths at a central design frequency the values shown in Table 1 are invariant to frequency scaling and therefore the behavior of the antenna will be unaffected by the choice of central design frequency. However this is true only if all physical dimensions (including element radius) are adjusted in proportion to the desired wavelength.

Experience shows that practical element radii expressed in wavelengths are not constant; at low frequencies (long wavelengths) relatively thin elements are used while at high frequencies relatively thick elements are typical. How then can a given design be altered to an equivalent design where element radius is changed? The clue is to make the impedance of the changed element exactly the same as the impedance of the original element; in this way exactly the same element currents will flow, resulting in the same overall antenna performance.

element	2 Element Yagi		3 Element Yagi		4 Element Yagi		5 Element Yagi		6 Element Yagi	
	X	LE	X	LE	X	LE	X	LE	X	LE
R	0.000	0.49366	0.000	0.49801	0.000	0.49185	0.0000	0.49994	0.000	0.49528
DR	0.150	0.47050	0.150	0.48963	0.250	0.47900	0.1875	0.48040	0.150	0.48028
D1			0.300	0.46900	0.500	0.46319	0.3750	0.45232	0.300	0.44811
D2					0.750	0.46319	0.5625	0.45232	0.450	0.44811
D3							0.7500	0.45232	0.600	0.44811
D4									0.750	0.44811
Gain (dBi)	6.88		7.86		10.62		10.45		10.7	
F/B	7.94		23.6		41.62		32.27		52.71	
Preferred Yagi antenna designs. All elements have radius R_0 , of $.0005260 \lambda$ and boom position X in λ										

Table 1: Preferred Yagi Designs

	Reflector			Driven Element			Director		
	Case 1	Case 2	Case 3	Case 1	Case 2	Case 3	Case 1	Case 2	Case 3
LE	0.49528	0.49489	0.49465	0.48028	0.47876	0.47785	0.44811	0.44431	0.44204
FR	0.97252	0.97042	0.96917	1.00289	1.00311	1.00325	1.07489	1.08090	1.08451
X (ohms)	30.40800	30.40800	30.40080	-3.14700	-3.14700	-3.14700	-78.58200	-78.85200	-78.85200
Case 1: $R_0 = .0005260 \lambda$, Case 2: $R_0 = .0008 \lambda$, Case 3: $R_0 = .0010 \lambda$									

Table 2: Scaled Antennas

Setting Up the Scaling Parameters

Before we get into the math we need to take a moment and explain an idea that you will see expressed in several places, the idea of describing antenna dimensions based on wavelengths rather than meters, feet or inches. You are going to see $F=1$ used a lot, or $X_{(F=1)}$. To understand the $F=1$ idea a little better let's assume that our base design is 14.2 MHz. All measurements are based on the wavelength of 14.2 MHz which is 69.265 feet (831 inches). Expressing dimensions in wavelengths is the first step in scaling an antenna. As an example in, Table 1 the reflector for a two element Yagi is .49366 wavelengths long, which if we were to express that

in feet would be 34.193 feet long. So when we say $F=1$ we are expressing F in wavelengths, thus $F = 1$ wavelength which at 14.2 MHz is 831 inches. This allows us to scale our dimensions regardless of frequency.

By expressing dimensions in wavelength we can take an antenna designed for 14.2 MHz and scale it for use at 28.3 MHz. As mentioned earlier where this fails is in scaling the element diameters. All the math that follows is all about taking element diameter into account so that you can scale an antenna using realistic element diameters thus allowing you to build an antenna for 10 meters that has the same performance properties as the antenna you modeled from. This is especially handy for scaling antennas for use in the VHF and UHF spectrum.

Expressing antenna relationships in terms of wavelengths also has one other important advantage. It lets you compare element relationships and/or compare one antenna to another. For example seeing a spacing of say 15 inches is not very helpful, but when expressed in wavelengths such as .2 wavelengths it becomes much easier to see the interrelationship of the elements in the antenna as well as being able to make direct comparisons with other similar antennas. Now let's get to our formulas.

Since the (radiation) resistance of the element is essentially unaffected by changes in radius, we need only make the reactance invariant to scaling element radius. Element reactance, X , near the resonance can be expressed as:

$$X = R * Q * (F / FR - FR / F) \quad (1)$$

See D11 in attached spreadsheet

Where:

R = the radiation resistance

Q = the effective Q

F = the central design frequency

FR = the element resonant frequency, also referred to central design frequency

fre-

RQ can be accurately expressed as:

$$RQ = (215.15 * \log(K) - 160) \quad (2)$$

See D14 in attached spreadsheet

Where:

$$K = 1/RO$$

RO = the radius of the element expressed in wavelengths at $F=1$, the central design frequency.

By using equations 1 and 2 we can now derive the element's reactance, X .

$$X = (215.15 * \log(K) - 160) * (F / FR - FR / F) \quad (3)$$

See D11 in the attached spreadsheet

And at the central design frequency ($F=1$):

$$X = (215.15 * \log(k) - 160) * (1 / FR - FR) \quad (4)$$

See D11 in the attached spreadsheet

If you want to scale the element radius from an original value we must ensure that $X_{(F=1)}$ is unchanged. Note that $X_{(F=1)}$ contains two variables, (K and FR), which are a function of element radius RO . FR is calculated from the physical length of element LE and physical resonant length LER ; both of these lengths are measured in wavelengths, λ_0 , at $F=1$.

$$FR = LER/LE \quad (5)$$

See D13 in the attached spreadsheet

Empirically (see Table 2, case 2 where $RO=.0008$):

$$LER = [1 - (10.7575 * \log(K) - 8) ^{-1}] / 2 \quad (6)$$

See D12 in the attached spreadsheet

Thus from equations 5 and 6:

$$FR = (1 - (10.7575 * \log(K) - 8) ^{-1}) / (2 * LE) \quad (7)$$

Let's Scale an Antenna

Now that we have established the basic tools for converting a given antenna such as the one described in Table 2 let's scale it to a different frequency using appropriately sized elements for the new antenna. An example will illustrate the nature of results. Consider the antenna design for the three-element antenna of Table 1; this would be a reasonable design for a 14.2 MHz antenna where one wavelength is 831.76 inches and elements with a radius of 0.00052599 wavelengths which corresponds to an element diameter of $\approx 7/8$ inches.

This would be a reasonable dimension for a mechanically adequate element. Now suppose that we would like an equivalent antenna for 28 MHz where we would want an element radius much larger in terms of wavelengths. Table 2 shows the computations. The original design shown as case 1, and case 2 is the scaled design that uses elements with a radius of 0.0008 wavelengths (about 5/8 inches diameter). Case 3 is the same antenna but scaled to use one inch diameter tubing (0.0012 wavelengths radius). Note that the changed values for element lengths are not wholly intuitive because two things happen simultaneously. As the radius increases the Q drops, requiring a greater spread in the resonant frequencies of reflector and director. However, at the same time the resonant physical length also changes.

It is important to reiterate that it is conceptually wrong to scale boom length and element lengths (for example, to convert a VHF antenna design to HF) without also scaling the element radius. The correct way to adjust an antenna element when the old and new radii (in wavelengths) are different is to modify both the element lengths and radius to give the same electrical reactance as the source antenna.

We now have the tools to convert a given antenna design such as shown in Table 2, case 1, to a new antenna design where the element radius is changed; the new antenna will perform exactly the same as the original antenna at the central design frequency. However the frequency-swept behavior of the new antenna, while qualitatively similar to the original, will show a broader or narrower bandwidth depending on the change in element Q.

Let's begin by scaling the three element 14.2 MHz antenna described in Table 2, case 1, to a new frequency of 28 MHz. The procedure is fairly straightforward. One final clarification, subscript 1 is referencing our 14 MHz (source) antenna, example: K_1 is referencing the K value of our source antenna. Subscript 2 is referencing our target antenna, example K_2 . Let's begin by calculating the new scaled element length, LE_2 :

$$K_1 = 1/RO_1; K_2 = 1/RO_2 \quad (8)$$

See D16 & D17 in the attached spreadsheet

$$FR_1 = (1 - (10.7575 * \log(K_1) - 8)^{-1}) / (2 * LE_1) \quad (9)$$

See D18 in the attached spreadsheet

$$X_1 = (215.15 * \log(K_1) - 160) * (1/FR_1 - FR_1) \quad (10)$$

See D19 in the attached spreadsheet

Having calculated reactance at $F=1$, we can now calculate the value of FR_2 that will give us the same value of X with the new element radius, RO_2 :

$$A \equiv X_1 / (215.15 * \log(K_2) - 160) \quad (11)$$

See D20 in the attached spreadsheet

$$FR_2 = (-A + (A^2 + 4)^{.5}) / 2 \quad (12)$$

See D21 in attached spreadsheet

$$LE_2 = (1 - (10.7575 * \log(K_2) - 8)^{-1}) / (2 * FR_2) \quad (13)$$

See D22 in the attached spreadsheet

Now that we have set up the initial equations we can walk through the process for scaling an antenna. As per Dr. Lawson's suggestion I set up his formulas in a spreadsheet and then tested the results and scaled several antennas and then modeled them using EZ NEC. The results were as predicted. I was able to scale a 2 meter Yagi to 70 cm and the performance numbers and impedances were similar to the 2 meter antenna.

Using the spreadsheet to scale your own antenna

Dr. Lawson also provided two examples based on the three element antenna described in Table 2, case 1. His results are in Table 2, cases 2 and 3 for the different antennas he scaled. The way you can use this spreadsheet to model your own antenna is to use a program like EZ-NEC(8) and find an antenna that you would like to scale. There are several examples in the ARRL antenna handbook. After you have modeled the antenna in your antenna design program and are satisfied with the results change the units to wavelengths. Then using that data you can plug the numbers for each element into the table found in the scaling tab of the worksheet.

We should note that some antenna design programs have a "Scaling" feature. As was stated earlier this does not necessarily work given that it scales everything, including the element diameters. What you might end up are elements with unrealistic diameters, or material sizes that are not manufactured.

Start with source antenna and enter in the reflector information:

- ✓ Enter the element length into cell D4

- ✓ Enter the element radius in D5
- ✓ Enter the design frequency into D6

Now we are going to enter in the information for the target antenna:

- ✓ Enter the target frequency into D7
- ✓ Select the desired element diameter in D9

Please note: In the spreadsheet you have to select the desired element diameter for the target antenna from a drop down list that includes popular tubing diameters. Consequently the element diameters may vary slightly from Dr. Lawson's results. For example in case 2 the element radius is .0008, if you select .75" from the dropdown the element radius will actually be .000889615. This will cause the length to be slightly different than the result in Table 2, case 2. Using .0008 the result is a reflector that is .49489 λ long. Using .000889615 the results will be 0.49478 λ long, which is a difference of only .11.

The reflector length will be displayed in D26. If you enter that value in cell K6 the program will generate a wires schedule that you can use in EZ NEC. The spacing information can be found in Table 1 for the 3 element Yagi.

After you have completed entering the information for the reflector continue by entering the length for the driven element and then the director. Remember to enter all dimensions in wavelengths. You can convert them in EZ NEC by changing the unit's option to the desired units: meters, feet, inches, etc.

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Radius Scaling Chart Follows:

Radius Scaling Chart

A	B	C	D	E
			Design	
	Element Length in λ	Le1	0.44811	
	Element Radius λ	Ro1	0.000526	
	Freq MHz	Freq	14.2	
	Scale to Frequency:	F=1	28	
	Wavelength in Inches:		= $\$H\$5/(D7*1000000)$	
	Element Diameter:		.750"	
	Radius:	Ro2	=INDEX(X4:X19,MATCH(D9,T4:T19,0),1)	
			Subscript 1	
		K=	=1/D5	(8)
		X=	=D17*(1/D16-D16/1)	(1)
		Ler=	=(1-(10.7575*LOG(D13)-8)^-1)/2	(6)
		Fr=	=(1-(10.7575*LOG(D13)-8)^-1)/(2*D4)	(5)
		RQ=	=(215.15*LOG(D13)-160)	(2)
			Results	
		K1	=1/D5	(8)
		K2	=1/D10	(8)
		Fr1	=D16	(9)
		x1=	=(215.15*LOG(D20)-160)*(1/D22-D22)	(10)
		a=	=D23/(215.15*LOG(D21)-160)	(11)
		fr2=	=($-D24+(D24^2+4)^{0.5}$)/2	(12)
		le2=	=(1-(10.7575*LOG(D21)-8)^-1)/(2*D25)	(13)

GUEST CONTRIBUTION

By KB6NU



Maybe next time.

GUEST CONTRIBUTION

WANTED

Contributing Editor submissions always welcomed!



ARRL Field Day (wan na-be ham) Visitor

Like many ARRL Field Day sites, the Hampden County Radio Association (HCRA) in Massachusetts welcomed guests to their event. They got more than they bargained for, though, when a black bear showed up and started helping itself to their food!





ARRL Field Day Banner Winner

Mike Moore, WI9MMM, President of the Fox Cities Amateur Radio Club, W9ZL, in Wisconsin, was the winner of the ARRL Field Day banner giveaway earlier this month.

ARRL Affiliated Clubs and members opted into the Club newsletter via email were automatically entered by purchasing ARRL Field Day merchandise or submitting an entry through an online form. Mike was the lucky winner, and displayed the banner at his club's site.

"The banner made our Field Day site much easier to find. We had decent enough foot traffic that I forgot to take more pictures. In a way... that's a "Win!" - because I got to share the hobby with more people," wrote Moore.





Volunteer Monitor Program Report

The Volunteer Monitor (VM) Program is a joint initiative between ARRL and the FCC to enhance compliance in the Amateur Radio Service. This is the April 2023 activity report of the VM Program.

◆ An advisory notice was issued to a Technician-class operator in Michigan for FT8 operation on 7.074 MHz, and to a Technician-class licensee in Ohio for FT8 operation on 14.074. Technicians have no privileges on those frequencies.

◆ An advisory notice was issued to a General-class operator in Ohio for deliberate interference to a 10-meter net. The operator was informed that a net control may request anyone to refrain from operation on a net when net policies are not being followed.

◆ An advisory notice was issued to an Amateur Extra-class operator in Washington for excessively wide transmissions (over 10 kHz). The operator was reminded that FCC rule 97.307(a) requires that no amateur station use more bandwidth than necessary for the information rate and emission type being transmitted.

◆ Advisory notices were issued to a Technician-class operator in Florida for operation on 40 meters with an expired license, and to a General-class licensee in Michigan for operation on 20 meters with an expired license.

◆ Good operator commendations were issued to licensees in South Carolina (for exemplary net procedure on the Greater Pee Dee 2-Meter Net), and North Carolina (for exemplary net procedure on 40 meters).

◆ A presentation on the ARRL/FCC Volunteer Monitoring Program was given to the Southern Pennsylvania Amateur Radio Club (SPARC) in Manheim, Pennsylvania, one of the oldest amateur radio clubs in Pennsylvania.

The totals for VM monitoring during March 2023 were 2,162 hours on HF frequencies, and 2,618 hours on VHF frequencies and above, for a total of 4,780 hours. For the quarter ending March 30, 2023, VMs filed 112 incident reports.
— *Thanks to Volunteer Monitor Program Administrator Riley Hollingsworth, K4ZDH*



Licensee Hit With \$24,000 Fine for Jamming Net, Failure to ID

06/05/2023

An investigation by the Federal Communications Commission (FCC) results in a large fine against a California amateur radio license holder. A [Notice of Apparent Liability Forfeiture \(NALF\) for \\$24,000](#) has been filed against Phillip J. Beaudet, N6PJB, of Burney, California. According to the filing, the penalty is for Beaudet “willfully and repeatedly interfering with the radio communications of the Western Amateur Radio Friendship Association (WARFA) while it was attempting to hold a regularly scheduled net and for failing to provide station identification on amateur radio frequencies.” FCC agents used direction finding techniques during November and December of 2022 to track the interfering signals to Beaudet’s home station. Agents “heard him playing recordings on 3.908 MHz that caused interference to the ongoing WARFA net while failing to provide his assigned amateur call sign,” the document stated.

O'bay Swap

SWAP ITEM # 246

FOR SALE: *Liquidating world-class amateur radio station* (Mike Petz W7DNI)
(including Alpha linear Amplifier)

#	Brand	Model	Nomenclature	Approximate Values		Asking
				New	On-Line	
1	Yesu	FTDX 3000	Tranceiver	\$1,500.00	\$1,550.00	\$1,240.00
2	ICOM	2730	Tranceiver		\$350.00	\$280.00
3	ICOM	ICT7H	2ea Handheld Transceivers	\$400.00	\$200.00	\$160.00
5	ICOM	HS 85	Headset	\$85.00	\$50.00	\$40.00
6	ICOM	IC-AT180	External Auto Antenna Tuner	\$365.00	\$285.00	\$228.00
7	ICOM	ICSM6	Mic	\$97.00	\$150.00	\$120.00
8	ICOM	ICSM20	ICOM Base Mic	\$190.00	\$120.00	\$96.00
11	Alpha	8410	Linear Amplifier	\$7,200.00	\$4,000.00	\$3,200.00
13	Alpha	2000	High Power Dummy Load	\$795.00	\$425.00	\$340.00
14	Palstar	AT-Auto	Automatic Tuner	\$1,145.00	\$1,400.00	\$1,120.00
15	Astron	RS-35M	12 V Power Supply	\$150.00	\$200.00	\$160.00
16	MFJ	259	Antenna Analyzer	\$370.00	\$350.00	\$280.00
17	MFJ	860	CrossNeedle SWR/Wattmeter	\$50.00	\$100.00	\$80.00
18	MFJ	949E	300W Tuner	\$50.00	\$150.00	\$120.00
19	MFJ	1128	Power Strip	\$130.00	\$220.00	\$176.00
20	Kent		Twin Iambic Paddle	\$150.00	\$125.00	\$100.00
21	Misc	Centech	2 Volt-Ohm Meters	\$14.00	\$10.00	\$8.00
22	Alpha Delta	Delta 4B	4 position Coaxial Switch w/gnd	\$180.00	\$100.00	\$80.00
23	Alpha Delta	Delta 4B	4 position Coaxial Switch w/gnd	\$180.00	\$100.00	\$80.00
24	Alpha Delta	Delta 2B	2 position Coaxial Switch w/gnd	\$60.00	\$45.00	\$36.00
25	Alpha Delta		2 Surge Protectors	\$110.00	\$30.00	\$24.00
26	Heil	Proset-IC		\$140.00	\$150.00	\$120.00
27	Heil	Dual Footswitch		\$36.00	\$25.00	\$20.00
30	Hy Gain	AV-640	Vertical Antenna (6 thru 40m 20' mast)	\$400.00	\$200.00	\$125

NOTE: Only serious interest enquiries

CONTACT: *If sincerely interested in what is available, please contact :*

Dee Dostaler W7DEE at bdrr@msn.com

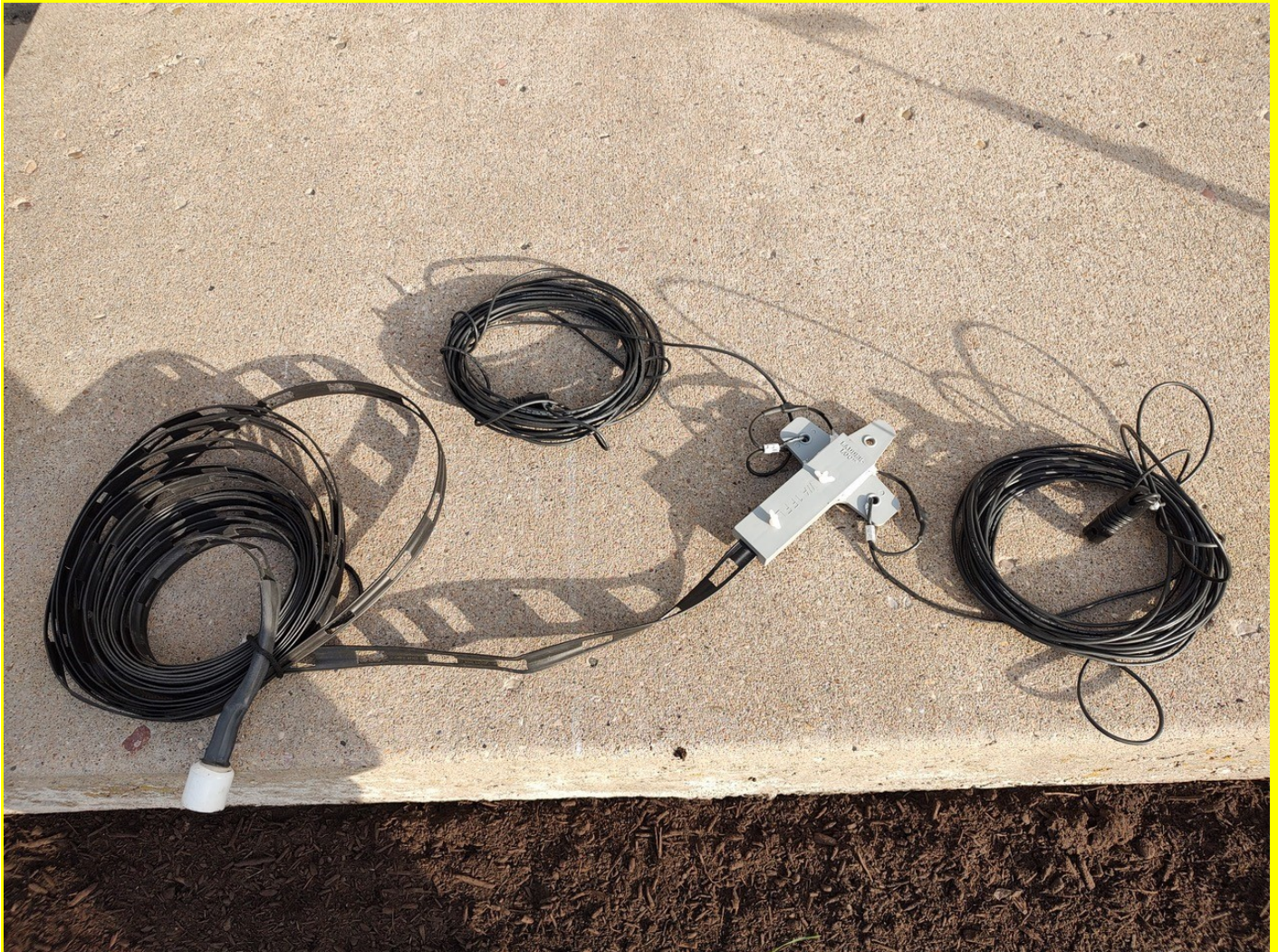
O'bay Swap

SWAP ITEM # 245

FOR SALE: ZS6BKW G5RV Antennas - The Optimized G

ASKING PRICE: \$50

CONTACT: Craig Howe, W0VRM@arrl.net



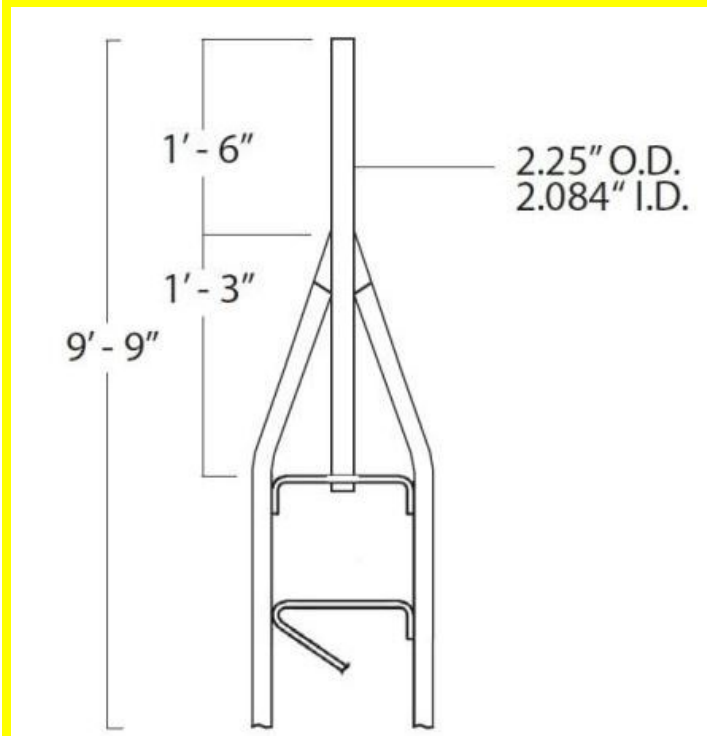
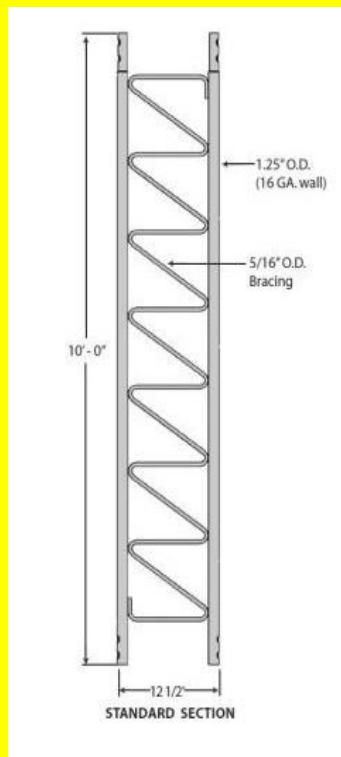
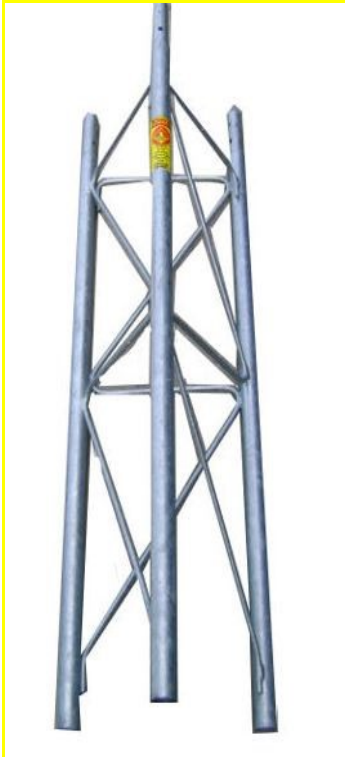
O'bay Swap

SWAP ITEM # 244

FOR SALE: 50 ft Rohn Tower with concrete base and mast

ASKING PRICE: \$250

CONTACT: Dave Sanders, K7RGY, dave.sanders@live.com



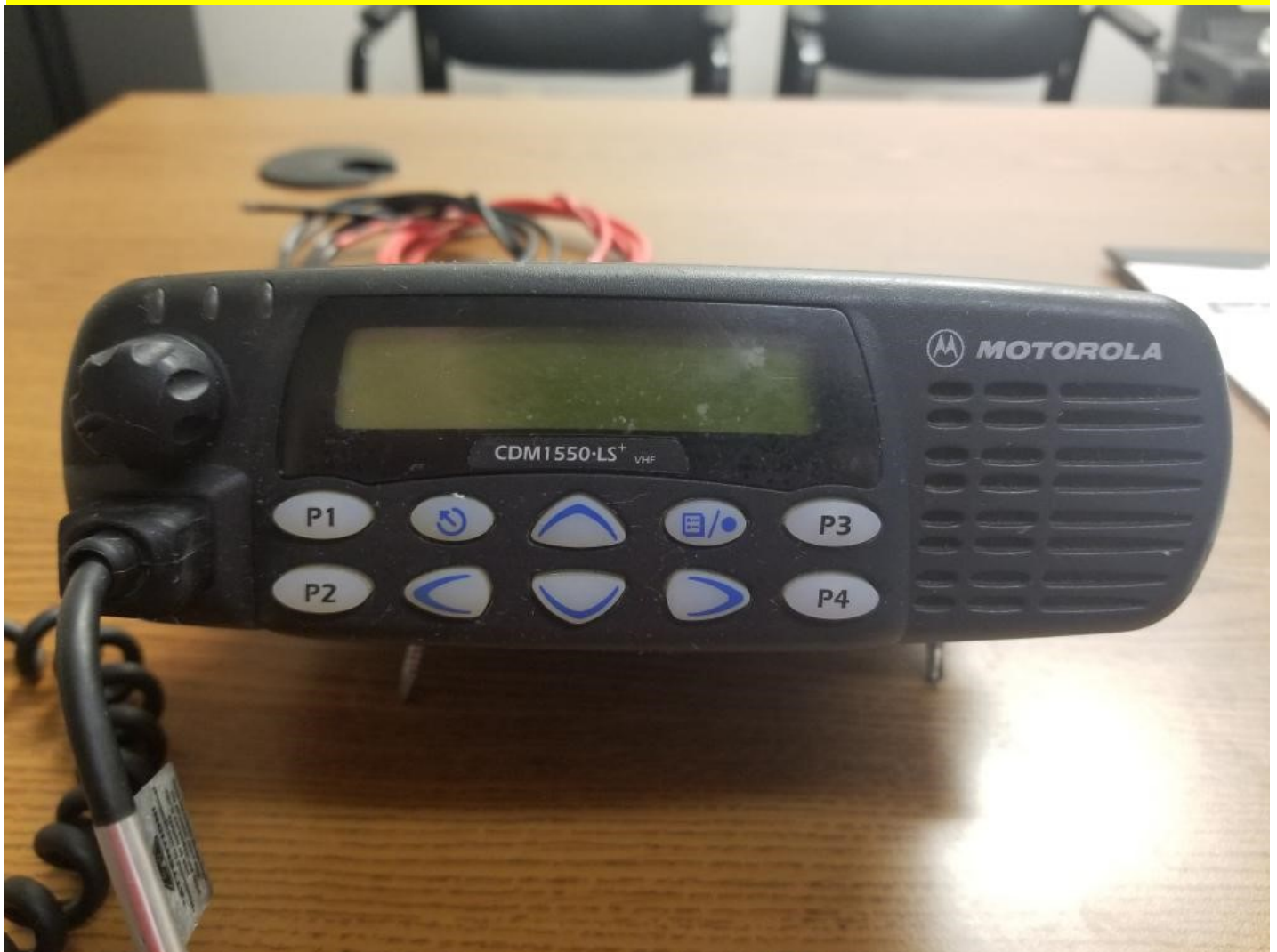
O'bay Swap

SWAP ITEM # 243

FOR SALE: Motorola CDM1550-LS VHF radio

ASKING PRICE: \$0 (free)

CONTACT: stephane budge, stephanebudge@gmail.com



O'bay Swap

SWAP ITEM # 242

FOR SALE: Collins 30L1 Amp

This is a very clean Amp. Original manual in excellent condition.

ASKING PRICE: \$650

CONTACT: Ed McKenney, AA1ZK, 860-729-8986, Eden Utah



O'bay Swap

(repeat)

SWAP ITEM # 225

FOR SALE: Misc Antenna: equipment, parts, cables, etc. (donated to OARC)

REFER TO CHART: Donation Inventory

ASKING PRICE: \$ make offer \$ (as a donation to your club)

CONTACT: Gene Morgan WB7RLX, 801-540-4907, ee_morgan@outlook.com

<http://OgdenARC.org/swap.html>

O'bay Swap

SWAP ITEMS WANTED

<http://OgdenARC.org/swap.html>

CLUB REFERENCE MATERIAL

OARC Repeater Sites

Promontory Point
Elevation: ?
-146.920 (123 Hz)
-448.775 (123 Hz)

Powder Mountain
Elevation: ?
-145.470 (123 Hz)
-447.775 (123 Hz)

Marriott Slaterville
Elevation: 4500 ft
-146.820 (123 Hz)
-448.575 (100 Hz)

Mount Ogden
Elevation: 9572 ft
-146.900 (DCS 125)
-448.600 (123 Hz)



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. Remember ... FREE Steak at Steak Fry for ALL members.

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.

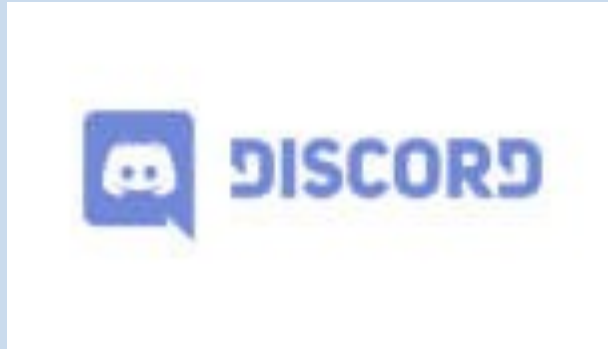
The cost is **\$12.00** each. The badge comes with a “MAGNETIC” clip. Badge includes your Call Sign in large letters and your First Name in a somewhat smaller font in white lettering on a pitch black background with the club logo. See example below.



Place your order along with **\$12.00** prepaid in advance for each badge ordered and specify Call Sign and First Name.

Visit the club website home page Join/Renew tab and select the Badge Order form to order your badge. You can use PayPal or mail your check to the club PO Box.

OARC Discord Page



Did you know that OARC has a Discord page ?

What is a Discord Page you ask?

It is OARC's new discussion group site.

Just click on the icon on the bottom of the club website home page to join and visit OARC's ongoing discussion threads. Check it out!

OARC Facebook Page



Did you know that OARC has a Facebook page ?

Just click on the icon on the bottom of the club website home page to visit OARC's ongoing monthly activities and events. Check it out!

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. Check it out!

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 monthly notices earlier in this newsletter.

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

**Utah Military Academy
5120 S 1050 W
Riverdale UT 84405**

Contact: VE Liaison:

Rick Morrison W7RIK (Liaison)

morrisonri@msn.com (801-791-9364)

open (Co-Liaison)

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.

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

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 repeat-er 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

OARC is 100 years old

OARC was established in May 1921 and became ARRL affiliated in 1937.

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
146.820-	OARC (*)	123.0	Marriott UT
448.575-	OARC	100.0	Marriott UT (no autopatch)

FREQ/Offset	TONE	LOCATION	OWNER
145.250 -	PL 123.0	Weber State Univ	WSC
145.290 -	PL 123.0	Brigham City	GSARC
145.330 -	PL 100.0	BYU (Provo)	BYUarc
145.430 -	PL 123.0	Brigham City	GSARC
145.470 -	PL 123.0	Powder Mountain	WCSO
145.490 -	PL 100.0	Promontory Point	K7JL
146.620 -	PL none	Farnsworth Peak	UARC
146.640 -	PL none	Logan	BARC
146.720 -	PL 103.5	Mount Logan	BARC
146.760 -	PL none	Lake Mountain	UARC
146.780 -	PL 100.0	Lake Mountain	UVARC
146.920 -	PL 123.0	Promontory Point	WCSO
147.040 +	PL 123.0	Antelope Island	DCARC
147.100 +	PL 123.0	Morgan County	KB7ZCL
147.120 +	PL 100.0	Farnsworth Peak	UARC
147.220 +	PL 123.0	Brigham City	GSARC
147.260 +	PL 103.5	Promontory Point	BARC
147.360 +	PL 100.0	Lewis Peak	Summit Co ARC
447.200 -	PL 127.3	Antelope Island	DCARC
447.225 -	PL 100.0	Malad Idaho	Malad Repeater
447.775 -	PL 123.0	Powder Mountain	WCSO
448.300 -	PL 123.0	Brigham City	GSARC
448.775 -	PL 123.0	Promontory Point	WCSO
448.825 -	PL 123.0	Clearfield City	IRLP Node 4654
449.100 -	PL 146.2	Farnsworth Peak	UARC
449.250-	PL 123.0	Weber State Univ	WSC
449.425 -	PL 100.0	Nelson Peak	IRLP - Western
449.500 -	PL 100.0	Farnsworth Peak	UARC
449.625 -	PL 103.5	Mount Logan	BARC
449.925 -	PL 100.0	North Salt Lake	DCARC
449.950 -	PL 123.0	Clearfield City	IRLP Node 3876
ATV - wb7fid	TV Ch 58	Farnsworth Peak	UARC - Utah ATV

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 @ 7:15 PM	Weber/Davis ERC	146.820 - 123.0 (ERC training net)
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	DCARC TECH Net	147.040 + 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	CSE RG	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	OARC - 10 Meter Net	28.375 MHz USB (all hams invited)
Thursday @ 7:30 PM	Davis Co ARES	147.420 = simplex & 449.925 -100.0
Thursday @ 8:00 PM	Weber State ARC	146.820 - 123.0 (coming soon)
Thursday @ 8:00PM (3rd Thurs)	State RACES VHF/IRLP	145.490 - 123.0, 146.680 - 123.0
Thursday @ 9:00PM	Wasatch Back Net	147.360 + 100.0
Saturday @ 8:00AM mt (3rd Sat)	RACES State HF	3.920 Mhz HF LSB
Saturday @ 11:00AM mst	QCWA net HF	7.272 Mhz HF LSB

73 de W7SU

www.OgdenARC.org

w7su@arrl.net

PO Box 3353 Ogden UT 84409