WATTS NEWS

The Best of Amateur Radio

OARC e-Magazine

www.OgdenArc.org

JANUARY 2021

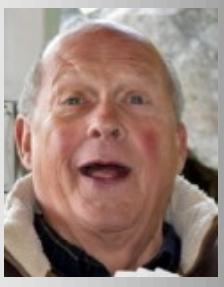
Next Club Meeting/Activity

Inside...

Dave Mamanakis KD7GR
President

Justin Hall KB7LAK
Vice President

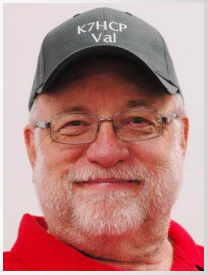
Barbara Siddle KB7FWW
Secretary



J. Siddle KG7CJN
Treasurer

Mike Wilde KJ7HEX
Program Director

Todd Shobe KW7TES
Activity Director



Val Campbell K7HCP
Webmaster/NL Editor

PREVIOUS CLUB MEETING/ACTIVITY

December Activity

3rd Saturday 19 December 2020

9:00 AM

Zoom + On-the-Air Meeting

Christmas Meeting & Door Prizes

NEXT CLUB MEETING/ACTIVITY

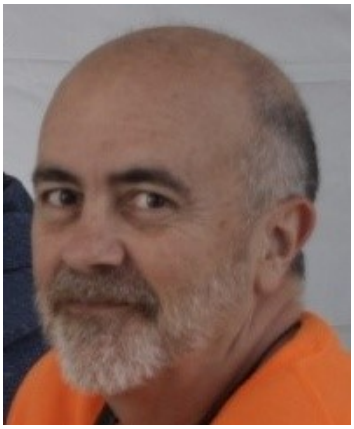
OARC

January Activity

Keep clicking...

PREVIOUS MEETINGS PICS

Photos by … photographers have been quarantined



Tim Samuelson—KE7DOA

Rick Hansen—N7EGA

“Previous Meeting - pictures” ...

Photos located on the club web site home page.

OARC COMING EVENTS

Next Activity

One more click...

January 2021 'Tech' Class

This class will be held via Zoom so it is Covid safe and no travel required.

More information inside.

Next VE Test Session

1st Wednesday 03 February 2021 @ 6:00 PM

CLUB NEWS

OARC

January Activity

OARC Meeting/Activity - January

3rd Saturday 16 January 2021

9:00 AM

Zoom meeting - More about QRZ.com Logging

Zoom logon link - posted on club website soon

Stay tuned to the Club Website and the Ham & Eggs Net

Dave's Rag Chew

Dave Mamanakis KD7GR

HAPPY NEW YEAR!

YES! We finally made it into the new year! 2021! And they are distributing the vaccine that will help us get back to normal!
So, my friends, start thinking about some auxiliary activities you'd like to have this coming year!
We still plan on our normal summer activities, especially if we all take advantage of the vaccine and the freedom it will afford us!
May will bring us Golden Spike… we'll keep you updated as to the status of the Park.
June is Field Day…
July is our T-Hunt…
August is the Steak Fry…
And I know Gil has some ideas for activities and events throughout the year…
BUT, we also want to "make up for lost time" in 2020, and we want to have some Eyeball QSO type events and other activities, especially with those in our community that might be interested in Ham Radio, the Youth in our Community, we might want to help "reactivate" hams that have left the hobby… or maybe we'd just like to invite more of the local hams to join the club and come out to have fun!
So if you have some ideas, please contact me or one of the other board members! We'd LOVE to hear your ideas!
Things like "Hotdogs at the park on Thursday evening" or "Breakfast at Warrens on Wednesday morning"…
This is YOUR club! If you want to do something, let's do it!

We will have some news about the FCC's ruling on charging a licensing fee for Ham Radio…
We, as a Board, are discussing the possibility of having a "Lifetime Membership"… I'd really like your feedback!

I'd like to thank Gil (NG7IL), Mike (KJ7HEX), Kenny (KI7UFN), Scott (KD7EKO), Rick (W7RIK), Justin (KB7LAK), and J (KG7CJN) and Barbara (KB7FWW) for all the hard work helping to distribute the Membership Certificates!
If you haven't received one, it might be in the mail (we had a PO Box in the mix) so give it a day or two… but if you haven't received yours, PLEASE contact one of the Club Officers, we'll verify your Membership Status and we'll get one to you soonish!

And don't forget: We are having a Contest to develop the Club's QSL Card for the 100 Year Anniversary! There is even a Cash Prize for the one that gets picked!

Let's make this year one to remember for GOOD reasons!

--Dave, KD7GR

Continued ...

My Friends!

I hope you all had a great Christmas!

If you got everything you wanted, then no need to read any further… however, if you feel you might have missed out on one last gift (for yourself, of course), might I suggest the Nano VNA.
You can find them for around $60, or all the way up to around $100. You might need to research a little, I guess some are "updated" while others aren't. Mine cost about $60, and it is the "latest". I bought it on Amazon…

The Nano VNA is a Vector Network Analyzer. It can, and does, do Antenna Analyzing… and it works very well, too. I picked mine up a while ago and I tuned all my HF Ham Stick antennas. My FT-857D hasn't complained about their tuning… well, as long as I stay away from the PEBRAC issues (You know, where the Problem Exists Between Radio And Chair?)…
I found it quick and easy to set up. It comes with all kinds of instructions… some might all be in Chinese, however. Mine were in both English and Chinese. The nice thing is, you can find a multitude of videos on Youtube that outline how to use the Nano VNA!

Or, if you have a Nano VNA, and you are still thinking you want another "just for you" gift… try a Raspberry Pi. No, not the edible one, the Computer. They come in a few flavors, but most can be had for under $100. They have a million uses. Everything from CAT Control for your Radio, to building a simple NAS, a Web Server, if you'd like to host a website, and they can be used on a Mesh Network. You can add a little hardware and turn one into an MMDVM, which will allow you to use Digital Modes on your HT, even if it isn't a Digital Radio.

Ham Radio is a Great Hobby, and there is plenty of support for Raspberry Pi in our Hobby!

This Month, starting Wednesday, is our Tech Class! Join us! You can help with the class, or just get a refresher!

Don't forget our Club Meeting on the 3rd Saturday… We'll be on Zoom!

All the info is on our Website! Check it out!

Stay Healthy, My Friends!
There is Light and the end of the Covid tunnel!

-- 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

A Note from your net control operators.....

The Ham and Eggs net is a fun and informal net for all licensed operators to enjoy. Prior to each net session we will ask for a volunteer to run the net.

Please consider doing just that!!! To call the net requires absolutely zero experience and is a rewarding enterprise. If you make a mistake. Guess what: no one cares.

It's easy, just follow the out line below.

Most of all: you will be greatly appreciated by your net check-ins and by your regular net operators.

Thanks...

Larry AD7GL and Stan W0KP

Continued ...

Suggested Net Outline for the Ham and Eggs Net.

Preamble:

Good evening and welcome to the Ogden Amateur Radio Club Ham and Eggs Net. This net meets each Tuesday evening at 7:00 PM local time on the 448.600 repeater. This repeater has a negative offset and a tone of 123.0 Hz. You do not need to be a member of the Ogden Amateur Radio club to participate, we welcome any and all stations to check in.

This is your call sign, my name is your name. I will be your Net Control Operator this evening. This is a very informal net and its purpose is to answer any questions relating to amateur radio, general discussions, and to foster fellowship with other amateur radio operators. More information about this net and the Ogden Amateur Radio club can be found online at www.OgdenARC.org.

Ask for Announcements:

Before we continue, I would like to invite any station with announcements to call now.

Call station(s) with announcements.

Ask for Check Ins:

Let's begin Check Ins. Please state your callsign slowly and phonetically along with your name and any information interesting to the rest of the net.

Log all Check Ins on a sheet of paper.

Acknowledge each check in as it is received.

Roundtable discussion:

Call each station that Checked In.

Encourage them to comment on; the topic of the evening, ask a question, or a short report on the past weeks radio activities.:

Late or missed Check Ins:

Are there any late or missed stations that would like to check into the Ham and Eggs Net?

Invite any late or missed stations to Check In:

Repeat Roundtable discussion with any additional Check Ins:

Last Call:

Are there any other stations wishing to check into the Ham and Eggs Net?

Are there any other comments of questions for the Net?

Close the net:

Thank you for participating in the Ogden Amateur Radio Club Ham and Eggs Net.

We will now return this repeater back to normal amateur use.

This Net is now closed.

This is your name Net Control Station your call sign clear.

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

Ogden Amateur Radio Club

Centennial 2021

QSL Card Contest

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

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

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

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

Grand Prize

$100

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

Submit all entries electronically to:

w7su@arrl.net

CLUB NEWS

OARC ‘s new 2021 Centennial Club Logo

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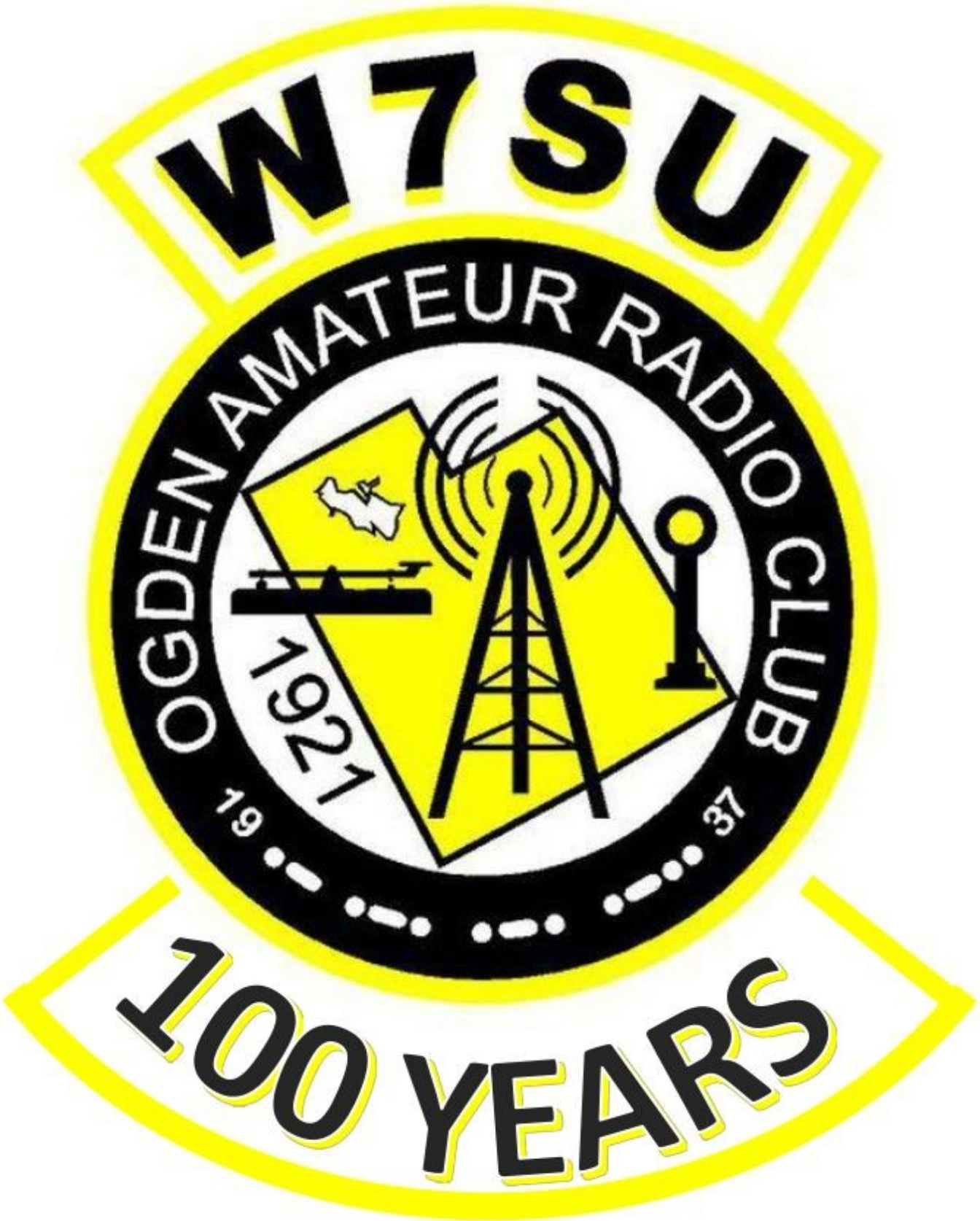

CLUB NEWS

OARC ‘s new 2021 Centennial Club Patch

CLUB NEWS

Ogden Amateur Radio Club Logo

Having been a member of the Ogden Amateur Radio club for only 10 years, I offer my perspective on the club logo. This article presents my perspective only and I invite relevant input from other members.

The existing logo version was modified to produce the 2020/2021 version to celebrate the Club centennial.

W7SU

Dr. Garner, one of the original founding members of the Ogden Amateur Radio Club, held many different callsigns. W7SU was his last.

It is amazing that someone in the club realized what a fitting tribute it would be, to apply for and get a grant for this callsign that now represents the Club Dr. Garner helped to organize in 1921.

The callsign, W7SU, was added to the top as a rocker. It reminds me of the broadcast microphones of years past.

Larry Griffin, AD7GL, is the current trustee for W7SU.

1921

This date represents the original founding of what is known today as the Ogden Amateur Radio Club.

The history of this date is presented in a letter and available here on the club website:

http://www.ogdenarc.org/documents/OARC%20History.pdf

19 ._ ._. ._. ._.. 37, ARRL

The Ogden Amateur Radio club first became affiliated with the ARRL in January of 1937. ARRL is spelled out in Morse code between the 19 and 37.

To be an affiliated club means that at least 51% of the voting club members are also ARRL members and hold a valid amateur radio license.

An annual report must be filed each year to maintain our affiliation with the ARRL.

The ARRL has been around for even longer than our club. Founded in 1914.

More information on a wiki here:

https://en.wikipedia.org/wiki/American_Radio_Relay_League

ARRL web site here:

http://www.arrl.org/

State of Utah

This is rather obvious as it represents the great state of Utah where we live.

100 Year Rocker

The 100-year rocker was added to the bottom of the logo for the 2020/2021 year.

It is a bold statement to anyone seeing our logo letting them know we are a 100-year-old club.

Key, Microphone and Antenna

The key, microphone and antenna tower should quickly suggest radio to anyone viewing the logo.

There are so many different modes and radio types available, it is impossible to represent them all.

These 3 elements invite questions where we can share our passion of radio and the different modes and radios available.

73 de Gil

NG7IL

CLUB NEWS

OARC Technician Class

The following classes have already begun. But it's not too late join.

Each Wednesdays 6, 13, 20, 27 January 2021 @ 7-9 PM
Classes sessions will be held online via Zoom meetings.

Zoom connection information on website

No pre-enrollment required.

However if you desire or have any questions, send an email to w7su@arrl.net with subject = "class".

Text book: Technician License Course, Stu Turner W0STU - (Club has 7 available- $20) or buy online at Amazon (Free online learning media at: www.HamRadioSchool.com

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Next VE Test Session

1st Wednesday 03 February 2021 @ 6:00 PM

Location to be Announced

CLUB NEWS

OARC Members,

Yahoo is bringing to an end Yahoo Groups so we will no longer have our OARC Yahoo Group. Not to worry, Google has a Google Groups which works almost exactly the same as Yahoo Group.

OARC has recently started sending your club communications directly to your email address that is the email address on record of your membership so OARC no longer will be using Yahoo or Google Groups method of distribution.

Sign up and use the OARC Google Group to Send/Receive OARC member communications between your fellow members.

Click on the Google Groups ICON at the bottom of the OARC website home page and sign up.

NOTE: Stay Tuned for this feature.
We are still working to make this happen.

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 w7su@arrl.net -Or- 801.389.0690

So send me your Ham Shack Photos soon!

CLUB NEWS

Ham Shack Photos

Last month the unidentified Ham Shack Photo was …

K07U

Kim Owen

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?

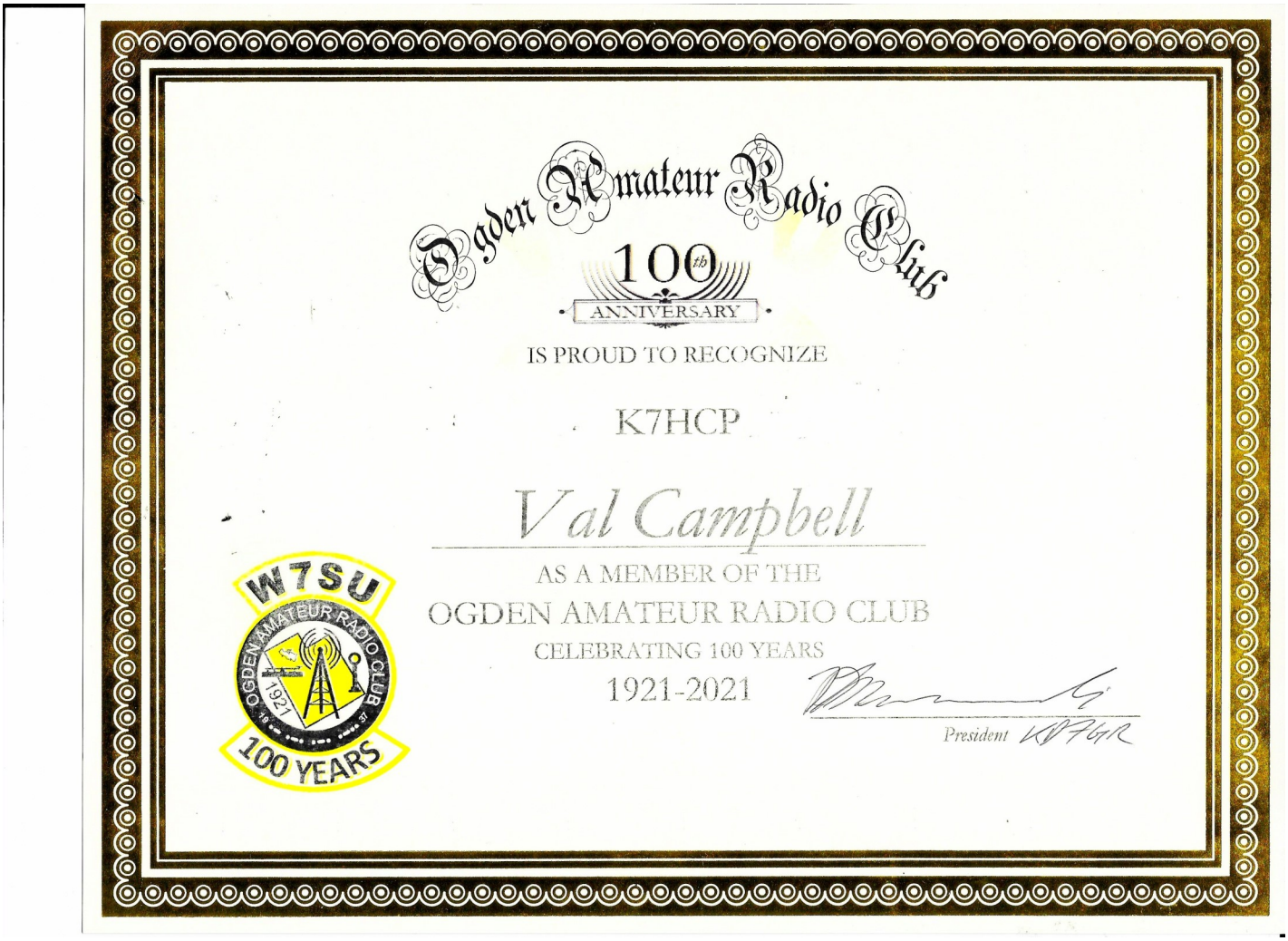
CLUB NEWS

Ogden Amateur Radio Club 100 Years Centennial Certificate

Kudos' to the OARC Centennial Committee and volunteer drivers that made this possible.

All 120 current paid up members of our club received this wonderful memento which is worthy of framing and hanging in our radio shack.

Thank you!



HOBBY NEWS

Utah VHF Society Announcement – 2021 Swap meet (27 Feb 2021)

The Society Officers have had a number of discussions about how to handle the upcoming Swap meet for 2021. As much as we would like to hold the swap meet as we normally do we feel it is in everyone's best interest to cancel the event to a later date in 2021 or not have it at all.

We know this will be a disappointment to all our members and as best as we can determine it is the first time since 1969 that we have had to cancel this event. We do not want to completely abandon this event so here is what we would like to do for our members:

1. We will have a drawing for a wonderful collection of door prizes, the drawing will be open to all members who have paid their dues for 2021 by 01 February 2021. The drawing will be accomplished using a random number generator.

2. We plan to conduct a business meeting open to all members via a Conference Call where we will conduct our business and announce the prize winners. We will send out notifications concerning this call sometime during Jan or Feb 2021.

3. We will publish our annual booklet and mail it to all members. If you want your name in the booklet we must have your dues payment by 31 January 2021.

FUTURE FEATURE EVENTS

ATTENTION READERS

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

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

This issue of OARC's newsletter, *WATTS NEWS* introduces a series of special articles and stories about our history. Stay tuned for upcoming features.

FEATURE EVENT

by Kent Gardner WA7AHY

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

SPECIAL EDITION

Volume 1 January 2021

As recorded by Dr. W. Glen Garner: In the spring of 1921:

I suggested to (Glen) Quillinan that we call the known amateurs in the Ogden area together for the purpose of forming an active radio club, for the purpose of exchanging ideas and discussing progress and recent developments in the field of amateur radio communications. Quillinan thought the idea an excellent one and I personally contacted all the prospective members I knew. The meeting was called for a Saturday afternoon, about the middle of May 1921.

Those attending were:

W. Glen Garner

Glen Quillinan

Cook

Ralph Flygare

"Chickey" Crawshaw

One other (forgot name)

Updated history 07 May 2007.

The following information was researched/found by Tim Larson, Ph.D. of the University of Utah. He found their names in the RSUS Edition July 1, 1916 (Radio Stations of the United States). This information was then provided to Kent S. Gardner, WA7AHY, OARC Historian and was updated as follows:

W. Glen Garner

Glen Quillinan

Ralph Flygare

Gene "Chickey" Crawshaw

George W. Cook (6CW) 208 27th Street, Ogden, UT (.5 kW)

Howard D. Harris (6AJA) Ogden High School, Ogden, UT (1.0 kW)

Dr. Garner continues: As the founder and organizer, I was elected President, Glen Quillinan, Vice President and Treasurer. No secretary or historian was elected at that time. The President was to assume the duties of Secretary. The name of the club, by unanimous vote, was to be “Ogden Amateur Radio Club”. Meetings were to be held once a month, at some specified place and time. The time, preferably Saturday afternoon, since most were available then. Thus, then and there the Ogden Amateur Radio Club was born and remained active for the next few years.

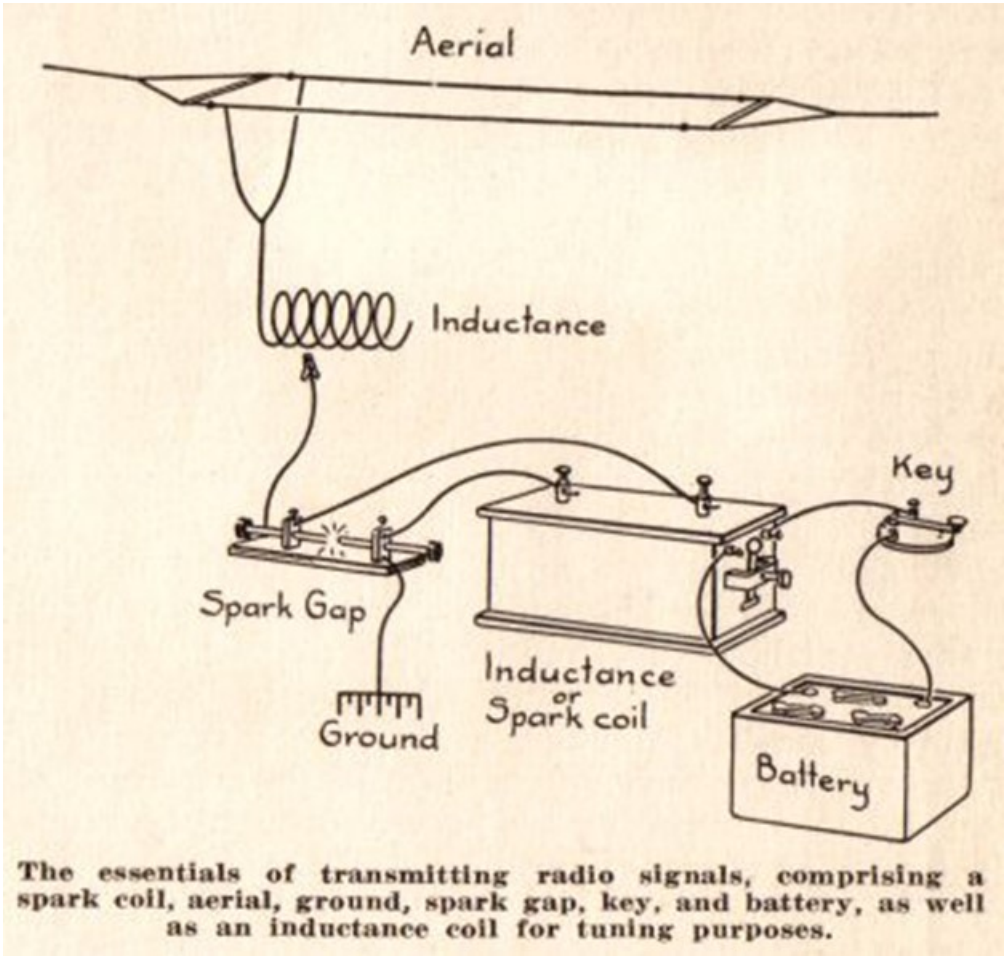
In the interest of history, let us step back a few years and see what Dr. Garner’s first ham stations could have looked like.

Dr. Garner states: I learned the old Morse telegraph code at the grand old age of nine years (1911). I designed and built my own telegraph key and sounder the following year and communicated by telegraph over a land line strung on fence posts, with a neighbor boy living four houses away.

My first transmitter consisted of a Ford automobile spark coil, home-made spark gap, an old telegraph key and a six-volt storage battery.

The following picture shows a very nice spark gap transmitter using the spark coil. It is probably much better looking than Dr. Garner’s homemade transmitter but the layout was probably very similar. The spark gap is just left of the spark coil. The two binding posts for the antenna are on top of the coil. The battery is not shown.

This pictorial shows the components very nicely. The picture was copied from the internet.



The essentials of transmitting radio signals, comprising a spark coil, aerial, ground, spark gap, key, and battery, as well as an inductance coil for tuning purposes.

Dr. Garner continues: The receiver was a homemade tuning coil with a silicon detector, 1000 Ohm Murdock receiver, and a homemade 23 plate variable condenser. With this "sophisticated homemade equipment", I was able to hear a ship at sea communicating with two other amateurs, (unlicensed) in the area. At the time, a transmitter that was deemed incapable of transmitting signals across state lines did not require a license from the Department of Commerce. Editor's note: Searching the internet, I could only find the following homemade Murdock receiver of 1918 vintage.

It was "loose coupled" where a coil was moved in and out of the encased coil. The 23 plate variable condenser fits on top of the coil box.

The crystal detector and cats-whisker assembly is shown on the right of the preceding picture. The following is a closeup. The crystal was either galena or silicon. The needle or wire had to be moved to a "sweet spot" on the crystal to rectify a signal.

Dr. Garner's further explanation about radio communications in those days:

In 1912 The RMS Titanic sank on its maiden voyage with the loss of 1517 lives. While sinking, the Titanic contacted several other ships via wireless. This event caused several changes. Spark-gap transmitters for wireless communications became almost universal on large ships. A year later, the International Convention for the Safety of Life at Sea was convened and required radio stations on ships to be manned 24 hours a day. Editors note: At that same time the Samuel Morse (American) code was scrapped, except for the American railroads, in favor of the German code. It is now known as the International Morse Code.

In 1924, spark gap transmitters were banned on amateur radio bands.

TNX Kent Gardner, WA7AHY.

FEATURE EVENT

by Eugene Morgan WB7RLX

DX-Expedition to the Spiral Jetty

Jared W7FMJ Operating from the Spiral Jetty, Promontory Point Utah

FEATURE ARTICLE

by Eugene Morgan WB7RLX

Prefix Locator

By Eugene Morgan (WB7RLX)

I first got interested in computers not long after I got interested in ham radio and for some reason I always felt like at some point the two technologies would ultimately come together. Not long after I got my ham license back in 1977 we started seeing some signs of that convergence. In fact one of the very first OARC club meeting I attended was a presentation of an IMSAI 8080. It's fair to say that it was this presentation that pointed me in the direction that my life's work would go in.

Figure 1: IMSAI 8080 Released in December of 1978

Being a young man with limited funds and a new wife with two young boys it took us several years to scrap together enough money to buy my first computer, a Commodore VIC 20 with an incredible 3.5K of memory. Not long after I was able to add an additional 24K of memory. It was on that machine that I started down the path of writing software.

Figure 2: Commodore VIC 20 Released in 1981

I was also very much into ham radio. At that time the sun spot cycle was peaking and signals from all over the world were being received by my home brew 6 element 10 meter monster yagi. It was a wonderful time for ham radio and a wonderful time for me, with the emphsis on "wonder". Back then there was no Internet as we know it today and what Internet there was was limited to universities and the government. The World Wide WEB would not be invented for several more years, 1989. Consequently looking up prefixes was done using the paper ARRL log book which included a DXCC list in the back. One day as I was sitting there logging QSO's and looking up prefixes I decided that I would write a program that would simplify the process for me so I set about writing one my my very first, what I will call, "useful programs". After getting the prefix lookup program done I thought it would be cool to also have it tell me what direction to aim my yagi and how far away the station was. As all programmers know a program is never really done. After it's "done" someone invariably wants to start adding features.

Using an algorithm I found in a book called, "*The Giant Book of Computer Software*" published by the editors of 73 magazine I was able to translate distance and bearing algorithm into Commodore (Microsoft) BASIC, and lo and behold it worked! I remember several evenings sitting at my computer while my wife sat with this huge atlas looking up lat/longs for the various DXCC countries around the world.

Once again following the montra that a program is never really done I thought it would be cool to add a Maximum Usable Frequency (MUF) feature along with sunrise and sunset times. At that point I really felt I was done. All and all I thought it was a pretty cool program. One day my wife suggested I send it to 73 magazine and see if they might be interested in publishing it. At that time all the magazines were looking for type-ins which were always a big hits with the readers at that time. They were interested and published the article in the Feburary 1984 issue of 73 magazine. The article was called, "*Put the DX*

World on a Screen" (see: 73 Magazine (February 1984) : Free Download, Borrow, and Streaming : Internet Archive). As time went on I wrote a few other programs that were also published. The next article was a code practice utility for the VIC 20 that was published in July 1984 (See: 73 Magazine (July 1984) : Free Download, Borrow, and Streaming : Internet Archive). That was followed by another program about Yagi Antenna design. The program would design a Yagi Antenna based on the research done by Peter P. Viezbicke and published in the National Bureau of Standards Technical Note 688. It can be found on the internet at: https://archive.org/details/yagiantennadesig688viez/page/n1/mode/2up.

I felt that I had found my true calling in life – computers. From there I went on to work for several local computer reatilers in the Ogden area. Which later brought me to the attention of Microsoft. I went to work for Microsoft in 1996 and after 21 years there I retired. I think it's fair to say – it all started for me at an OARC club meeting some time in the late 70's where I first came face to face with these wonderful, perplexing and fascinating wonders of the modern age.

Figure 3: My first log book and a page showing when I got my General Class license.

Now I want to turn the clock to more recent times. After I retired I was starting to feel like my brain was turning to mush. My Job at Microsoft required me to write a lot of scripts that could interface to what Microsoft called, "Active Directory". It addition I was also asked to write a lot of different "batch files" and scripts for our customers. Later I started writing some pretty sophisticated Excel spreadsheets that my teams used to manage large programs and projects budgets for managing the financials. I enjoyed these kinds of projects because they took me back to my first love, coding. After retiring I decided to start writing my own software for running my ham station even though there were a number of very good programs used for QSO logging. One of my first endeavors was to write my own logging programs. It was during this effort were I learned the ins and outs of writing CAT control algorithms for my radios and the details of the Amateur Data Interchange Format ADIF standards. I was now able to not only control my radios through software but also pull data from my radio such as frequency and mode settings. I was also able to export and import my logs to QRZ using the ADIF standard. Over time I wrote a number of programs that I use every day in my station. That now brings us to the primary topic of this article, the Prefix Locator utility.

The current version of the Prefix Locator utility is a much simpler version of the program I wrote back in 1983 with a much larger database. The data base includes all of the 2020 DXCC entities. If you enter in a prefix it will return the possible countries or DXCC entities associated with that prefix. It does not give you latitude, longitude, distance, bearing, MUF or sunrise and sunset times as my first version did. You will note however that the prefix.txt data file does include the latitude and longitude along with DXCC Code, the ITU Code and the CQ Zone number for each prefix. I decided to leave that data there for possible use later if I decide to update program. In this version of the program I decided to leave all of that out given that it is readily available on the internet. Perhaps one of the best prefix locator programs I've found on the internet is the one on QRZ, DX Atlas by QRZ Ham Radio. The intention of this

little utility was to do one thing, provide the DXCC entity name for each prefix and to do it very quickly, simplicity was my primary functional requirement. I also wanted it to be able to run it with no dependency on the internet so it could be used as a part of a mobile operation.

The program can be downloaded from the OARC web site. Once you download it unzip the file. From there the read me file will tell you how to install it. To run it just launch it, type in a prefix at the prompt and it will respond with a list of possible countries. If the country list is terminate by three periods that means there were too many entities to list. See the example below. This is a lookup for the prefix ***UA***. As you can see there are a lot of DXCC entities that use the UA prefix. You can get a bit more specific by typing in a longer prefix, usually not more than three character, UA0 for example which will return Asiatic Russia. If you type in a longer prefix the utility will perform a lookup, if it finds nothing it will chop off the last character and do another search. It will keep doing that until it finds a match or is down to only one character. After doing a lookup you can do another lookup by typing in another prefix or just press the enter key to terminate the program. The program will terminate if the search value is empty.

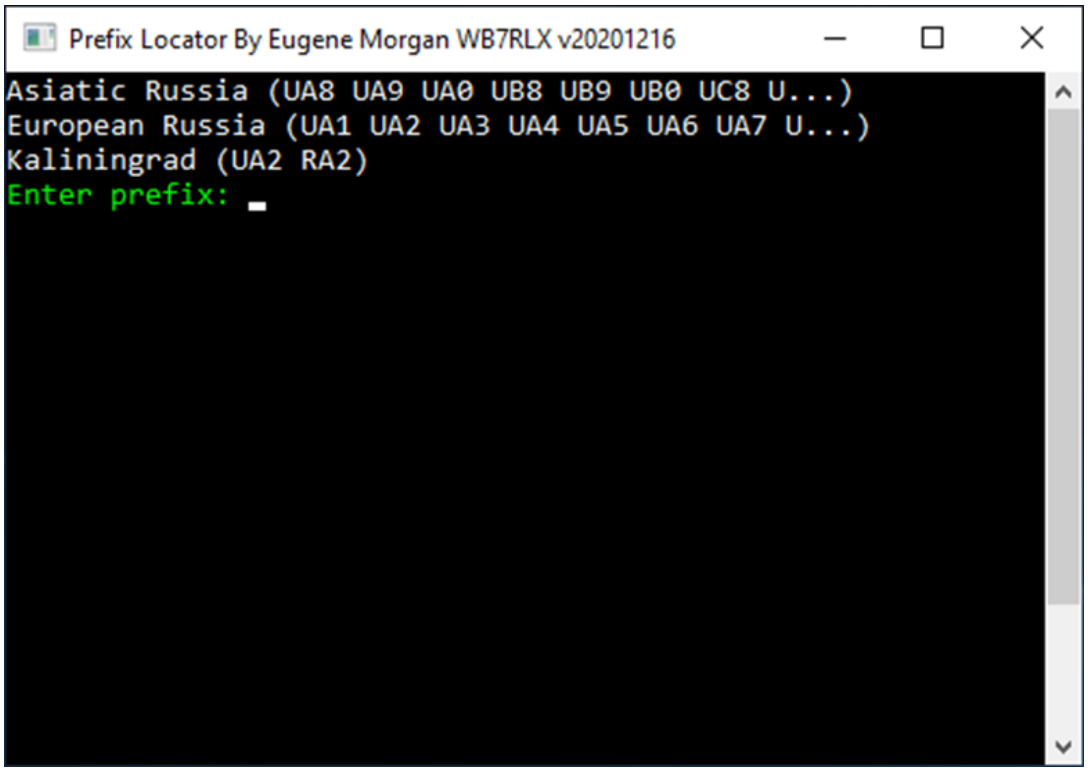


Figure 4: Prefix lookup for UA

I like to leave this little utility up and running when I'm on the air and if I hear a prefix that I don't recognize. I can just type it into the utility to find out where the CQ is coming from. Right now with the sun spot cycle being what it is we are not hearing a lot of DX. But as cycle 25 continues to progress toward maximum this little utility may come in handy.

I'm working on a future version of this utility that will look up and entire call sign using the QRZ database and will provide information about the station including distance and bearing. If it can't find the call sign in the QRZ database it will at least look up the prefix and tell you what direction to point your antenna and how far away the prefix entity is.

I hope you enjoy using my little utility. If you have any questions about it please drop me a note or give me a call on the Mt Ogden 448.6 repeater.

73, Gene

(WB7RLX)

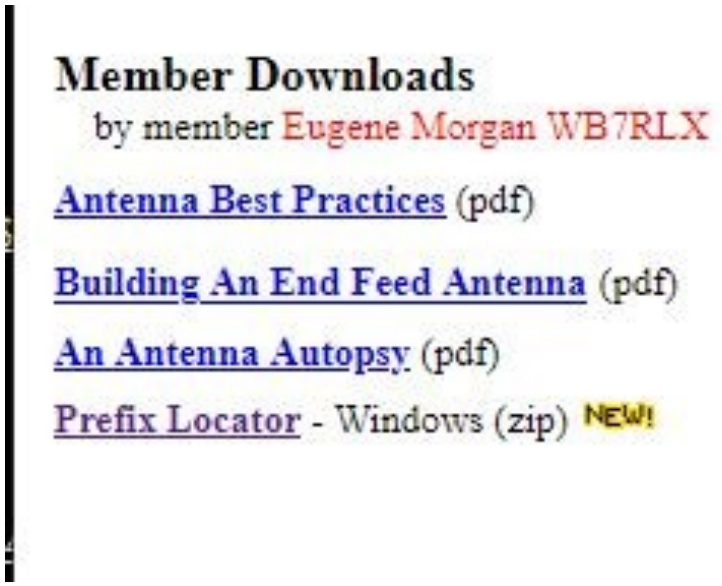
———————————————————————————————————————-

Note from the Editor…

Gene's Prefix Locator program for Windows PC can be downloaded from the clubs "Downloads" page.

Download the .ZIP file and read the ReadMe.txt file for simple instructions to install and use on your Windows PC machine.

73,



FEATURE ARTICLE

by Kent Gardner WA7AHY

6-Meter Beam

9 Years in the Making—March 2011-November 2020

Ever since I bought my Kenwood TS-2000 transceiver with 6-meter coverage built in, I have wanted to get on that band. Even in the AM days, I only had a Heathkit-Twoer, not a 6-meter box. Being the Ogden Amateur Radio Club's Historian, I have seen some old photos and stories about a 6-meter group having some whooping good times back in the 1960s. Please check out the pictures and stories by reading the February 2010 issue of *WATTS NEWS.* There is some great stuff about 6-meters; especially, the story by John Shupe, about confronting the bad guys who were there to have it out with ham operators who had funny antennas on their cars.

One of my favorite places to explore/shop is Smith and Edwards. They used to have military surplus to entice me to visit them often and go exploring in the rows of mostly junk aisles. They have torn down all those building on the South side now, but the surplus section in the store still has an appeal to explore. In one of those walks through the hardware section, I noticed some aluminum stock. I thought it important enough to write a little article for the newsletter in the May 2011 issue, some of which is repeated below.

Source of Aluminum Tubing for Homebrew Antennas I am always looking for aluminum for antennas and copper wire for grounding etc. I looked specifically for aluminum tubing that can slide in and out of a larger size so you can tune the driven element in an antenna.

Aluminum tubing

1 1/4" x 1/16" 8' = $20.49 6' = $15.99

1" x 1/16" 8' = $13.49 6' = $10.99

7/8" x 1/16" 8' = $12.49 6' = $10.49

3/4" x 1/16" 8' = $10.99 6' = $ 8.99

Aluminum square tube

1" x 1/16" 8' = $17.99 6' = $13.49

Anodized square tube

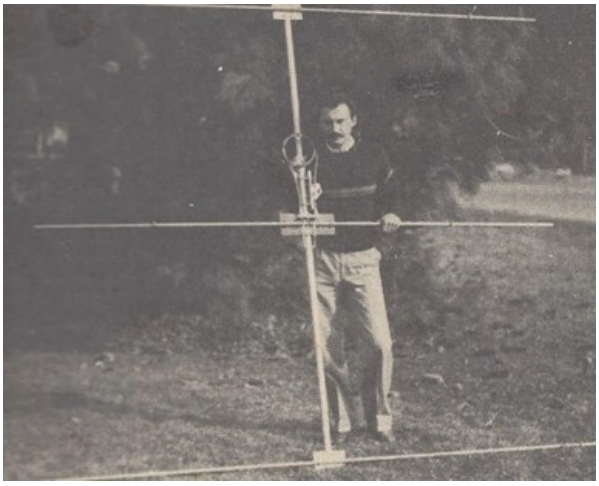
1/4" square 75 cents per foot

I haven't stopped to look at the prices lately. Other hardware stores have similar stock now.

My intention was to build a three-element beam for 6-meters. I chose to use the 1/4th inch anodized square tubing for the reflector and the director where I could use just one continuous piece for each. I chose the 7/8 "round aluminum tubing for the larger diameter and 3/4" for the smaller outer pieces for the driven element.

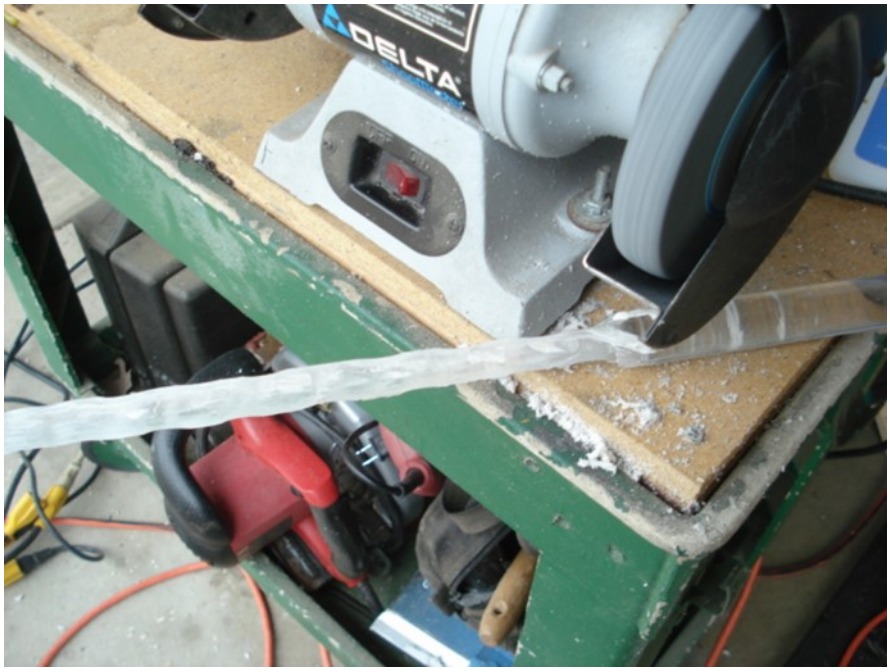
The following photo shows the square tubing.

The next picture shows what the antenna was to look like.

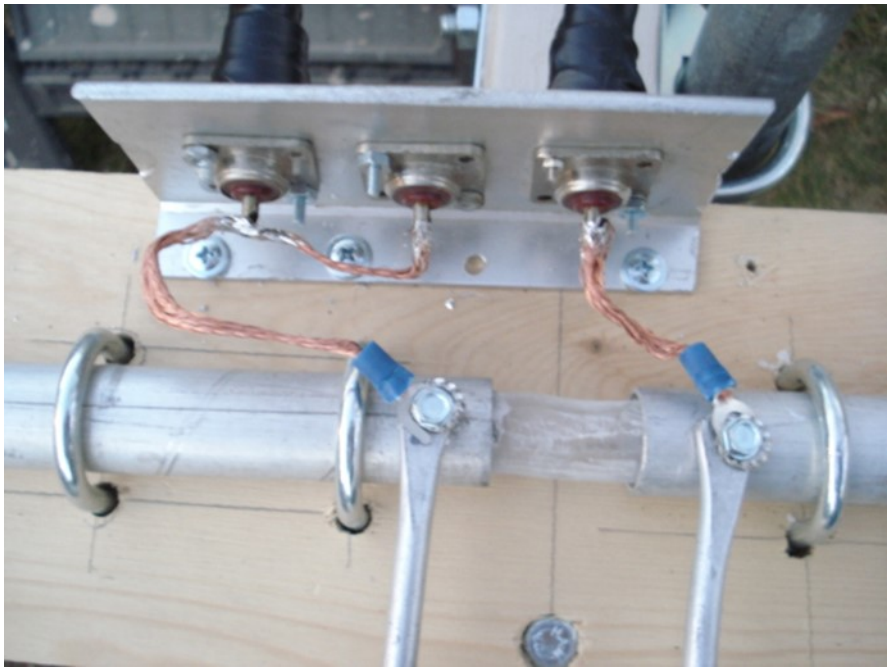


The ARRL Antenna Book, Copyright 1983, is the source for the picture and the measurements. The next picture shows a problem I ran into during the construction of the driven element.

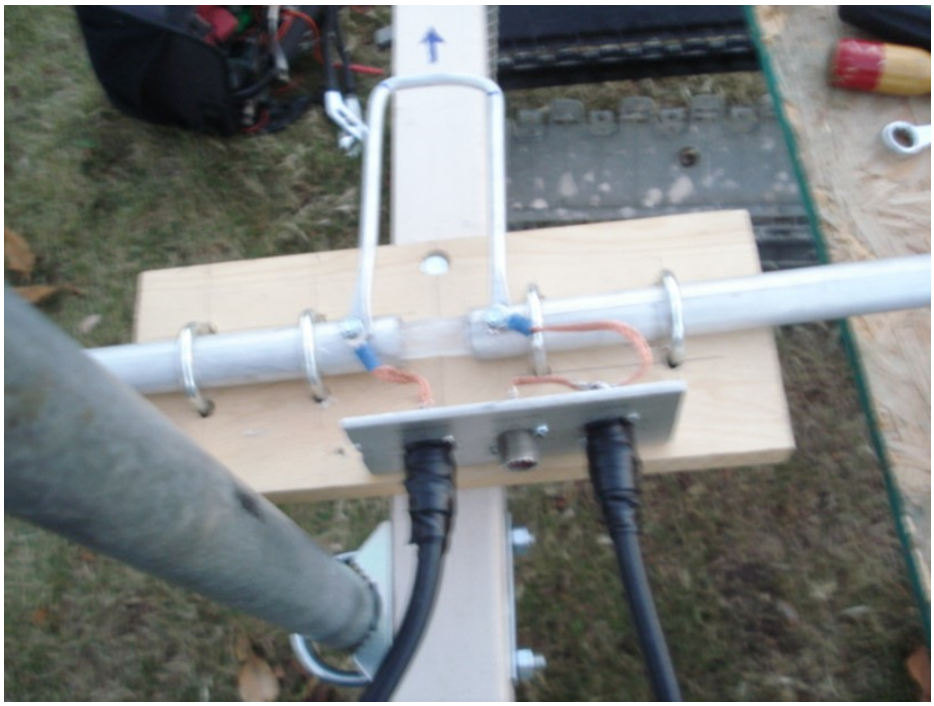
Each of the right and left elements were to be strengthened by inserting a Plexi-glas rod in both sections to strengthen the driven element in the middle. The idea being that one would only use one U-bolt on each side. I ended up using two U-bolts on each anyway. My problem was is that I could not find the right size plas-tic rod to fit in the tubing. I did have a curtain/drape rod section that I had used for insulators supporting my Skywire Loop. I had to cut/grind the rod to fit. I used my table saw to cut some and then my grinder to make it rounder.



This is what the plexiglass rod looked like installed. The section was one foot long.



The coax connectors were mounted on an aluminum panel. There is a story that goes with this. I bought about a dozen empty front panels at a TRW swap meet from a then defunct CB radio production line. This particular panel was used for several years as my connection point for my lightning caused whistler antenna and receiver setup in my van.



Notice I had to offset the coax connector assembly so I could screw on the coax balun (phasing) cable. The hairpin loop proved to be interesting also. The design called for a piece of 3/16th aluminum rod. I tried everywhere to find such a size, but could only find ¼ inch. I used it and it worked out just fine. I pounded the ends out flat so I could drill holes to mount the copper braid and hairpin loop to each side of the driven element. The coax feed connected to the middle fitting

The original plans called for the boom to be aluminum tubing, but I chose to use a 2 x 2 pine board instead. Another story. While in the Air Force I was a member of Air Force MARS and checked into a net from Selma, Alabama where I was stationed to Montgomery, a distance of about 50 miles (this was the distance of the freedom march the year before I got there). The rig was a Heathkit-Twoer. My antenna was made of a broomstick (wood boom) with hard rolled telephone wire elements (10 or so). The success was that it was mounted on a telephone pole up about 30 feet. I was always able to check in without any problems.

I must confess that I started the project back in 2011 when I originally bought the tubing. I mounted the reflector and director to the 2x2 board, but chickened out building the driven element. It took me nine years to finally do it. My article concerning my repairing/rebuilding my antennas after the hurricane was in the December issue of the newsletter. The rebuild project

gave me incentive to finally finish the antenna. I had the 2x2 leaned up against the back fence or plopped on my basketball court for all those years. I moved it every two weeks to mow the grass under it. I never did dream about it, but did think about it every summer. The new tower sections that I installed (shown last month) also gave me a place to put it.

I originally just drilled two holes in the square tubing, but found I needed more strength. All those years the elements became looser and losser. Putting on these wood plates and using the U-clamps solved the problem. The instructions were a little thin how I should place the hairping loop etc.so I wrote on the plate which element it was and the direction. Before mounting hardware, I plastered the wood with shelac in an attempt to waterproof the wood. I then painted it the same color as my ham shack wood trim, then put on more shelac. I tried to keep everything square, but I ended up a little off.

The drawing below shows the phasing line. The second to last line shows the velocity factor specification. I had to look it up on the internet to find that RG-213's factor was .84. It was close enough to .80 that I used 7 ft. 10 3/8 in. as the length.

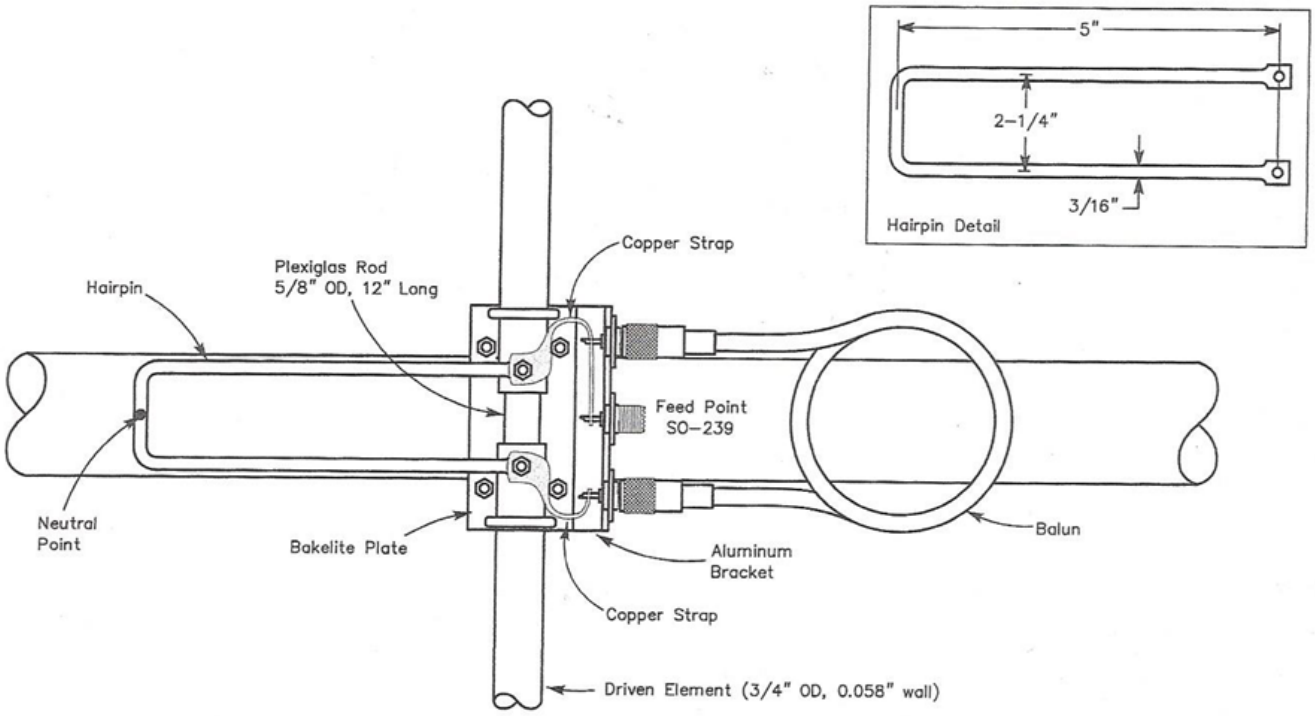


Fig 36—This shows how the driven element and feed system are attached to the boom. The phasing line is coiled and taped to the boom. The center of the hairpin loop may be connected to the boom electrically and mechanically if desired.
Phasing-line lengths:
For cable with 0.80 velocity factor – 7 ft, 10 3/8 in.
For cable with 0.66 velocity factor – 6 ft, 5 3/4 in.

I taped the loop in three places then taped the entire loop to the boom for better stability.

In the Antenna Book article, they tell you to point the finished antenna straight up while still on the ground and then check the SWR. I reduced my transceiver power to 5 watts, tuned safely to just inside the 50 MHz band edge and then pressed the mike button. The meter showed less than 1.5 to 1, which to my mind was wonderful. I didn't need to adjust the driven element length or the hairpin loop or anything else. It was completed!! I then installed it on the mast as high as I could reach on the ladder. I could have unbolted the mast from the rotator and lowered it so I could install it at the top of the mast, but I was tired enough to leave it as it was for the time being. Most know that 6-meters is where TV channel 1 would have been. This is why they started with channel 2.

The recent windstorm did its damage, but it got me off dead center and upped my priority. Now I can see if there is anyone on 6 meters to talk to. It will be a new experience for me.

Remember also, to check out the 6-meter article in the February 2010 issue of WATTS NEWS.

TNX

Kent Gardner, WA7AHY

GUEST ARTICLE

by Dan KB6NU

How to prevent ESD damage

By Dan Romanchik, KB6NU

Here are some tips from Keysight Technologies, one of the leading electronic test equipment companies, on how to prevent ESD from damaging your electronics.

USE A GROUNDED WRIST STRAP whenever you are handling equipment or boards. Using a grounded wrist strap prevents your body from building up charge and causing damage when this built-up charge discharges into your equipment or test boards. Make sure to connect that alligator clip to ground!

USE GROUNDED WORK SURFACES OR MATS for your boards. Do NOT use static generating or insulating materials as a work surface. Non-grounded mats and static generating/insulated materials can inductively charge boards, especially exposed ones. When connecting a charged board to equipment, the board can cause damage by discharging into the equipment's inputs.

KEEP CHARGED MATERIALS AT LEAST 0.3 METERS FROM EXPOSED ASSEMBLIES. This includes plastics, foam, or other materials that can build up charge. Having a charged material near an exposed assembly can inductively charge the assembly. The assembly can then discharge into the equipment's inputs.

DISCHARGE YOUR CABLES BEFORE CONNECTING THEM TO YOUR EQUIPMENT. Electrostatic charges can build up on test probes and test leads, so it's import to discharge them before connecting them to your test equipment:

Ensure your device is off.

Connect your cable to your device.

Attach a 50 Ω shunt to the open end of the cable.

Remove the shunt and immediately attach your device to your equipment. This prevents the center conductor of your cable from discharging stored charge into your equipment. A charged assembly can charge connected cables.

USE BOARD STANDOFFS AS NEEDED. In some situations, you need board standoffs to provide extra insulation for your exposed assemblies. This prevents your grounded mats from making unwanted connections on your board.

NEVER USE "PINK" PACKING MATERIAL FOR BOARD TRANSPORT OR AS A WORK SURFACE. While many people think pink packing material is ESD safe, in most cases it easily builds up unwanted charge. Unless continuous, thorough testing is done, treat pink packing materials as charged.

CAP UNUSED EQUIPMENT INPUTS to avoid accidental ESD and physical damage. Damage often occurs by accidentally contacting equipment inputs. Capping unused inputs protects them from incidental ESD damage.

USE ESD-SAFE BAGS WHEN TRANSPORTING BOARDS. This protects boards from ESD damage while moving between ESD-safe locations.

DO NOT OVERDRIVE EQUIPMENT INPUTS. Start your testing at the least sensitive input setting and zoom in on your signal. Additionally, observe the maximum input levels for your specific equipment. The least sensitive setting is the most resilient, so starting there ensures that your inputs are at safe operating levels

After I posted this to my blog, Dave, N8SBE offered some further tips. He writes:

Grounded heel straps also help reduce static charge. Test them with a floor tester every time you put them on. The floor needs to be somewhat conductive—not metal, that's a safety hazard—so use conductive wax on tiles, or conductive carpet to drain of electrostatic charges.

Keep materials, such as styrofoam cups, that form electrostatic charges easily away from your workspace. A styrofoam cup can generate thousands of volts.

Keep the humidity up in the workspace. That helps to keep static generation down as well.

I like to think that I follow ESD-safe procedures, but there are a couple of things here that I hadn't thought about before. For example, I'd never really thought about discharging test equipment cables before connecting them. I think that's a good tip

To learn more, go to https://www.keysight.com/find/PreventESD

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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 worrying about electrostatic discharge, he teaches online ham radio classes and operates CW on the HF bands.

GUEST ARTICLE

by Dan KB6NU

AMSAT 2020 Space Symposium video now online

By Dan Romanchik, KB6NU

The 38th AMSAT Space Symposium and Annual General Meeting was held online on October 17, 2020. I'm kinda bummed about this because I just joined AMSAT, but somehow, I managed to miss this event. Fortunately, the symposium was recorded and is now online, and I've been enjoying watching the video (https://www.youtube.com/watch?v=EHDgrI_w8hY).

The video includes updates on AMSAT projects and presentations on amateur satellite technology. For details on presenter names and presentation titles, visit the AMSAT website. AMSAT members can access the Symposium Proceedings on the AMSAT website as well. (The proceedings for all the AMSAT Symposiums are available there as well, but you do have to be an AMSAT member.)

Continued ...

Here's a list of the different presentations on the video and the times at which they start:

0:00:00 Welcome

0:02:07 AMSAT GOLF-TEE System Overview and Development Status

0:43:02 GOLF IHU Coordination

1:19:10 GOLF Downlink Coordination

1:50:15 FUNcube Next

2:13:50 LunART – Luna Amateur Radio Transponder

2:45:35 CatSat HF Experiment Overview

3:13:30 Neutron-1 CubeSat

3:39:58 Progress and Development of Open Source Electric Propulsion for Nanosats and Picosats

4:15:00 AMSAT Education

5:14:00 ARISS (Amateur Radio on the International Space Station) / AREx (Amateur Radio Exploration)

6:14:00 AMSAT Engineering

7:21:16 AMSAT Annual General Meeting

So far, I've only watched the GOLF-TEE System Overview and the AMSAT Education presentation. They were both interesting and I'm looking forward to watching the others.

I really hadn't been keeping up with AMSAT lately, so the presentation on the GOLF project was definitely news to me. GOLF is an ambitious project aimed at sending up high Earth orbit (HEO) satellites. GOLF is short for "Greater Orbits Larger (user communication) Footprints." This is really pretty exciting stuff.

Watching these presentations really gives one an appreciation for the work that goes into the design of these satellites and the technical skills and dedication of the hams working on these projects. These guys are not getting paid to do any of this work, and as Eric Skoog, K1TVV, the GOLF System Engineer said in his presentation, "Space is hard."

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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 trying to work the satellites, he teaches online ham radio classes and operates CW on the HF bands.

FCC Posts Email Address Reminder On ULS Landing Page

12/21/2020

The FCC is encouraging users of the Universal Licensing Service (ULS) to have an email address on file with the FCC.

“Applicants are strongly encouraged to provide an email address on their license application(s), which will trigger the electronic issuance of an official copy of their license(s) to the email provided upon application grant. Per the timing specified in Rulemaking FCC 20-126, the FCC will no longer print, and licensees will no longer be able to request, hard copy license authorizations sent by mail.”

The FCC has not yet established the date by which an email address will be required on all applications. ARRL VEC already has begun including email addresses on FCC applications for as many applicants as possible.

The FCC began auctioning 3.7 - 3.98 GHz to 5G carriers earlier this month. The combined bids are already at $70 billion. Yes, that's billion with a "b"... over $200 per man, woman, and child in the U.S. This is serious money, even for companies as large as AT&T and Verizon.

Bidding resumes on January 4 and the value of the spectrum is expected to rise further. An auction for 3.45 - 3.55 GHz will follow.

Absent a miracle, I don't see how hams can hold onto more than a sliver of spectrum between 2.45 and 24.25 GHz.

O’bay SWAP

OBAY SWAP ITEM # 212

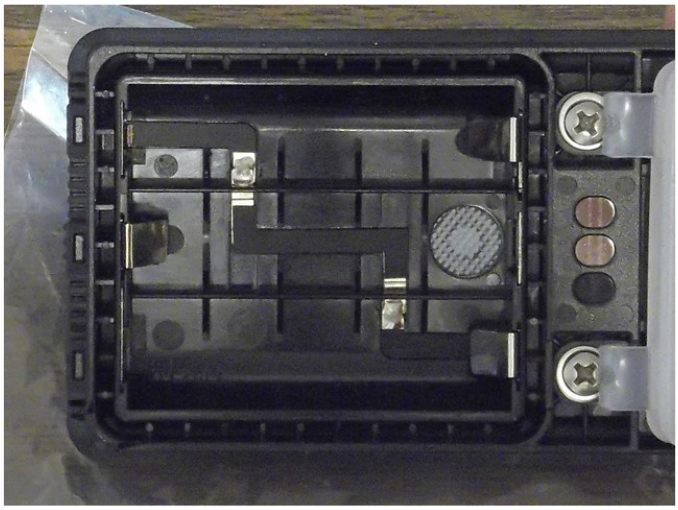
Yaesu FBA-39 Alkaline Battery Case for Yaesu FT-1, FT-2, FT-3, and VX-8 (like new original)

Fits Yaesu FT-1DE, FT-1DR, FT-1D, FT-2DE, FT-2DR, FT-2D, FT-3DR, VX-8DE, VX-8DR, VX-8D, VX-8R

Check your radio manual for compatibility and transmit power limits.
From the Yaesu manuals: Only for use with non-rechargeable alkaline AA battery cells.
Maximum transmit power using alkaline battery case is less than one watt.

FOR SALE: $20 >>> I can deliver or meet within 5 miles of Hill AFB.

CONTACT: Tim KE7DOA, ke7doa@gmail.com



O’bay SWAP

SWAP ITEM # 210

GAP Titan DX 8 Band Multiband Vertical HF Antenna

http://gapantenna.com/shop/antennas/titan-dx/

FOR SALE: $200 (negotiable)

O’bay SWAP

SWAP ITEM # 209

Hi Utah ARRL Club Contacts,

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

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

>>> $100 OBO <<<

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

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

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

Mast height: ~16 ft (above ground), ~ 13.5 ft to first knuckle

Mast circumference: 20.5 in

Four tiered, presumed extended height ~ 40 ft

Anchored in ground

CLUB REPEATER NEWS

Scott Willis KD7EKO

Mike Fullmer KZ7O

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

OARC MEMBERSHIP DRIVE

SUPPORT YOUR RADIO CLUB

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

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

THANK YOU FOR YOUR SUPPORT

Join OARC

Join or Renew your membership now!

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

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

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

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

Club Badges

OARC Club badges are available for all licensed club members.

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

Place your order along with $10.00 prepaid in advance for each badge ordered and specify Call Sign and First Name.

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

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

Club Badges

UNCLAIMED OARC CLUB BADGES

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

NO UNCLAIMED OARC CLUB BADGES…

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

OARC YAHOO GROUP

Did you know that OARC has a Yahoo Group?

Discontinued after 15 December 2020 .. sorry

We occasionally communicate with our OARC members via the Yahoo Group. Receive email notices regarding upcoming club meetings and future 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: - 448.600 (pl 123.0)

Check OARC web site for details

www.ogdenarc.org

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

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

Next Weber Co VE Test Session:

1st Wednesday Feb, Jun & Oct

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

Time: 06:00 PM *Walk-ins allowed*

Location: Permanent location

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

Contact: VE Liaison:

Rick Morrison W7RIK (Liaison)

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

Jason Miles KE7IET (IT)

Cost: $ 14.00

Two forms of **ID**, one of which must be a **picture ID**.
For "Upgrades" bring current **license** and a **copy** of current license, and any **CSCE**'s

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

Club Web Site

Be sure to visit our club web site.

www.OgdenARC.org

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

Club Call Sign

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

W7SU

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

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

See you there.

OARC REPEATERS			
(*) Yaesu Fusion digital/FM compatible			
FREQ	CLUB	TONE	LOCATION
146.900-	OARC (*)	125 DCS	Mt Ogden (w/WiresX)
448.600-	OARC (*) "talk-in"	123.0	Mt Ogden
146.820-	OARC (*)	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	3rd Saturday 09:00 am	Check OARC web site …
WC Sheriff Comm-O		1st Saturday 10:00 am	Weber Co. Sheriff Complex West 12th Street Ogden Utah
Barc	barconline.org	2nd 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	2nd Saturday 10:00 am	Davis Co. Sheriff Complex Farmington Utah
NU Ares	home.comcast.net/ ~noutares/	3rd Wednesday 7:00 pm	Cache Co. Sheriff Office Logan Utah
Uarc	xmission.com /~uarc/	1st Thursday 7:30 pm	UofU EMC Bldg Room 101 Salt Lake City Utah
UVarc	https://uvarc.club	1st 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	3rd 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/	1st Tuesday 7:00 pm	Tooele County Courthouse Tooele Utah
WsuArc	https:groups.google.com/forum/#!forum/wsuarc	3rd 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 @ 6:30 PM	OARC—Ham & Eggs Net	448.600 -123.0
Tuesday @ 8:00 PM	Weber ARES	448.600 - 123.0
Tuesday @ 8:00 PM	VHF Society Swap	147.120 + 100.0
Tuesday @ 9:00 PM	Bridgerland ARC	147.260 + 103.5
Wednesday @ 7:00 PM	Am-Con Northern Utah	448.600 –123.0
Wednesday @ 8:00 PM	GS ARC	145.290-, 145.430-, 448.300- (all 123.0)
Wednesday @ 8:30 PM	CSERG	145.770 simplex
Wednesday @ 9:00 PM	No. Utah 10m HF net	28.313 Mhz HF USB
Wednesday @ 9:00 PM	6-meter SSB net	50.125 Mhz 6-meter USB
Thursday @ 7:00 PM	OARC - 10 Meter Net	28.385 MHz USB (all hams invited)
Thursday @ 6:30 PM	Davis Co Elmers Net	147.040 + 123.0 New Hams
Thursday @ 8:00 PM	Weber State ARC	146.820 - 123.0 (coming soon)
Thursday @ 8:00PM	State RACES VHF/IRLP	145.490 - 123.0, 146.680 - 123.0 3rd 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 3rd Saturday – odd months only
Saturday @ 11:00AM mst	QCWA net HF	7.272 Mhz HF LSB

OARC OFFICERS

President: Dave Mamanakis KD7GR

Vice President: Justin Hall KB7LAK

Secretary: Barbara Siddle WB7FWW

Treasurer: J. Siddle KG7CJN

Program Director: Mike Wilde KJ7HEX

Activity Director: Todd Shobe KW7TES

"WATTS NEWS" e-Magazine

NL Editor: Val Campbell K7HCP

"OARC" web site

Webmaster: Val Campbell K7HCP

OTHER CLUB APPOINTMENTS

VE Liaisons: 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: Kent Gardner WA7AHY

Equipment Manager: Val Campbell K7HCP

Club Call Sign Trustee: Larry Griffin AD7GL

Club Elmer: Stan Sjol W0KP

Centennial Committee Chair:
Gil Leonard NG7IL

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