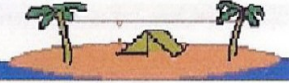


WATTS NEWS



The Best of Amateur Radio

OARC e-Magazine

www.OgdenArc.org

AUGUST 2024

Next Club Meeting/Activity/Events

Look Inside



Craig Howe W0VRM
President



Justin Hall KB7LAK
Vice President



Colleen Pike KJ7EAY
Secretary



J. Siddle KG7CJN
Treasurer



Gary Hudman KB7FMS
Program Director



Mike Fullmer K270
Activity Director



Val Campbell K7HCP
Webmaster/NL Editor

OARC Website Masthead

www.OgdenArc.org

OARC OFFICERS

President: Craig Howe W0VRM

Vice President: Justin Hall KB7LAK

Secretary: Colleen Pike KJ7EAY

Treasurer: J. Siddle KG7CJN

Program Director: Gary Hudman KB7FMS

Activity Director: Mike Fullmer KZ7O

OARC ADVISORS (past presidents)

Gary Liptrot N7ZII

Mike Fullmer KZ7O

Kent Gardner WA7AHY

Kim Owen KO7U

Larry Griffin AD7GL

Gil Leonard NG7IL

Jason Miles K7IET

Dave Mamanakis KD7GR

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 - Mike Fullmer KZ7O

Antenna Manager – open

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 Facility Manager—Dave Mamanakis KD7GR

Club Technical Support – Rick Morrison W7RIK

Equipment Loan Program - Val Campbell K7HCP

Equipment Manager - Dave Mamanakis KD7GR

FD Log Manager - Jason Miles KE7IET

Field Operations Manager - open

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

Ham & Eggs Net Control – Bryce Draper KI7YZU

Historian/Librarian – Kent Gardner WA7AHY

Media Manager—Kent Gardner WA7AHY

Photographer – open

QSL Manager – Pete Heisig AI7GV

Repeater Engineer – Mike Fullmer KZ7O

Repeater Engineer – Scott Willis KD7EKO

Social Media Manager - Dave Mamanakis KD7GR

YouTube Videos - Jason Miles KE7IET

VE Liaison Operations – Rick Morrison W7RIK

VE Assistant - open

VE IT – Jason Miles KE7IET

YL Net Control—Teresa Haymaker N4MBA

Zoom Manager – Justin Hall KB7LAK

CLUB ANNOUNCEMENTS

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.

Net Control: Larry Griffin (AD7GL), ad7gl@arrl.net

Stan Sjol (W0KP), stansjol@xmission.com

Kenny Pronschinske (KI7UFN), kennypron@hotmail.com

Bryce Draper (KI7YZU), brycejill@outlook.com



Larry Griffin

AD7GL



Stan Sjol

W0KP



Kenny Pronschinske

KI7UFN



Bryce Draper

KI7YZU

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: Mike Fullmer KZ7O, kz7o@arrl.net



Mike Fullmer KZ7O

... New ...

“YL” Ladies Only Net

Monday Evening (19:00) 7:00 PM MT

70 cm Repeater - 448.600 MHz (neg offset, PL=123)

Purpose is to promote the “YL” lady operators an oppportunity to mingle together (without men operators bothering them—Hi Hi).

Net Control: Teresa Haymaker N4MBA



Teresa Haymaker N4MBA

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

A MESSAGE FROM OUR PRESIDENT

Craig's Corner - A Message from our President



Craig Howe W0VRM

Craig's Corner August 2024

Hello ham family,

It is August already and time for our annual Steak Fry and Elections.

We have had a busy service season this year and it continues with several events to assist with our radios. The strength of our club is its variety of members who share unique talents, skills and perspectives with us. Please consider the opportunity to become a club officer. Our officers include:

Club President – guides the club board and sets direction and vision for the club and represents the club to partner agencies. Also, conducts club and board meetings.

Club Vice President – Responsible to facilitate training courses and classes, works with the VE team to synchronize exam sessions in connection with the courses. Represents the Club President when unavailable to otherwise fulfill their responsibilities.

Club Secretary – Records minutes of meetings and is the Chair of the Elections committee.

Club Treasurer – Receives, disburses and accounts for Club funds. Provides guidance to the Club Board regarding financial matters.

Club Program Director – Arranges topics and speakers for our internal club meetings.

Club Activities Director – Arranges and leads external activities such as Field Days, Golden Spike Special Event, Fox Hunt and others as needed.

... continued ...

Full descriptions of each officer's duties may be found at the OgdenARC.org website.

Every office is up for election each August. Please contact Colleen Pike (Club Secretary) for more information and to declare your candidacy for any office.

We have had a busy year and I appreciate everyone who has helped me in my ham personal journey. We don't have to know it all, but it is amazing when we share what we do know with each other.

I look forward to see everyone at the Steak Fry.

Until next time, 73 all. Craig W0VRM

NEXT CLUB MEETING/ACTIVITY

CLUB NEWS

Next Club Meeting/Activity

OARC Annual Steak Fry and Officers Elections

Date: 3rd Saturday, 17 August 2024

Time: **5:00 pm**

Location: Marriott Park

1045 S 1200 W, Ogden, UT 84404 [MAP](#)

Steak Fry (Free steaks for all paid up members)

Free hamburger and hot dogs for the kids of all ages

Note: **Please bring side dish to share.**

Also, bring your own dinner-ware (emergency paper-ware provided).

Club Officers Election; (Nominations welcomed)

Note: August is Membership Renewals

Membership Renewal (\$15); Spouse Membership (\$10); Family Membership (\$25)

Complimentary Membership (Free for remainder of first year licensed amateur radio)

GRAND DOOR PRIZES: **\$500 cash**

NOTE: [Must be present to win. Paid-up members only]

>>> Check website for details

PREVIOUS CLUB MEETING/ACTIVITY

CLUB NEWS

PREVIOUS CLUB MEETING

OARC "T"-Hunt

3rd Saturday 20 July 2024

The winner was **KK7LZQ Gordon Milligan** assisted by his wife Maria who first found the transmitter.

Kudos to Mike Fullmer and his assistant Gary Hudman. A very great planning effort resulting in a Grand Fox Hunt!

The location was interesting and, although a bit hard to find, was ideal for today! Congratulations are in order for them!



Note: More photos are located on the club website

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"

CLUB & HOBBY NEWS

HOBBY NEWS
Craig Howe W0VRM



HamCon:Zion 2024

Sorry if you missed it!



HamCon: Zion 2024
ARRL Rocky Mountain Division Convention
The Dixie Convention Center | St. George, Utah
Friday and Saturday | July 12 and 13
General Admission: 8 AM to 5 PM, both days

Order Tickets Now

Featuring a commercial vendor expo hall, an indoor Swap Meet, a special event station, and a number of social and meetup events including special guest Gordon West, WB6NOA.

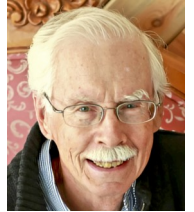
Presentations | Forums | Workshops | Demonstrations

Nestled against the striking backdrop of Utah's red rock landscapes, the 2024 ARRL Rocky Mountain Division Convention will serve as a vibrant hub for radio enthusiasts from all walks of life. It's a unique opportunity to connect with fellow enthusiasts, learn from experts in the field, and explore the latest advancements in amateur radio technology and practices.

For the most up to date information, visit www.hamconzion.com.

CLUB NEWS

Dave Sanders K7RGY



IN MEMORY OF THE SK's

[Rulon Passey W7QR \(sk\)](#)

[Ray White K7RFW \(sk\)](#)

[Website Listing of ham friends
that have passed on \(sk\)](#)

Click on the flag then use search box upper right

Thank you Dave Sanders K7RGY

CLUB NEWS

Craig Howe W0VRM



OARC Ham Licensing Classes

There are three levels of licensing for Amateur Radio provided by the FCC. We need to pass tests for the different levels in order.

The first level is the **Technician Class** license, then **General Class**, then **Amateur Extra Class** (most advanced).

OARC regular teaching schedule has the Technician classes at the first of the year and then the others later on.

Our next scheduled Technician Class will be held in January. It will be held on Wednesday evenings from 6 until 9 pm. We will likely hold the class at Weber State University and also provide a zoom session into the class for those who are further away.

We use the Stu Turner Class books that are available on Amazon. They are a good reference both for the class and for future help. Our instructors are registered with Stu and authorized to use his materials in the class.

Our next Course related sessions will be during the month of August and September. We are providing a seminar to assist those taking Stu's Amateur Extra course online, by holding zoom and possibly in-person meetings on Wednesdays to answer questions. The online course is provided by Stu and he instructs online for this advanced course (it is a bit much for those looking to obtain the first Technician License).

Soon after each Exam Session we hold a VE Test Session for those who are prepared to test for any license class.

There are several preparation tools. One of the better options is to use [HamStudy.org](https://www.hamstudy.org). It is a free preparation for exams when using a browser on a PC. If you register with the website, it will track your progress. When you are able to consistently pass the practice tests with 85% or 90% scores, you will have little problems passing the exam which requires a score of 74% or 26 out of 35 questions.

Our club website is: ogdenarc.org and we post information about classes and exam sessions there. We also have a facebook page that provides information about the doings of the club.

Craig Howe W0VRM

CLUB NEWS

Val Campbell K7HCP



OARC Memberships

**OARC memberships run from August thru August each year.
July and August is OARC memberships best renewal period.**

Attention all OARC members.

It is that time of the year again already.

OARC has NOT increased dues going back to before the beginning of this century. We are proud of that.

OARC memberships have been running just under 200 members for several years now. We are currently at 197 members. 109 of you are paid-up members, however 88 members are still currently up for renewal at this time.

Please use the OARC website “join/renew” tab at the top of the homepage. Afterwards you can then choose to use “PayPal” if you wish OR send payments to the OARC PO Box listed there.

Know that a paid membership enables you to participate in the \$500 cash door prize available at both the August Steak Fry meeting and the December Family Dinner.

Remember that August is OARC “officers elections” month. Consider running for an OARC office. OARC needs you!

Thank you for being a member of OARC.

This is Val Campbell, K7HCP: OARC membership clerk.

HOBBY NEWS

This information came my way and I found it potentially interesting so I decided to share it with the club.

Thank You.

OARC Editor

QRZ articles: <https://www.qrz.com/trials-and-errors>

QRZ url: <https://www.qrz.com/db/W7DGJ>

W7DGJ - Dave Jensen

7333 E. Mark Ln

Scottsdale, AZ 85266

928 274-2266

davejensen70@gmail.com



(repeat)

WHY JOIN ARRL ?

Join ARRL through OARC and receive a free one-year membership upgrade in OARC

Please consider that you may want to becoming a member of ARRL if you are not currently or have not been for at least two years ...

The Amateur Radio Relay League [ARRL](#) is the national membership association for Amateur Radio operators. ARRL membership includes digital access to “QST” magazine and “On The Air” magazine. Optionally you can sign up for hardcopy subscriptions to the magazines.

OARC is an affiliated ARRL club and has been since 1937. However, to maintain OARC’s affiliation, OARC must maintain that over 50% of our members are also members of ARRL.

Fill out this form, joining ARRL through OARC, and bring/send it to OARC.

(form shown on the following page for display only. Check OARC website for actual form)

NOTE: All OARC members

Please check the OARC Membership Roster tab on the OARC website homepage and confirm that we have the correct info for your membership:

Call Sign, License Class, and ARRL Membership "Y" or "N".

Please eMail any discrepancies to the club eMail address: w7su@arrl.net.



ARRL
The National Association for
Amateur Radio®

Membership Application

New Renew Previous Member Unlicensed

Name _____ Call Sign _____

Address _____

City _____ State _____ ZIP _____

Email _____ Phone _____

Date of Birth ____ / ____ / ____

My Family Member is Joining or Renewing: (\$12 per member)

Name _____ Call Sign _____

Name _____ Call Sign _____

Please note my new address I do not want my name and address made available for non-ARRL related mailings

Your Annual Membership Dues*		Member Benefits	
Circle Your Choice (rates effective Jan. 1, 2024)			
	1 Year	3 Years	
Standard membership	\$59	\$174	Your membership supports benefits, services, and programs that keep you active and on the air. Membership Includes: <ul style="list-style-type: none"> • Access to four digital magazines and archives (<i>QST</i>, <i>On the Air</i>, <i>QEX</i>, & <i>NCJ</i>) • Unlimited courses through the ARRL Learning Center (learn.arrl.org) • Logbook of The World®, contests, and award programs ...and more! <small>*A print subscription for <i>QST</i> and/or <i>On the Air</i> requires an ARRL membership. Dues and subscription rates are subject to change without notice and are non-refundable.</small>
Family (same membership exp. date and address)	\$12	\$36	
Student (must be under age 26)	\$30		
Blind (requires one-time statement of legal blindness)	\$12	\$36	

Add-on ARRL Subscriptions

QST, ARRL's membership journal for active radio amateurs.
 1 Year \$25* 3 Years \$75*

On the Air, For beginner-to-intermediate-level radio amateurs.
 1 Year \$25* 3 Years \$75*

Payment Information

\$ _____ Total Charge to: Visa MasterCard AmEx Discover Check Enclosed

Card Number _____ Expiration Date _____

Card Holder's Signature _____

Toll Free (US) 1-888-277-5289 or 860-594-0200 • ARRL, 225 Main St., Newington, CT 06111-1400
membership@arrl.org • www.arrl.org/join

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

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

CONTRIBUTING EDITOR SUBMISSIONS

GUEST CONTRIBUTION

By John Gaz K7DOT

ANTENNA TOWER ACCIDENT REPORT

I am providing this information in response to your request for additional information. In Block No. 3 of the Accident Reporting Form, I put "poor planning" as the cause of the accident. You indicated in your letter that I needed to explain more fully what actually happened, and I trust that the following details will be sufficient.

I am an amateur radio operator. On the day of the accident. I was working alone on the top section of my new 80-foot Rohn antenna tower. After I completed my work, I discovered that I had, over the course of several trips up the tower, brought about 300 pounds of tools and spare hardware to the top of the tower. Rather than carry all of the unneeded tools and materials down by hand and resulting in many trips up and down the tower, I decided to lower these items in a small barrel by using a pulley and rope which, fortunately, was attached next to the Gin Pole at the top of the tower.

I secured the rope at the ground level of the tower. I then went to the top of the tower and loaded all of the tools and materials into the barrel. Then I went back down the tower to the ground and untied the rope, holding it tightly to ensure a slow descent of the 300 pounds of tools and spare hardware. You will note in Block No. 11 of the Accident Report Form that I weigh 165 pounds. Due to my surprise at being jerked off the ground so suddenly, I lost my presence of mind and forgot to let go of the rope. Needless to say, I proceeded at a rather rapid rate up the side of the antenna tower. In the vicinity of the 40-foot level, I met the barrel loaded with tools and spare hardware coming down. This explains the fracture in my skull and the broken collar bone. Slowed only slightly, I continued my rapid ascent, not stopping until the fingers of my right hand were two knuckles deep into the pulley at the top of the tower. Fortunately, by this time, I had regained my presence of mind and was able to hold on tightly to the rope however, the barrel hit the ground and the bottom of it fell out causing the tools and material to fall out on the ground. Devoid of the weight of the tools and material, the barrel now weighed 20 pounds.

I refer you again to my weight in Block No. 11. As you might imagine, I began a rapid descent down the side of the antenna tower. In the vicinity of the 40-foot level, I met the barrel coming up the antenna tower. This accounts for the two fractured ankles and the lacerations of my legs and lower body. The encounter with the barrel slowed me down enough to lessen the injuries when I fell onto the pile of tools and material and, fortunately, only three vertebrae were cracked. I am sorry to report, however, that as I lay there on the tools and material in pain, unable to stand up, and watching the empty barrel 80-feet above me, I again lost my presence of mind, I let go of the rope.....

GUEST CONTRIBUTION

By Rex Greenwell K0KP

A long distant and current member of OARC sent us this picture of Col John Sampson W7OCX from his archive of memorability of ham radio operators who were past members of OARC. Thanks to Rex Greenwell K0KP—Duluth MN. Rex was a KLO Radio DJ back in the day.

Hi Val, this is Rex - K0KP from near Duluth, MN. I think I have a treat for you to share. Col John H Sampson, W7OCX, was a leader in Ogden and the state for ham radio. He was the net control for many years of the Beehive Utah Net. I think it is most probable that without Col Sampson's work the net would certainly not exist as we know it today. When I worked at KLO circa 1973, I interviewed John on KLO for an hour to speak about amateur radio. The broadcast was well received. Now for the treat, here is a photo of John at his station in Ogden. The transmitter appears to be a Johnson Viking II, and the receiver probably a Collins. He had a Johnson matchbox that fed open wire line to a dipole antenna in his back yard. His antenna was up about 30 feet. He was gracious to allow me to visit him in his shack circa 1967 or so. Before I got my ham ticket I would listen to John call the Beehive Utah Net on my short wave receiver. John operated AM phone until about 1969 when he purchased a Swan 350 SSB transceiver. John was a traffic man who worked the regional and national CW traffic nets. He would pass Utah traffic across the state on the Beehive Net. John's grandson Harrison Sand from Maryland currently holds the callsign W7OCX, and he provided me with the photo. If this is a new photo for you that you don't already have, then enjoy the treat and allow others to see and remember Col John H Sampson!

Bye and 73, Rex Greenwell K0KP



GUEST CONTRIBUTION

By Kent Gardner WA7AHY



A Fun Historical Note on Getting My Novice Ticket in 1961

I enjoy being the club historian. It gives me hints sometimes to delve into my own history in more detail. I am working on a project to document my experiences as a student in the Radio-TV Speech Department at Utah State University (USU).

As a freshman at USU I wanted to get my Novice License. I was in Engineering at the time and found that the Dean of Electrical Engineering, Larry Cole, was a ham who volunteered to give me my Novice code test and then the written exam.

I went into his office with my code practice oscillator and he sent some text at five-words-per-minute which I passed easily. I then sent some words he gave me to prove I could also send. In those days, he sent off a request for the written test from the FCC. When it was returned, I again went into his office and passed the written part. He was thin in build, with a very fine mustache sported by many in those days. He had a deep voice and was very nice to talk to. I got my Novice in the mail during finals week of the spring quarter. I was living in the Richards Hall dorm and my Novice experience began in earnest. I will save another fun story for another time that resulted in getting my first two QSOs.

In doing my research for my broadcasting history, I had a signed copy of a publication *ACADEMIA AND THE AIRWAVES*, a history of Radio and Television at Utah State University by Burrell F. Hansen. It was published in 1986. Dr. Hansen was the head of the Radio-TV Speech Department for a number of years that I was there.

Dr. Hansen started out with a timeline of radio broadcasting from the beginning, including stations that appeared in Logan, Utah in those early days.

The birthdate of broadcasting is generally set on November 2, 1920 when KDKA in Pittsburgh went on the air and broadcast the presidential race between Harding and Cox. I now quote:

“It was not many years after that, that the first known operating radio station in Logan was begun by a couple of young amateur engineers, one of whom was subsequently to become a faculty member of USU.

Larry Cole and Winston Jones, while still in high school in 1921, had become active amateurs with stations 6CKI and 6CKJ. In the spring and summer of 1926, though still in college, Larry Cole and Winston Jones set up the first commercial radio station in Logan. Using the call letters KFXD, the young broadcasters went on the air with a station which they had built entirely by themselves—including the microphones. The studios were in the upstairs of the Studebaker-Packard Dealer—where the Allen-Hall Mortuary is now located. It was the only station north of Ogden.” End of quote.

They couldn't keep up selling commercials and with the press of college studies, they soon sold the station to a Burley, Idaho company.

So, there you have it! My volunteer examiner was a famous ham radio operator. I never would or could grow a mustache, but his will always be remembered.

TNX

Kent Gardner, WA7AHY P.S. My Novice call was KN7PML.

GUEST CONTRIBUTION

By Kent Gardner WA7AHY



THERE IS MORE THAN ONE WAY TO RECEIVE RADIO SIGNALS FROM JUPITER AND IT'S MOON IO

I have always been a science fiction fan just about as long as I have been interested in ham radio. Listening to the squeals and squawks on the family radio in the 1940s thinking they were coming from outer space and later watching the movie "2001 A Space Odyssey", I have been fascinated with Jupiter and Io. From the Cinerama big screens in Florida and Washington D.C., a small screen at the base theatre at Incirlik Air Base Turkey, to my TV screen at home and now from my Blu-Ray disc, I still have fun absorbing its well-intended purpose/vision. I just have to watch the "Sound of Music", "Fiddler on the Roof" and "2001" every year to keep me well grounded.

I built an H-beam in my back yard and tuned to a spot in the 15-meter band to try to pick up radio waves when Comet Shoemaker-Levy 9 broke apart and the series of fragments slammed into Jupiter in 1994. I was very **UN**successful in my effort, but learned a lot in the process.

Radio astronomers have known since 1955, that they could receive signals from Jupiter near the 20.1 MHz frequency. NASA founded Project Jove where individuals and students could build receivers for that frequency and build dual-dipole antennas for school projects etc. Some of you may remember that you helped me put the dipoles up on the grass just outside the Riverdale Fire Station during a Show-and-Tell meeting several years back. It looked like the following:



The two identical dipoles were phased together. They used RG-59 75-ohm coax with F-59 fittings to save money. Subsequent publications used lower loss RG-6.

There was valid theory behind the phasing dipoles construction. A reply to questions about the dipole construction by Project Jove participants brings out the theory. Note: I am a member of the Society of Amateur Radio Astronomers (SARA) and some postings on their Google Group produced the following:

The particular brand of RG-6 that we supply in the RJK2pro kit has a velocity of propagation (also known as velocity factor or VoP) of 0.82. Note that using degrees of phase is only useful for narrowband arrays (e.g., the Radio JOVE dual dipole array); i.e., it's only valid for a single frequency. In the examples, we use 20 MHz.

If you're using a wideband array (e.g., a TFD array), however, phase delay is not the way to go.

Now, I come to a fascinating idea as put forth by another SARA member, Dave Gilbert, AB7E.

I am guessing that the area taken up by the Jove Phased Dipoles was problematic. It is fine for a school class to go on a field trip for a day, set up the array, take some readings on a laptop and then disassemble everything and go home, but what about having it set up all the time and doing lots of recording possible signals. I had the same problem in my back yard.

The idea of properly orienting the array is to have Jupiter pass overhead in its daily or nightly orbit giving the antenna a leg-up for getting the maximum amount of signal. My method was to keep the original dipoles and use surrounding trees and towers to support it. I will not illustrate that in this article or go into why the moon Io has a direct effect on signals coming from Jupiter, but will give you Dave's ideas on solving the problem, using a log periodic antenna oriented vertically and using a drone to send signals to be measured by the antenna. Yes, his antenna takes up some room, but not as much as the original dual-dipole array. It, being vertical, was oriented to match the Jupiter orbit depending on whether Jupiter was above the horizon. My cut-and-pastes of his submissions to the SARA Google Group follow. I sent him an email and he has given me the permission to publish this in our WATTS NEWS. Thanks Dave.

An Unusual Method of Measuring Field Strength Using a Drone

On Fri, Mar 29, 2024 at 1:50 AM Dave AB7E <AB7Echo@gmail.com> wrote:

I recently described a tilted 5 element wire Log Periodic Dipole Array (LPDA) that I designed and built for Radio Jove reception. It gives me the flat SWR curve that I wanted and I now get pretty uniform background noise distribution on my RSS spectrographs without significant flares at certain frequencies.



I mentioned at the time that I planned to mount a small crystal oscillator on my drone to try to measure and plot the elevation response pattern of the antenna.

I built the oscillator and tried to make it work with crystals for 16 MHz, 20 MHz, and 24 MHz, but apparently the capacitor values are a bit more finicky than I thought. It works fine at 20 MHz, but it is unstable at 16 MHz and doesn't oscillate at all with a 24 MHz crystal. I'll probably have to build three separate oscillators with optimized capacitor values.

Anyway, I mounted the oscillator to my drone along with a short dipole antenna made from 1/8" diameter aluminum welding rod. I started out with longer elements for the drone antenna, but they turned out to resonate like a tuning fork and made the drone unstable. So, I reluctantly shortened them, probably at the expense of some received signal strength, but at least they were stable.

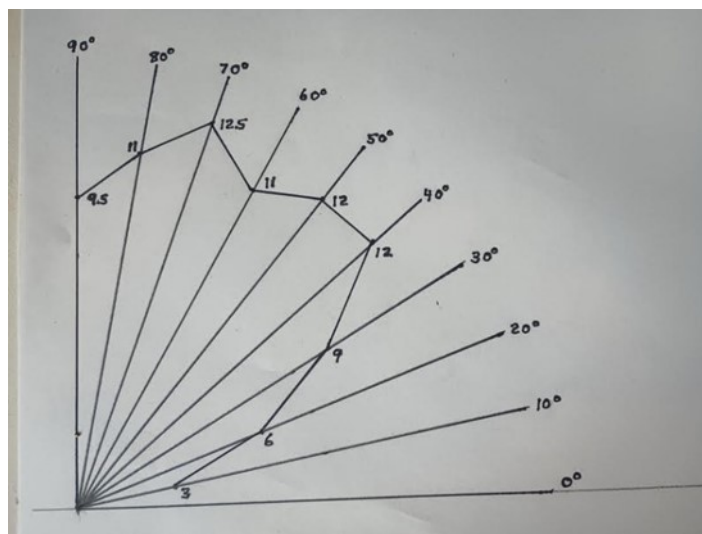
I used my RSPdx with SDRUno for the readings from the LPDA, and my wife recorded the numbers in the house while I flew the drone outside. We used a pair of walkie talkies to coordinate things. The drone controller tells me both the height of the drone and the distance from me (I took off from the base of the LPDA), so I made a chart of the XY coordinates (height and horizontal distance) necessary to keep the drone 200 feet from the LPDA for every 10

degrees of elevation from zero to 90. It was easy to keep the drone pointed at the LPDA since the drone has a forward-facing camera that I can monitor from the controller.

Below is a picture of the drone



as well as a hand-drawn plot of the signal results.



Please note that the values on the plot were normalized to the reading for zero degrees. That just happened to be -100 dBm, so if you subtract 100 from each of the values on the plot, you'll get the actual dBm readings my wife logged. It was a weak, but very clear signal. For a variety of reasons, including the uncertainty of where the effective ground actually is and the likelihood of reflections from nearby structures, I'm not going to try to rationalize this plot with the modeled plot from EZNEC+, but at least it tells me that the major lobe is between 70 degrees and 40 degrees where I wanted it to be.

I only took readings in the direction the LPDA was pointed. It would have been nice to get back-side readings, but they wouldn't have been valid since my tower and my ham radio antennas are only about 90 feet in that direction. Readings off the side would be similarly compromised since I live on a fairly steep mountainside and the sideways results likely wouldn't be valid for any flat-lander. The readings I did take were in the direction (SSE) of reasonably level ground for the 200 feet distance ... i.e., perpendicular to the direction of the slope.

If anyone wants to try an LPDA like this, I can help with some of the parts. It requires, though, a single, roughly 20-foot-tall pole to support the upper end.

Take care,
Dave AB7E

So, there you have it.....another way to use a drone for scientific purposes. Pretty cool.

Now, to continue the idea further, but in a different direction.

I monitor the Hill Air Force Base control tower, and one day began to notice that there were some passenger jets, I think Boeing, flying in the pattern. It sounded like there were crews on board listening to the tower aviation frequencies. It was at the same time cellphone 5G was being introduced. There were some questions that 5G technology would interfere with the planes navigation/landing systems and might cause accidents. I guess that all the activity was to verify that 5G was indeed safe.

Also, there was a helicopter operating from one of the runway ramps. It would, with the tower's permission, go to one altitude, take readings, then go to the next altitude etc. This was another way that was used to verify field strength readings to test 5G. In my mind, Dave's drone was using similar technology. What fun this amateur radio hobby is.

TNX Kent Gardner, WA7AHY

GUEST CONTRIBUTION

WANTED !

Contributing Editor submissions always welcomed!

ARRL ITEMS of INTEREST

CLUB NEWS

ARRL Member Bulletin



QST de W1AW

ARRL Bulletin 12 ARLB012

From ARRL Headquarters

Newington CT August 5, 2024

To all radio amateurs

SB QST ARL ARLB012

ARLB012 W1AW to QSY on 17 Meters for CW

Beginning on Friday, September 6, 2024, Maxim Memorial Station W1AW will begin using a new 17 meter frequency for its scheduled CW transmissions due to increased activity near the current bulletin frequency. In order to reduce the possibility of interference, W1AW will move to 18077.5 khz.





I thought that those of you that are ARRL members might want to know ...

The July/August issue of ARRL's "On The Air" magazine is devoted to the topic of MORSE CODE. I found the articles very interesting. If you have wanted to get into the challenge of learning Morse Code you might want to read this issue .

OARC Editor





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 2024 activity report of the VM Program.

◆ Two operators in West Virginia and two operators in North Carolina received notices concerning wideband operation of 6 to 7 kHz wide on 75 and 40 meters, contrary to FCC rules. Operators in Florida, Ohio, Kentucky, Virginia, and Georgia received notices for wideband operation of 6 to 8 kHz wide on 40 meters. Commission Rule 97.307(a) provides that “no amateur shall occupy more bandwidth than necessary for the information rate and emission type being transmitted, in accordance with good amateur practice.”

◆ An electric cooperative power company in Arkansas received an advisory notice due to unlicensed operation on 145.500 MHz by its fiber optics contractor working in Sharp, IZard, and Fulton counties.

◆ Technician-class operators in Maryland and California received advisory notices for operating FT8 on 20 and 40 meters. Technicians have no 20-meter operating privileges and may operate only CW on 40 meters.

◆ An operator in Massachusetts received an advisory notice for failure to identify during 75-meter transmissions of more than 30 minutes. Section 97.119(a) requires amateur stations to transmit the assigned call sign at the end of each communication and at least every 10 minutes during a communication.

◆ During April there was one referral from the VM Program to the FCC, at the request of the FCC, regarding repeater interference findings. A VM Program presentation was given to the Mt. Airy VHF Radio Club in Warminster, Pennsylvania.

◆ The totals for March 2024 monitoring were 1,166 hours on HF frequencies, and 1,046 hours on VHF frequencies and above, for a total of 2,212 hours. — *Thanks to Volunteer Monitor Program Administrator Riley Hollingsworth, K4ZDH*

O'Bay Swap Items

O'bay Swap



SWAP ITEM # 256

CLEARANCE SALE: AF7J

[See Clearance Items](#)

ASKING PRICES: see ad

CONTACT: Tom Harrington AF7J, tom_af7j@yahoo.com, 801-675-1762

See listing on the OARC website: O-Bay Swap page.

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

AF7J Clearance Sale

Description	Price	Notes
Heathkit SB-221	\$650	SOLD
Icom 706 Mkiig	\$525	SOLD
Yaesu FT897	\$450	HF/VHF/UHF Transceiver
Yaesu FT840	\$425	HF Transceiver
Starlink Internet Equ	\$350	
Swan 1200x	\$250	Linear Amplifier
Comet GP9	\$200	VHF/UHF Vertical Antenna
MFJ-993B	\$200	Auto Antenna Tuner
LDG TW1	\$150	Talking Watt Meter
MFJ 989B	\$100	Versa Tuner V
Heathkit SA2040	\$100	SOLD
LDG AT-11MP	\$85	Auto Antenna Tuner
RV Satalite TV Antenna	\$50	
Linear Power Supply	\$20	

Contact information:

tom_af7j@yahoo.com

801-675-1762

O'bay Swap

SWAP ITEM # 253

FOR SALE: 9 Items for sale

See [Photo display .pdf](#)

ASKING PRICES: see ad

CONTACT: Mike K7DOU, k7dou@comcast.net (801) 550-5101

See listing on the OARC website: O-Bay Swap page.

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

FOR SALE

Mike, K7DOU k7dou@comcast.net (801) 550-5101

1. VHF portable radio kit. 50-watt Icom IC-2000H radio, external speaker, microphone, new 12V 10 Ah SLA battery, DC cables for Anderson connectors and cigarette lighter plug. Icom user manual on CD. \$235

2. Micronta (Radio Shack) HF SWR bridge and field strength meter, 3-30 MHz, 1-1000 watts, missing field strength telescoping whip antenna. \$10

Following items are all new:

3. Workman model 104 VHF/UHF SWR & power meter. 120-500 MHz. Up to 150 watts. \$25 (\$48 on Amazon.com)

4. Arrow Antennas 2-Meter 4-element portable yagi antenna. \$75, model 146-4. (\$141 on Amazon.com)

5. 5/8-Wave mobile NMO-mount gain antenna for 2-meters, with new Larsen Mag Mount \$60

6. Portable tripod antenna stand for yagi antenna. 13-ft. Tripod base, 24" ABS riser and antenna mount bracket, weight bag and carrying case. \$125

7. Dual-band tripod portable antenna kit. 144/440 MHz antenna & radials, 13-ft. tripod mount and carrying case. \$145

8. VHF half-wave (no ground plane needed) tripod portable antenna kit. Half-wave NMO antenna, 13-ft. tripod base and carrying case. Comes with 17-ft RG-58/U coax and PL-259 connector. \$135

9. Dual-band portable advance base station antenna kit. Tram fiberglass antenna, heavy-duty tripod mast kit, carrying case and weight bag. \$249

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.

OARC ARRL MEMBERSHIP DRIVE

WHY JOIN ARRL ?

Join ARRL through OARC and receive a free one-year membership upgrade in OARC

Please consider that you may want to becoming a member of ARRL if you are not currently or have not been for at least two years ...

The Amateur Radio Relay League [ARRL](#) is the national membership association for Amateur Radio operators. ARRL membership includes digital access to “QST” magazine and “On The Air” magazine. Optionally you can sign up for hardcopy subscriptions to the magazines.

OARC is an affiliated ARRL club and has been since 1937. However, to maintain OARC’s affiliation, OARC must maintain that over 50% of our members are also members of ARRL.

Fill out the “joining ARRL through OARC” form, and bring/send it to OARC.

(Check OARC website for actual form)

Club Badges

OARC Club badges are available for all licensed club members.

The cost is **\$25.00** 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 **\$25.00** 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 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/	2nd Thursday 7:30 pm	UofU Warnock Engr Bldg Room 2230 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
Monday @ 7:00 PM	OARC YL net	448.600 -123.0
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	CSERG	145.770 simplex
Wednesday @ 9:00 PM	No. Utah 10m HF net	28.313 Mhz HF USB
Wednesday @ 9:00 PM	6-meter SSB net	50.125 Mhz 6-meter USB
Thursday @ 6:30 PM	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