





The Best of Amateur Radio

OARC e-Magazine

www.OgdenArc.org

FEBRUARY 2018

Next Club Meeting/Activity

Riverdale Fire Station



Jason Miles KE7IET
President



Mike Taylor KE7NQH
Vice President



Ceva Cottrell KE7IEV
Secretary



Jerry Cottrell KG7IGW

Treasurer



Gil Leonard NG7IL
Program Director



Dave Mamanakis KD7GR
Activity Director



Val Campbell K7HCP
Webmaster/NL Editor

PREVIOUS CLUB MEETING/ACTIVITY

January Meeting

3rd Saturday 20 January 2018

9:00 am

Riverdale Fire Station

Steve Snow KE7WYU .. ARES

NEXT CLUB MEETING/ACTIVITY

February Meeting

3rd Saturday 17 February 2018

9:00 am

Riverdale Fire Station

"Get to Know your Fellow Ham"

Bring your favorite project to ...

Show & Tell

PREVIOUS MEETINGS PICS

Club Photographer ... Ceva Cottrell KE7IEV













From the Shack of KE7IET







Jason Miles KE7IET

From the Shack of KE7IET

We are fortunate to be involved in a "hobby of hobbies". If you get bored with one aspect, there are plenty of others to explore. Now, having said that, please forgive me if my monthly articles trend toward building and experimenting. At the moment, that's the part of the hobby that has my interest. By the way, if you would like to write about your amateur radio interests, Val Campbell K7HCP would probably be glad to include your article in the newsletter.

At our last meeting, I mentioned that I found yet another project online. I don't remember how I stumbled upon it, but I found the website of Chuck Adams K7QO a little while ago. He is promoting the idea of a year-long QSO party to celebrate the 25th anniversary of the NorCal 40A kit, which is a 40-meter, frequency-agile, CW transceiver. The idea is to get as many NorCal 40A kits on the air as possible during 2018. Those fortunate enough to have one from the original production run are all set. I got my license a few years after that. To help those like me, Mr. Adams has graciously provided resources for putting together your own kit. See his website at http://www.k7qo.com/ for details.

At this point, the reader should be warned. It is easy to commit to this project before knowing the full effort required. This isn't a traditional kit where you receive a box of the necessary parts. You have to order the parts yourself, and it can be a challenge to find sources for components for a 25-year-old kit. The original documentation has Mouser and Digi-Key part numbers, but most of these are no longer valid. Some of the parts are no longer being made. Fortunately, there are resources available for finding the parts you need.

To have PCBs manufactured, you need to send Gerber files to a manufacturer. Mr. Adams has posted the necessary files on his website. He used to suggest allpcb.com as the manufacturer because of a deal they were offering. That deal has expired, but there are plenty of PCB manufacturers you could use. Ordering PCBs was one of the easiest steps for me, but it's probably a bit more difficult now.

It should be noted that the Gerber files produce a PCB that is not exactly the same as the one in the Wilderness Radio manual to which Mr. Adams has a link. The Wilderness Radio version had connectors and controls mounted directly to the PCB. With the 2018 version, the board is designed so the connectors and controls are mounted to the enclosure and connected to the PCB with hookup wire. Additionally, the 2018 PCB has pads for an optional audible frequency annunciator, an optional keyer, and an alternative final amplifier transistor.

So far, I'm still gathering parts. Four things have come in handy:

Mr. Adams published a text file with stage-by-stage instructions and a few parts substitutions. The text file is available on his website at http://www.k7qo.com/k7qo-quick-assembly.txt. In particular, the document lists the D882 transistor as an alternative to the 2SC799 or 2N3553 final amplifier.

Mr. Adams also published several YouTube videos where he builds the transceiver stages. The videos also contain possible parts substitutions that aren't in the text document. To find the videos, search for "K7QO" on YouTube.

One of the links on the k7qo.com website leads to a PDF of an original Wilderness Radio NorCal 40A construction manual. This manual contains a bill of materials, but be aware that the text document and YouTube videos may provide a better bill of materials.

Questions and answers are happening on the qrp-tech mailing list. To ask a question, you'll need to sign up for the list. However, to read messages already asked, you can browse the archive at https://groups.io/g/qrp-tech.

Some parts may only be available at some lesser-known suppliers. There is a list online of alternatives at http://www.ladyada.net/library/procure/hobbyist.html. I have not vetted the list, so take normal precautions when working with a new suppliers.

I'm just starting this project. At first, I thought hunting down the parts would be frustrating, but it's been interesting. I'll have to put updates in a later newsletter.



OARC COMING EVENTS



Next VE Test Session

1st Wednesday 07 February 2018 6:00 PM

UVHFS—Swap Meet 4th Saturday 24 February 2018

CLUB NEWS

HAM and EGGS Net

Tuesday Evenings at 7:00 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

Ham Radio Technician Course Announcement

The **Davis County Amateur Radio Club** is pleased to announce that they will be sponsoring a Technician Licensing Course.

It will be held in Layton City Office, 437 Wasatch Dr., Layton, Utah 84041.

There is no cost to take the class.

We will be using the Technician License Course book by Stu Turner. The books sell for \$21.95 plus shipping if you order them online.

The class starts on 24 January 2018 every Wednesday evening from 6:00 – 8:30 PM thru 28 February 2018.

For more information contact Spencer Mark at ae7io@arrl.net.

Thank you,

Spencer Mark AE7IO

Pocatello ID—K0IP

There are two crank-up Tri-Ex towers in Rigby ID available.

One is 35 feet. The other 55 feet.

Also two Hy-Gain beam antennas, one of which is a TH7DXX.

Plus lots of other radio STUFF!

All for \$1500.

See ... http://www.pocatelloarc.org



Early Bird Registration

Join us for the 2nd annual Utah Digital Communications Conference being held March 24th, 2018 in Sandy, Utah. This conference focuses on the amateur radio hobby digital side of the house. Great topics are planned this year including:

- · Amateur radio satellite communications
- . DMR How to get on the network
- DMR Creating your first codeplug
- · Design your own printed circuit board
- . MESH/AREDN Hands On Getting Started
- MESH/AREDN Advanced topics
- · Computer Control of your radio's via Linux/Raspberry Pi
- Cyber Security for amateur radio devices
- · LoRa Radio for internet of things
- · 3D Printing for amateur radio goboxes, antennas, and around the shack
- · Digital modes for field day

*More topics coming as presenter proposals are finalized

Register before February 24th to get early bird pricing and eligible for early bird prize drawing. You can register online at utah-dcc.org.

Register Today

Registration for HamCon 2018 will go live on February 15.

www.wyominghamcon.org

Thanks, Rick N1TEK



QST February 2018

ARRL Executive Committee Updated on Entry-Level License, Amateur Auxiliary Revision

The ARRL Executive Committee reviewed plans to implement recommendations of the Entry-Level License Committee when it met on October 14, 2017 in Hartford, Connecticut. The ARRL Board of Directors had called for work to go forward on a plan to pursue additional HF digital and phone privileges

for Technician licensees. The
Executive Committee was told that
New England Director and EntryLevel License Committee Chair Tom
Frenaye, K1KI, will work with ARRL
General Counsel Chris Imlay, W3KD,
and International Affairs Vice
President Jay Bellows, K0QB, to
develop the specifics of a proposal to

the FCC requesting expanded frequency and mode privileges for Technicians, which will be reviewed by the full Board when it meets on January 19, 2018.



FCC Cites Auto Dealership for Causing Harmful Interference to Cell Phone Site

01/10/2018

The FCC Enforcement Bureau called on a North Dakota auto dealership "to stop operating devices that are causing interference to licensed radio operations and to comply with federal rules and regulations related to radio frequency devices." The Bureau release a *Citation and Order* on January 9, to Lithia Toyota of Grand Forks. The case stems from interference to a nearby Verizon Wireless site that has been emanating from the dealership's outdoor lighting.

"Specifically, Lithia is being cited for operating industrial, scientific, and medical (ISM) equipment and causing harmful interference in violation of Sections 18.111(b) and 18.115(a) of the Commission's rules," the Bureau said in the citation. The Enforcement Bureau said the dealership "should take immediate steps to come into compliance with the Commission's rules, including eliminating the interference."

The case dates back to April 2016, when Verizon Wireless complained to the FCC of radio emissions causing interference to a Verizon 700-MHz LTE cell site in Grand Forks. Verizon noticed that the interference appeared to correspond with the outdoor portal lighting schedule of the nearby dealership, and it subsequently contacted a representative of Lithia Toyota, which agreed to leave the portal lighting off for one evening. Verizon said that resulted in a "considerable noise floor drop." Verizon contacted the FCC after Lithia failed to take corrective action, the FCC Citation recounted.

A March 2017 visit by an FCC field agent confirmed that the interference was coming from the dealership's portal lighting, which employed Philips model QL55W/840 induction lighting devices. The Enforcement Bureau's Denver Office issued a warning to Lithia Toyota, informing the dealership that it was operating an RF radiating device, an unintentional radiator, that was causing harmful interference to radio communications. The letter stated that the RF energy emanating from the device was detected between 776-787 MHz, frequencies reserved for cellular operation.

Although the dealership orally agreed to make a good faith effort to resolve the problem, a conference call with Lithia and Verizon representatives last June 28 confirmed that the interference still had not been resolved.

The FCC noted in the Citatin that the RF lighting devices at issue are ISM equipment regulated under Part 18 of the Commission's rules, which compel the operator to "promptly take whatever steps may be necessary to eliminate the interference."

"Based on the foregoing evidence, we find that Lithia has violated Sections 18.111(b) and 18.115(a) of the Commission's rules by failing to promptly eliminate the interference," the FCC said. Lithia has 30 days to provide a report to indicate corrective actions it has taken or will take to eliminate the problem.

The FCC said failure to take action to resolve the interference could result in fines of up to \$16,000 per day.



ARRL Suggests FCC May Need to Intervene to Ensure Effective Antenna Rights

02/01/2018

Commenting in response to an FCC *Public Notice* (DA 17-1180) released last month, ARRL addressed the extent of Amateur Radio's response to recent hurricane disasters and efforts needed to expand the use of Amateur Radio services when it comes to planning, testing, and providing emergency communication. The comments point out that Amateur Radio not only has been "far more than a hobby;" it is a ubiquitous, infrastructure-independent communication resource that's always ready to deploy effectively whenever and wherever needed. The League cited the remarks of former FEMA Administrator Craig Fugate, KK4INZ, that Amateur Radio "oftentimes is our last line of defense." ARRL raised three areas where action by the FCC could ensure and enhance the ability of radio amateurs to provide emergency communication, including the current Amateur Radio Parity Act of 2017 (S. 1534), now in the US Senate.

"HOAs can preclude amateur antennas in common areas. HOAs can enact reasonable written rules governing height, location, size and aesthetic impact of, and installation requirements for, outdoor antennas and support structures for amateur communications, but the effective outdoor antenna requirement is paramount," ARRL noted in its comments. "The bill is currently before the Senate Commerce Committee. If, however, Congress is unable, as has been rumored, to pass *any* telecommunications legislation this term, it will be incumbent on the Commission to take the action on its own initiative that would be called for by this legislation. The future of Amateur Radio emergency communications is dependent on it."

ARRL asserted that it "is critical to have stations located at one's residence in order to regularly participate in disaster preparedness training exercises and drills."

Another "noteworthy and urgent need" that might call for some regulatory involvement by the FCC, ARRL said, "relates to an outdated regulation that limits data rates in HF Amateur communications, precluding certain digital emissions that have recently proven extremely important in Amateur Radio hurricane relief efforts." ARRL noted that the FCC has yet to act on the League's *Petition for Rule Making* (RM-11708), filed in November of 2013, proposing to amend the Amateur Service rules to eliminate the symbol rate limit relative to data emissions in allocations below 29.7 MHz.

That *Petition* also called for establishing a 2.8-kHz maximum occupied bandwidth for data emissions in those bands. ARRL has argued that this deregulatory action is necessary to allow the use of PACTOR 4, an effective and efficient digital communication mode that has proven valuable in disaster-relief efforts. In July of 2016, the Commission released a *Notice of Proposed Rule Making* in WT Docket 16-239, proposing only to remove limitations on the symbol rate applicable to data emissions.

"Equipment dispatched with the 'Force of 50' [volunteers] to Puerto Rico included data transmission equipment capable of PACTOR 4 operation, but it could not be legally used in the Hurricane Maria disaster relief effort," ARRL noted. The League prevailed upon the FCC to grant a temporary waiver to permit use of PACTOR 4 by radio amateurs involved in the emergency response. "However, it should not have been necessary to wait more than 4 years for the underlying rulemaking proceeding to have been resolved, and it should not have been necessary to ask for a temporary waiver of a hopelessly outdated rule that limits data speeds for no useful reason," ARRL added in its comments.

GUEST ARTICLE

By Dan Romanchik, KB6NU

Amateur radio in the news: Hams choose GMRS for CERT team, practicing for disaster, Orange ARC celebrates 70th anniversary

February 2, 2018

Hams choose GMRS for CERT team. Instead of amateur radio, BeCERTAINN — Berkeley CERT & Inter Neighborhood Network will be using GMRS radios for their operations. "There are many licensed hams in Berkeley, but it proved very difficult to actually get a significant number of people involved in this effort," Perlman added. "It was even more difficult to attract new hams, due to fears about the level of knowledge required to pass the licensing test."



Practicing for disaster. Various agencies came together at the Civic Center on Saturday to deal with a mock disaster. The 24-hour mock disaster simulation was held during the annual Winter Field Day event. The theme of the day was public education and awareness, disaster preparedness, crime prevention and amateur radio.

"The goal of this event was to simulate a communication failure that required amateur radio operators to set up and maintain a communications system for 24 hours," said Gary Young, Cove deputy fire chief and emergency management coordinator. "Many people are not aware of the steps to take during a disaster." The event allows people to take part in the simulation, gain important information and become a part of the process.

There is nothing amateur about amateur radio. Tastefully restored Orange Train Depot Museum at 1210 West Green Avenue was a perfect setting on a perfectly sunny, chilly day to host the Orange Amateur Radio Club's 70th anniversary Saturday and Sunday. Accompanying the sign advertising the club's two day event, numerous radio antenna populated the depot grounds, making it possible for club members working their radios inside to reach far and wide in their search for contacts throughout the county, and well beyond.

FEATURE ARTICLE

Amateur Radio Look-A-Like License Plate Back to the Novice Days?

I found this plate in Ogden in December 2017. You have to imagine that the zero is an o. It falls short of being a Novice call because the suffix is one letter short.

It looks like the car owner is named **Obi Wan**.

TNX

Kent, WA7AHY



CLUB NEWS



Ogden Utah as viewed from the Wasatch Front Mountains



Club Swapmeet



"SALE" or "WANTED" ITEMS NEEDED

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

Visit http://www.ogdenarc.org/ then click on Obay-Swap.

FEATURED ITEMS

SWAP ITEM # 177

FOR SALE: 60ft crank up tower. Aluma model T-60HN.

Includes 120V winch, tilt base plate, YAESU G-800SDX and G-500A rotators,

guy wires and house bracket.

PRICE: \$4000

CONTACT: John N7WZ, 208 520 3537 (leave message)

SWAP ITEM # 176

FOR SALE: 40ft mobile air pushup tower.

Includes spare tire for trailer, leveling feet for trailer and guy straps with ground stakes.

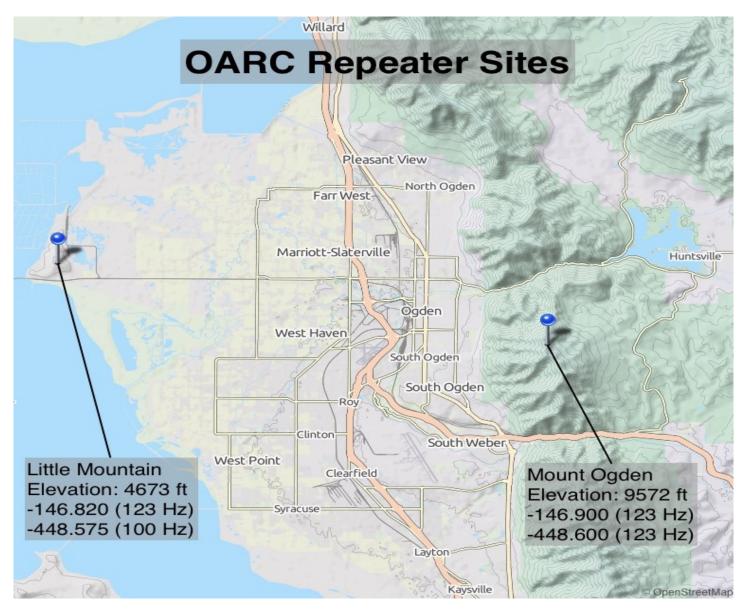
Trailer requires 2 in ball.

PRICE: \$3000

CONTACT: John N7WZ, 208 520 3537 (leave message)

NOTICE

CLUB REPEATER NEWS









Mike Fullmer KZ70

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 YAHOO GROUP



Did you know that OARC has a Yahoo Group?

We occasionally communicate with our OARC members via the Yahoo Group. Receive 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 **Join Now!** icon at the top 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



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

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 in advance for each badge ordered and specify Call Sign and First Name. Contact webmaster or any club officer via email or contact the club treasurer at the next club meeting.

For additional information see club website left side menu and click "Join" to fill out a club application form to order a club badge.

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

Renew your membership now!

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.

Joining is easy. Come to a club meeting or fill out an application form from the club website (click "Join" from the left side main menu). Instructions for mailing on the form.

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.

ANNOUNCEMENTS

Next Club Meeting:

3rd Saturday of each Month

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

Meeting/Activity:

See notices above

Talk-in: -146.82 (pl 123.0)

Check OARC web site for details

www.ogdenarc.org

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

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

Next Weber Co VE Test Session:

1st Wednesday Feb, Jun & Oct

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

Time: 06:00 PM Walk-ins allowed

Location: Permanent location

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

Contact: VE Liaison:

Rick Morrison W7RIK (Liaison)
morrisonri@msn.com (801-791-9364)

Jason Miles KE7IET (IT)

Cost: \$ 14.00

Two forms of **ID**, one of which must be a **picture ID**.

For "Upgrades" bring current license and a copy of current license, and any CSCE's

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

Club Web Site

Be sure to visit our club web site.

www.OgdenARC.org

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

Club Call Sign

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

W7SU

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

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

See you there.

OARC REPEATERS				
(*) Yaesu Fusion digital/FM compatible				
FREQ	CLUB	TONE	LOCATION	
146.900-	OARC (*)	122 DCS	Mt Ogden	
448.600-	OARC (*)	123.0	Mt Ogden	
146.820-	OARC (*) "Talk-in"	123.0	Little Mtn	
448.575-	OARC	100.0	Little Mtn (w/auto patch)	

OTHER AREA REPEATERS			
FREQ	CLUB	TONE	LOCATION
146.620-	UARC	none	Farnsworth Pk
147.120+	UARC	100.0	Farnsworth Pk
449.100-	UARC	146.2	Farnsworth Pk
449.500-	UARC	100.0	Farnsworth Pk
147.040+	DCARC	123.0	Antelope Isl
447.200-	DCARC	127.3	Antelope Isl
449.925-	DCARC	100.0	No Salt Lake
145.290-	GSARC	123.0	Brigham City
145.430-	GSARC	123.0	Brigham City
147.220+	GSARC	123.0	Brigham City
448.300-	GSARC	123.0	Brigham City
146.640-	BARC	none	Logan
146.720-	BARC	103.5	Mt Logan
147.260+	BARC	103.5	Promontory Pt
449.625-	BARC	103.5	Mt Logan
145.250-	WSU	123.0	* coming soon
449.250-	WSU	123.0	* coming soon
145.490-	K7HEN	123.0	Promontory Pt
146.920-	N7TOP	123.0	Promontory Pt
449.775-	N7TOP	123.0	Promontory Pt
147.100+	Morgan	123.0	Morgan Co
448.825-	IRLP/Echo	123.0	Clearfield City
449.950-	IRLP	123.0	Clearfield City
449.425-	IRLP	100.0	Nelson Peak
147.360+	Summit Co	100.0	Lewis Peak

AREA CLUB MEETINGS & WEB SITES

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CLUB	WEB SITE	DATE/TIME	LOCATION
OgdenARC	ogdenarc.org	3 rd Saturday 09:00 am	Check OARC web site
WC Sheriff		1 st Saturday 10:00 am	Weber Co. Sheriff Complex
Comm-O			West 12 th Street Ogden Utah
Barc	barconline.org	2 nd Saturday 10:00 am	Cache Co. Sheriffs Complex
			200 North 1400 West Logan Ut
CSERG	dcarc.net	Last Wednesday 8:30pm	Clearfield City Hall
	/ares.htm/		Clearfield Utah
DCarc	dcarc.net	2 nd Saturday 10:00 am	Davis Co. Sheriff Complex
			Farmington Utah
NU Ares	home.comcast.net/	3 rd Wednesday 7:00 pm	Cache Co. Sheriff Office
	~noutares/		Logan Utah
Uarc	xmission.com	1 st Thursday 7:30 pm	UofU EMC Bldg Room 101
	/~uarc/		Salt Lake City Utah
UVarc	https://uvarc.club	1 st Thursday 6:30 pm	Orem City Council Chamber Room 56
			North State St. Orem Utah
GSarc	Ubetarc.org	Check Website	Check Website
Utah DX	udxa.org	3 rd Wednesday	check web page for details
Association		check web page for details	Salt Lake City area
UvhfS	ussc.com	Each Tuesday 8:00 pm	Weekly 2 meter net
	/~uvhfs/	(refer to web site)	(no eye ball meetings)
WDArc	westdesertarc.org/	1 st Tuesday 7:00 pm	Tooele County Courthouse Tooele Utah
WsuArc	https:groups.googl e.com/forum/#!	3 rd Thursday 5:30 pm	WSU Blding #4 Room ?
	forum/wsuarc		Ogden Utah

LOCAL AREA NI	ETS

LOGAL MILITS				
DATE	CLUB	FREQ		
Daily @ 12:30 PM mt	Utah Beehive net HF	7.272 Mhz HF LSB		
Daily @ 07:30 PM mt	Utah Code net HF	3.570 Mhz HF CW		
Daily @ 02:00 UTC	Utah Farm net HF	3.937 Mhz HF LSB		
Sunday @ 8:45 AM	Ogden Old Timers HF net	7.193 Mhz HF LSB		
Sunday @ 7:30 PM	GS ARC	145.430 - 123.0 (training net)		
Sunday @ 8:30 PM	SATERN Net	145.900 - 123.0		
Sunday @ 9:00 PM	Morgan Co Net	147.100 +123.0		
Sunday @ 9:00 PM	UARC Info net	146.620- no PL tone required		
Monday @ 9:00 PM	2-meter SSB net	144.250 Mhz 2-meter USB		
Tuesday @ 7:00 PM	OARC—Ham & Eggs Net	448.600 -123.0		
Tuesday @ 8:00 PM	Weber ARES	448.600 - 123.0		
Tuesday @ 8:00 PM	VHF Society Swap	147.120 + 100.0		
Tuesday @ 9:00 PM	Bridgerland ARC	147.260 + 103.5		
Wednesday @ 8:00 PM	GS ARC	145.290-, 145.430-, 448.300- (all 123.0)		
Wednesday @ 8:30 PM	CSERG	145.770 simplex		
Wednesday @ 9:00 PM	No. Utah 10m HF net	28.313 Mhz HF USB		
Wednesday @ 9:00 PM	6-meter SSB net	50.125 Mhz 6-meter USB		
Thursday @ 6:30 PM	Davis Co Elmers Net	147.040 + 123.0 New Hams		
Thursday @ 8:00 PM	Weber State ARC	146.820 - 123.0 (coming soon)		
Thursday @ 8:00PM	State RACES VHF/IRLP	145.490 - 123.0, 146.680 - 123.0 3 rd Thursday - even months only		
Thursday @ 8:30 PM	Davis ARES	147.420 = simplex		
Thursday @ 9:00PM	Wasatch Back Net	147.360 + 100.0		
Saturday @ 8:00AM mst	RACES State HF	3.920 Mhz HF LSB 3 rd Saturday – odd months only		
Saturday @ 11:00AM mst	QCWA net HF	7.272 Mhz HF LSB		

OARC OFFICERS

OTHER CLUB APPOINTMENTS

President: Jason Miles KE7IET VE Liaison: Richard Morrison W7RIK

Jason Miles KE7IET (IT)

Vice Pres: Mike Taylor KE7NQH

Secretary: Ceva Cottrell KE7IEV

Repeater Engineers: Mike Fullmer KZ7O

Scott Willis KD7EKO

Treasurer: Jerry Cottrell KG7IGW Photographer: Ceva Cottrell KE7IEV

Program Director: QSL Manager: Ceva Cottrell KE7IEV

Gil Leonard NG7IL

Historian/Librarian: Kent Gardner

Activity Director: WA7AHY

Dave Mamanakis KD7GR

Equipment Manager: Val Campbell K7HCP

"WATTS NEWS" e-Magazine

Club Call Sign Trustee: Larry Griffin AD7GL

Advisors:

NL Editor: Val Campbell K7HCP

"OARC" web site Mike Fullmer KZ70

Kent Gardner WA7AHY

Webmaster: Val Campbell K7HCP Kim Owen KO7U

Larry Griffin AD7GL

Stan Sjol WOKP