

The Best of Amateur Radio

OARC e-Magazine

www.OgdenArc.org

MAY 2021

Next Club Meeting/Activity

2 separate - Special Event Stations









Dave Mamanakis KD7GR Justin Hall KB7LAK

President

Vice President

Secretary

Treasurer



Mike Wilde KJ7HEX **Program Director**



Todd Shobe KW7TES Activity Director



Val Campbell K7HCP Webmaster/NL Editor



PREVIOUS CLUB MEETING/ACTIVITY

April Activity

3rd Saturday 17 April 2021

9:00 AM

In-Person meeting

At the Utah Military Academy

NEXT CLUB MEETING/ACTIVITY

OARC

May Event/Activity

Golden Spike Special Event Station W7G

&

OARC Centennial Special Event Station W7SU/100

Keep clicking...

PREVIOUS MEETINGS PICS

Photos by ... club photographers



Kathryn Sutton – K8RYN



Rick Hansen—N7EGA

We want to welcome Kathryn Sutton K8RYN who recently volunteered to be an OARC photographer. Thank You Kathryn.

And thank you Rick for your continued service to OARC as an assistant OARC photographer.

"Previous Meeting - pictures" ...

Photos located on the club web site home page.

By the way, the last batch of club meeting pictures on the club website homepage were <u>NOT</u> taken by our expert photographers. Sorry for the poor quality. We will all appreciate a good photographer.



OARC COMING EVENTS



Next Activity

One more click...

VE Test Session

1st Wednesday 02 June 2021 @ 6:00 PM



OARC May Event/Activity

OARC Activity/Event

OARC Golden Spike Special Event Station W7G

More information follows ...

OARC Activity/Event

OARC Centennial Special Event Station W7SU/100

More information follows ...

Dave's Rag Chew







Dave Mamanakis KD7GR

Greetings, My Friends!

We have finally arrived at our Summer Activities, and BOY DO WE HAVE SOME ACTIVITIES!

Thank You to all who joined us at our Live and In Person Meeting at UMA! We got to hear from Mel Parks and Pat Malan as they campaign for the Position of Section Manager for the ARRL here in Utah. Good Luck to them!

Which reminds me, if you aren't a Member of the ARRL, please look into it! Ask questions about it at the Ham & Eggs net... or send me an email...

We also started to ramp up our Social Media mojo! You can find us on Facebook! Just search for Ogden Amateur Radio Club!

Then we looked at the radios: The Club's radio, the Icom IC-7300 and a Yaesu FT-991a... I hope that was helpful to get people a little more familiar with what's available... 2 great radios!

WE HAVE A WINNER! As you may remember, we've been doing a QSL card contest to pick the QSL card for our 100th anniversary... You may find the pick here:

http://ogdenarc.org/images/QSL%20100/qsl1.jpg Congratulations! Joe Taranto (K7CJT)!!

GOLDEN SPIKE!!! W7G! THIS WEEKEND! The 8th and the 10th. Saturday and Monday! Come up, work the radio, see the trains, bring the family! It will be a good time for all!

W7SU/100 SPECIAL EVENT We plan on working the air for our 100th Anniversary! More Details on our WebSite, OgdenARC.org !!! This will be a good time to operate HF!!

Continued ...

FIELD DAY! June 26-27 We'll be at the Marriot Park, by the IRS, just off 12th Street... 1045 S 1200 W, Ogden, UT 84404 Potluck Dinner, bring a side to share! Dogs and Burgers, Chips and Drinks provided! Another great opportunity to operate HF Radio!

Speaking of 12th Street...

I'm sure you've heard about the "unofficial" Ham & Eggs Breakfast?

We used to be at the Warrens in Roy, but we have outgrown the tables we could mash together. We are going to try The Rusted Spoon (formerly Stagecoach) just off 12th at 1310 Wall Ave, Ogden, UT 84404 Come Join us!

Wednesday Morning, 8am.

TEST SESSION!

June Test Session coming up! First Wednesday! June 2nd, at 6pm!

T-HUNT

Get ready to run around Weber County trying to find a hidden transmitter! First to find it gets a \$25 Gift Card and EVERYONE gets Breakfast! If you'd like to help, send me the location of a great place to hide the transmitter. A park, a yard, a business, home, or any location where we can set up a grill and cook some eggs, ham, and waffles! We could use some ideas! Send them to me!

Beyond that?

Just a couple words about SUMMER.

We are supposed to have a warm dry summer. It doesn't seem like it sometimes, but this is Utah... give it a minute, it'll warm up.

Keep some water in your cars... just a bottled water or something, just in case. Heat Stroke is no joke! Use sunscreen, wear a hat, drink plenty of water.

Stay Safe!

Thanks for being a Great Club!

--Dave (KD7GR)

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 WOKP, stansjol@xmission.com

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

NEWS YOU CAN USE

OARC members, Did you know ...

The 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 once a week. Everyone is welcome.

Now at a <u>new location</u>:

The Stagecoach-The Rusted Spoon-Ogden 1310 Wall Ave, Ogden, UT

NOTE: Covid social distancing is observed.

See you there ... <u>if you can get up that early</u>.

73, Val K7HCP

Welcome Tom Harrington AF7J

OARC's new Social Media manager. Check out the OARC Facebook page.

"Ogden Amateur Radio Club"



Tom Harrington AF7J



NOTICE OARC MEMBERS

Order your OARC Centennial/100th Year

Polo (Golf) Shirts

before 15 May

(last chance)

Refer to the ordering information link on the OARC website homepage.



I'm sure well will hear from those that participated in the event this year.

I will post any information that comes our way.



Golden Spike

The golden spike (also known as The Last Spike is the ceremonial 17.6-karat gold final spike driven by Leland Stanford to join the rails of the First Transcontinental Railroad across the United States connecting the Central Pacific Railroad from Sacramento and the Union Pacific Railroad from Omaha on May 10, 1869, at Promontory Summit, Utah Territory. The term *last spike* has been used to refer to one driven at the usually ceremonial completion of any new railroad construction projects, particularly those in which construction is undertaken from two disparate origins towards a common meeting point. The spike is now displayed in the Cantor Arts Center at Stanford University.

OARC Activity/Event

OARC Golden Spike Special Event Station W7G

Saturday 08 & Monday 10 May 2021 (9AM - 5PM)

Held on site at the Golden Spike National Historic Park

W7G Golden Spike Special Event Operators Sign Up

NOTE: Multiple Operators per shift is desirable

Stay tuned to the Tuesday <u>Ham & Eggs Net</u> for updates

(repeat...)

OARC Golden Spike Special Event W7G

ARRL/QST magazine requires our submission for QST Special Events be submitted no later than 28 February for the May issue of the QST magazine.

05/07/2021 | Golden Spike Special Event - W7G

May 7-May 10, 1500Z-2300Z, W7G, Corinne, UT. Ogden Amateur Radio Club (OARC) - W7SU. 14.255 7.235 7.074 7.040. QSL. Ogden Amateur Radio Club (OARC) - W7SU, PO Box 3353, Ogden, UT 84409. Golden Spike Celebration Commemorating the Anniversary of the 1869 Driving of the Golden Spike, completing the Transcontinental Railroad at Promontory Summit, Utah. Golden Spike National Historical Park - National Parks Service 6200 North 22300 West, Promontory Summit, UT 84307. http://w7g.org

In addition we have the following websites setup to support this special event.

http://w7g.org

And at QRZ.com check out ... the call sign W7G

http://qrz.com/db/w7g

SIGN UP NOW TO OPERATE AT THE GOLDEN SPIKE SPECIAL EVENT STATION

NOTE: Multiple Operators per shift is desirable

Maty Weinberg, KB1EIB, events@arrl.org; www.arrl.org/special-event-stations

Special Event Stations

QST May 2021 page 82

Working special event stations is an enjoyable way to help commemorate history. Many provide a special QSL card or certificate!

Through Dec. 31, 0000Z – 2359Z, all calls, all areas. VE2GT and VE2NCG. Quebec Parks on the Air (QCPOTA). Certificate. This is an operating event. See website for details. qcpota.ca

Apr. 18 – Apr 19, 1300Z – 0400Z, W7W, Rochester, NY. W2JLD/ Special event coordinator. World Amateur Radio Day. Echo-Link *ROC-HAM* CONFERENCE 531091 AllStar 2585, 47620, 53130. QSL John Derycke, W2JLD, 85 Amherst St. #2, Rochester, NY 14607. w2Jld2@gmail.com

Apr. 24, 1300Z – 1900Z, W1M, Russell, MA. Western Massachusetts Council BSA. Woronoko Heights Outdoor Adventure. 14.290 14.060 10.115 7.190. QSL. Tom Barker, 329 Faraway Rd., Whitefield, NH 03598. Operating from the Horace Moses Scout Reservation.

Apr. 24, 1400Z – 1930Z, W1BSA, Fall River, MA. USTNE NE1PL. W1BSA Birthday of Scouting Event. 14.259. QSL. Rick Emord, 135 Wareham St., Middleboro, MA 02346. See website for up-to-date information. www.ne1pl.org

May 7 – May 8, 1600Z – 2000Z, various call signs, Fort Huachuca, AZ. US Department of Defense. Armed Forces Day Crossband Test. USB 5330.5 14438.5 14383.5 13164; FM 2484. QSL. Station contacted. Military stations will transmit on DOD frequencies and announce the amateur frequency they are monitoring. A complete list of participating stations, modes, frequencies, and times will be available after April 19, 2021. See website for details. dodmars.org

May 7 - May 10, 1500Z - 2300Z, W7G, Corinne, UT. Ogden Amateur Radio Club, W7SU. Golden Spike Special Event — W7G, 14.255 7.235 7.074 7.040, QSL, Ogden Amateur Radio Club (OARC) — W7SU, P.O. Box 3353, Ogden, UT 84409, www.w7g.org or ogdenarc.org

May 8, 1600Z – 2300Z, NI6IW, San Diego, CA. USS *Midway* (CV-41) Museum Ship. **Battle of Coral Sea**. 7.250 14.320 14.070 (PSK31) D-STAR via PAPA System repeaters. QSL. USS *Midway* CV-41 COMEDTRA NI6IW, 910 N. Harbor Dr., San Diego, CA 92101.

May 9 – May 15, 0000Z – 2359Z, K3FBI/0 through 9, Quantico, VA. FBI Amateur Radio Association. National Police Week — Honoring Our Fallen Herces. 14.275 14.074 7.275 7.074; all bands, all modes. Certificate & QSL. Jay Chamberlain, NS4J, 27 Fox Run Ln., Fredericksburg, VA 22405. www.qrz.com/db/k3fbi

May 11 – May 12, 1500Z – 0200Z, W0CGM, Dundas, MN. South East Metro Amateur Radio Club. Minnesota Birthday Bash. 7.250. Certificate. SEMARC, 1655 68th St. W., Inver Grove Heights, MN 55077. www.semarc.org

May 15, 1200Z – 2200Z, W8TFC, Richwood, WV. The Family Center Amateur Radio Club, 82nd Annual Ramp Festival. 444.450 14.250 7.250 3.850. Certificate. Wally Howerton, WA8LLY, 144 Chief Red Eyes Tr., PO. Box 85, Richwood, WV 26261. Certificates will automatically be completed and emailed if operator is listed in grz.com. walter.howerton@frontier.com or thefamilycenterof richwoodwv.com/Ham/default.html

82 May 2021 QS7 www.arrl.org

May 15, 1300Z – 1900Z, W1M, Russell, MA. Western Massachusetts Council BSA. Woronoko Heights Outdoor Adventure. 14.290 14.060 10.115 7.190. QSL. Tom Barker, 329 Faraway Rd., Whitefield, NH 03598. Operating from Moses Scout Reservation.

May 15 – May 23, 1500Z – 2300Z, W7SU/100, Ogden, UT. Ogden Amateur Radio Club. Centennial Celebration. 14.255 7.235 7.074 7.040. QSL. Ogden Amateur Radio Club — W7SU/100. P.O. Box 3353, Ogden, UT 84409. www.qrz.com/ db/w7su/100 or ogdenarc.org/100

May 22 – May 23, 1600Z – 1800Z, K7SWI, Nampa, ID. South West Idaho Amateur Radio Club. Chicken Dinner Road. 146.52 14.250 7.250 3.850. Certificate & QSL.* South West Idaho ARC, K7SWI, 323 W. Dewey Ave., Nampa, ID 83686-6638. www.facebook.com/groups/SouthWestIdahoARC

May 27 – Jun 1, 0000Z – 2359Z, W2F, Brooklyn, NY. James Gallo. Fleet Week NYC. 14.340. QSL. James Gallo, 149 Marine Ave., Brooklyn, NY 11209.

May 28 – May 31, 1800Z – 1800Z, W3M, State College, PA. Nittany Amateur Radio Club. Birthplace of Memorial Day. 7.195. QSL. W3M, Nittany Amateur Radio Club, P.O. Box 614, State College, PA 16801. www.qrz.com/db/w3m

May 28 – May 31, 1800Z – 2359Z, K0S, Springfield, MO. N0EW. KØS Strange Antenna Challenge. 28.500 14.310 7.200 3.900. QSL. Erik Weaver, 4857 E. Farm Rd. 136, Springfield, MO 65809. Anyone may operate, just add /KØS to your call sign; /KØS station is responsible for their own QSL. The Strange Antenna Challenge is to utilize antennas not made of normal antenna materials. erikeweaver@gmail.com

May 29, 1300Z – 2200Z, W2A, Christiansburg, VA. New River Valley Amateur Radio Club. World War II Hero Audie Murphy. 14.262 7.262 3.860. QSL. Danny Wylam, 710 McDaniel Dr., Christiansburg, VA 24073. Operating from Brush Mountain on the Appalachian Trail, near the crash site. dannywylam@gmail.com

Certificates and QSL cards: To obtain a certificate from any of the special event stations offering them, send your QSO information along with a 9 × 12 inch self-addressed, stamped envelope (three units of postage) to the address listed in the announcement. To receive a special event QSL card (when offered), be sure to include a self-addressed, stamped business envelope along with your QSL card and QSO information. "Note: Some clubs may ask for a nominal fee to cover the cost of the certificate or QSL. Request will be made on air during the event or on the club's website.

Special Events Announcements: For items to be listed in this column, use the ARRL Special Events Listing Form at www.arrl.org/special-events-application.

Submissions must be received by ARRL HQ no later than the 1st of the second month preceding the publication date; a special event listing for August QST would have to be received by June 1. In addition to being listed in QST, your event will be listed on the ARRL Web Special Events page. ARRL reserves the right to exclude events of a commercial or political nature.

May 7 – May 10, 1500Z – 2300Z, W7G, Corinne, UT. Ogden Amateur Radio Club, W7SU. Golden Spike Special Event — W7G. 14.255 7.235 7.074 7.040. QSL. Ogden Amateur Radio Club (OARC) — W7SU, P.O. Box 3353, Ogden, UT 84409. www.w7g.org or ogdenarc.org

OARC recently received an email from Brian KB9ZPK of Kenosha WI. Following are excerpts/fragments from his emails.

Hello....

I understand that your Radio Club did a SPECIAL EVENT STATION for the 150th Anniversary of The Golden Spike Celebration. Where can I find info of that past Event? Can I buy a QSL Card?

SO GOOD TO MEET YOU, AND THANKS FOR YOUR TIME AND ANSWERING ME! Wow! I don't know how I missed your Club doing the GS SE Station every year! And Thanks to your Club, and you for doing it every year! I bet the 150th Anniversary was Way Cool! And the good thing for me is that your SE station out there for 2021 is Right around the Corner! I can't wait to work your Promontory Station.

Thanks for sending the QSL Cards via attachment on your last email. I really Love the 2019/2020 card! But they all look Great. If you want to send me some of them, via the Mail, that would be AWESOME!

Someday I would Love to get out to your beautiful Historic State and drive the Old Transcontinental Railroad grade and visit The Promontory site. Have you ever drove it? How is the Repeater Coverage along the 80-mile grade to Promontory? I am assuming Cell Coverage out there is rough? Driving the original RR grade would give me chills knowing the History that I am driving on!

I am going to explore what looks to be A VERY Informative and Awesome Web site for your radio Club.

Congratulations on your clubs 100th Anniversary. Let me say you are a Credit to our Hobby, and a Class Act!

Hope to get a card by contacting your Club this year. What equipment does your Club use for the SE Station at Promontory?

I saw The Repeater Map online, and will print it. Sweet! I saw some pictures of the Antennas up on Ogden Mtn.....Cool! What a Great Website your Club has! With lots of Cool info!

73 Brian Hamilton KB9ZPK Kenosha WI USA **Club News**

Ogden Amateur Radio Club

Centennial 2021 QSL Card Contest <u>RESULTS</u>

Grand Prize

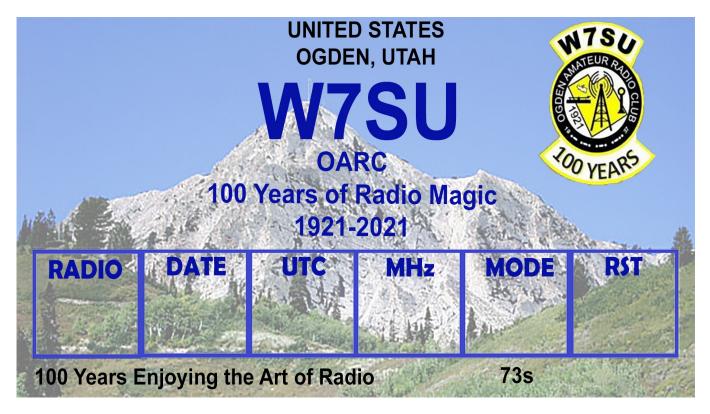


And the Winner is ...

Ogden Amateur Radio Club

Centennial 2021 QSL Card Contest <u>Winner</u>

THE WINNER IS QSL #1



Congratulations to

Joe Taranto (K7CJT)

Good Job Joe!

OARC QSL manager (Pete Heisig AI7GV) will get several of these cards made up in QSL Card quality hardcopy for distribution to all stations that contact our station W7SU/100 during our Centennial Special Event and other W7SU events well into the future.

Joe, a \$100 bill is in the mail. Hi Hi

Condolences to the other 5 contestants. All 6 QSL Card submissions were outstanding. Thank you all.

Club News

(repeat)

Ogden Amateur Radio Club

Centennial Event <u>Request</u>

Calling out to all amateur radio operators. Would you be willing to share something listed below?

Do you have any <u>photos of old radio gear</u>? Antennas, radios, shacks, or equipment. <u>New, used</u>, or <u>antique equipment</u>. Your <u>shack setup</u>.

Do you have any <u>interesting QSL cards</u>? Your own, one you have received, or an old one?

Would you be willing to <u>share a short story</u> or two? <u>Why you got licensed</u>? How <u>amateur radio has impacted your life</u>? <u>How amateur radio impacted the life</u> of someone else? A story about when you first joined the club. A story about radio communications in any form?

I would like to put together a presentation that can be viewed by interested parties by visiting our Club Website, and another link to all submissions. This is a great way to visit our history and make history for future club members.

The more people that are willing to share and contribute, the better this presentation will be. Please don't be shy and its ok to make several contributions.

Submissions, questions, or inquiries can be sent to:

W7SU@arrl.net

NG7IL@arrl.net

Thank you in advance for supporting this effort.

73 de Gil NG7IL

OARC Activity/Event

OARC Centennial Special Event Station W7SU/100 From Saturday May 15 thru Sunday May 23, 2021

- (1) Special Site Operations: May 15-16 and May 22-23
 - Special location: Ogden 25th & Grant Ave (south east corner)
 - Public display OARC VHF/UHF operations
 - OARC HF Special operations site is ...
 - TBD
- (2) Operate from home: 15 May thru 23 May

Note: <u>Be sure to log all contacts (see following page)</u>

More details about this Centennial Special Event will be posted on the club website home page once the Golden Spike special event has concluded.

Stay tuned to the Tuesday <u>Ham & Eggs Net</u> for updates

Use the following QSO Log Sheet for all at home QSO's for W7SU/100

QSO nr	date	UTC start	UTC end	station	operator	QTH	its RST	my RST	frequency (MHz)	mode	pwr (W)	QSL sent	QSL rcvd	remarks
		:	:											
		:	:											
	• •	:	:		·									
	• •	:	:		2									
		:	:											
	8 . 9	:	:											
		:	:					÷						
		:												
		:	:						-					
		:	:								o)			
		:	:								97			
		:	:		· · · · · · · · · · · · · · · · · · ·									
		:										-		
		:	:								÷			
	• •	:						<u> </u>						
	•	:												
-							-							
-		:	:						•					
-	200 20	:	:								<u> </u>			
	• •	:	:					3	•			-		
	· · ·	:	:				-		*					

NOTE: When operating from home be sure to LOG all QSOs for W7SU/100.

Printable log sheets can be downloaded from OARC website "Downloads" page, lower right section.

A note from the OARC callsign (W7SU) Trustee Larry Griffin AD7GL

When operating OARC Centennial Special Event stations from your home please observe the following rules and considerations:

- Use the club call sign that has been assigned to this special event, W7SU/100.
- It is okay for the club to have multiple operators operating simultaneously on the same band while using any mode of operation authorized on that band segment.
- Be aware that you can only operate within the qualifications of your license class privileges.
- There does not need to be a schedule of operations posted in advance.
- Maintain an accurate, legible log and submit it in a timely manner.
- Log time, frequency, callsign, signal report, mode and location.
- Be sure to ID every 10 minutes and at the end of your transmission.
- Apply all the courtesy rules of Ham Radio at all times.
- And HAVE FUN.

(repeat...)

OARC Centennial Celebration Special Event W7SU/100

ARRL/QST magazine requires our submission for QST Special Events be submitted no later than 28 February for the May issue of the QST magazine.

05/15/2021 | Ogden Amateur Radio Club Centennial Celebration Special Event Station W7SU/100

May 15-May 23, 1500Z-2300Z, W7SU/100, Ogden, UT. Ogden Amateur Radio Club (OARC) - W7SU. 14.255 7.235 7.074 7.040. QSL. Ogden Amateur Radio Club -W7SU/100, P.O. Box 3353, Ogden, UT 84409. Ogden Amateur Radio Club Centennial Celebration Special Event Station W7SU/100 celebrating 100 years. Founded May 1921, ARRL affiliated January 1937. QRZ.com (W7SU/100/) or ogdenarc.org/100

In addition we have the following websites setup to support this special event.

http://ogdenarc.org/100

And at QRZ.com check out ... the call sign W7SU/100

http://qrz.com/db/w7su/100

Maty Weinberg, KB1EIB, events@arrl.org; www.arrl.org/special-event-stations

Special Event Stations

Working special event stations is an enjoyable way to help commemorate history. Many provide a special QSL card or certificate!

Through Dec. 31, 0000Z – 2359Z, all calls, all areas. VE2GT and VE2NCG. Quebec Parks on the Air (QCPOTA). Certificate. This is an operating event. See website for details. gcpota.ca

Apr. 18 – Apr 19, 1300Z – 0400Z, W7W, Rochester, NY. W2JLD/ Special event coordinator. World Amateur Radio Day. Echo-Link *ROC-HAM* CONFERENCE 531091 AllStar 2585, 47620, 53130, QSL, John Derycke, W2JLD, 85 Amherst St. #2, Rochester, NY 14607. w2jld2@gmail.com

Apr. 24, 1300Z – 1900Z, W1M, Russell, MA. Western Massachusetts Council BSA. Woronoko Heights Outdoor Adventure. 14.290 14.060 10.115 7.190. QSL. Tom Barker, 329 Faraway Rd., Whitefield, NH 03598. Operating from the Horace Moses Scout Reservation.

Apr. 24, 1400Z – 1930Z, W1BSA, Fall River, MA. USTNE NE1PL. W1BSA Birthday of Scouting Event, 14.259. QSL. Rick Emord, 135 Wareham St., Middleboro, MA 02346. See website for up-to-date information. www.ne1pl.org

May 7 – May 8, 1600Z – 2000Z, various call signs, Fort Huachuca, AZ. US Department of Defense. Armed Forces Day Crossband Test. USB 5330.5 14438.5 14383.5 13164; FM 2484. OSL. Station contacted. Military stations will transmit on DOD frequencies and announce the amateur frequency they are monitoring. A complete list of participating stations, modes, frequencies, and times will be available after April 19, 2021. See website for details, dodmars.org

May 7 - May 10, 1500Z - 2300Z, W7G, Corinne, UT. Ogden Amateur Radio Club, W7SU. Golden Spike Special Event — W7G. 14.255 7.235 7.074 7.040. QSL. Ogden Amateur Radio Club (OARC) — W7SU, P.O. Box 3353, Ogden, UT 84409. www.w7g.org or ogdenarc.org

May 8, 1600Z – 2300Z, NI6IW, San Diego, CA. USS Midway (CV-41) Museum Ship. Battle of Coral Sea. 7.250 14,320 14.070 (PSK31) D-STAR via PAPA System repeaters. QSL. USS Midway CV-41 COMEDTRA NI6IW, 910 N. Harbor Dr., San Diego, CA 92101.

May 9 – May 15, 0000Z – 2359Z, K3FBI/0 through 9, Quantico, VA. FBI Amateur Radio Association. National Police Week — Honoring Our Fallen Herces. 14.275 14.074 7.275 7.074; all bands, all modes. Certificate & QSL. Jay Chamberlain, NS4J, 27 Fox Run Ln., Fredericksburg, VA 22405. www.qrz.com/db/k3fbi

May 11 – May 12, 1500Z – 0200Z, W0CGM, Dundas, MN. South East Metro Amateur Radio Club, Minnesota Birthday Bash. 7.250. Certificate. SEMARC, 1655 68th St. W., Inver Grove Heights, MN 55077. www.semarc.org

May 15, 1200Z – 2200Z, W8TFC, Richwood, WV. The Family Center Amateur Radio Club. 82nd Annual Ramp Festival. 444.450 14.250 7.250 3.850. Certificate. Wally Howerton, WA8LLY, 144 Chief Red Eyes Tr., P.O. Box 85, Richwood, WV 26261. Certificates will automatically be completed and emailed if operator is listed in grz.com. walter.howerton@frontier.com or thefamilycenterof richwoodwv.com/Ham/default.html

82 May 2021 QST www.arrl.org

May 15, 1300Z – 1900Z, W1M, Russell, MA. Western Massachusetts Council BSA. Woronoko Heights Outdoor Adventure. 14.290 14.060 10.115 7.190. QSL. Tom Barker, 329 Faraway Rd., Whitefield, NH 03598. Operating from Moses Scout Reservation.

May 15 – May 23, 1500Z – 2300Z, W7SU/100, Ogden, UT. Ogden Amateur Radio Club. Centennial Celebration. 14.255 7.235 7.074 7.040. QSL. Ogden Amateur Radio Club — W7SU/100, P.O. Box 3353, Ogden, UT 84409. www.qrz.com/ db/w7su/100 or ogdenarc.org/100

May 22 - May 23, 1600Z - 1800Z, K7SWI, Nampa, ID. South West Idaho Amateur Radio Club. Chicken Dinner Road. 146.52 14.250 7.250 3.850. Certificate & QSL.* South West Idaho ARC, K7SWI, 323 W. Dewey Ave., Nampa, ID 83686-6638. www.facebook.com/groups/SouthWestIdahoARC

May 27 – Jun 1, 0000Z – 2359Z, W2F, Brooklyn, NY. James Gallo. Fleet Week NYC. 14.340. QSL. James Gallo, 149 Marine Ave., Brooklyn, NY 11209.

May 28 – May 31, 1800Z – 1800Z, W3M, State College, PA. Nittany Amateur Radio Club. Birthplace of Memorial Day. 7.195. QSL. W3M, Nittany Amateur Radio Club, P.O. Box 614, State College, PA 16801. www.qrz.com/db/w3m

May 28 – May 31, 1800Z – 2359Z, KØS, Springfield, MO. NØEW. KØS Strange Antenna Challenge. 28.500 14.310 7.200 3.900. OSL. Erik Weaver, 4857 E. Farm Rd. 136, Springfield, MO 65809. Anyone may operate, just add /KØS to your call sign; /KØS station is responsible for their own QSL. The Strange Antenna Challenge is to utilize antennas not made of normal antenna materials. erikeweaver@gmail.com

May 29, 1300Z – 2200Z, W2A, Christiansburg, VA. New River Valley Amateur Radio Club. World War II Hero Audie Murphy. 14.262 7.262 3.860. QSL. Danny Wylam, 710 McDaniel Dr., Christiansburg, VA 24073. Operating from Brush Mountain on the Appalachian Trail, near the crash site. dannywylam@gmail.com

Certificates and QSL cards: To obtain a certificate from any of the special event stations offering them, send your QSO information along with a 9 × 12 inch self-addressed, stamped envelope (three units of postage) to the address listed in the announcement. To receive a special event QSL card (when offered), be sure to include a self-addressed, stamped business envelope along with your QSL card and QSO information. "Note: Some clubs may ask for a nominal fee to cover the cost of the certificate or QSL. Request will be made on air during the event or on the club's website.

Special Events Announcements: For items to be listed in this column, use the ARRL Special Events Listing Form at www.arrl.org/special-events-application.

Submissions must be received by ARRL HQ no later than the 1st of the second month preceding the publication date; a special event listing for **August** QST would have to be received by **June 1**. In addition to being listed in QST, your event will be listed on the ARRL Web Special Events page. ARRL reserves the right to exclude events of a commercial or political nature.

May 15 – May 23, 1500Z – 2300Z, W7SU/100, Ogden, UT. Ogden Amateur Radio Club. Centennial Celebration. 14.255 7.235 7.074 7.040. QSL. Ogden Amateur Radio Club — W7SU/100, P.O. Box 3353, Ogden, UT 84409. www.qrz.com/ db/w7su/100 or ogdenarc.org/100

QST May 2021 page 82

Congratulations to the hams that successfully tested at the

08 April 2021 OARC Weber County VE Test Session

Heisig, Peter	Extra	AI7GV
Brown, Ross	General	KJ7RWP
Jaynes, Kenneth	General	KJ7QJJ
Jeppson, Joel	General	KJ7WVP
Jeppson, Kyle	General	KJ7UFQ
Kent, Garey	General	KI7QKV

ARRL AFFILIATION

(repeat)

Check the OARC <u>Membership Roster</u> to ensure correct info for your: Call Sign, License Class, <u>ARRL Membership</u> "Yes" or "No". Email the OARC website if you have any discrepancies. Thank You, 73

The Ogden Amateur Radio Club is an ARRL affiliated member club and has been since 30 January 1937. To maintain our affiliation, OARC must have at least 50% of our members to also be ARRL members.

So, if you are not already an ARRL member consider joining ARRL. For your membership you can choose between two different magazines that will be mailed to your home, the QST magazine or the On The Air magazine. Members can also view either magazine in digital format online each month.

Signup online at http://www.arrl.org/

Thank you for your consideration.

(repeat)

OARC HAM RADIO EQUIPMENT LOAN PROGRAM Launched on OARC Website

The OARC Ham Radio Equipment Loan Program is a new program that has been conceived to provide new or inexperienced <u>OARC member hams</u> use of donated/loaned equipment for a limited time use while deciding how to move forward in the hobby.

Equipment can be checked-out for a period of time. If requested, an extension may be granted if no one else has a request for the same equipment pending. More than one item can be checked out if the other items are related by use.

To check-out a specific piece of equipment, send an email to the OARC club email address w7su@arrl.net with the <u>subject="equipment loan"</u> indicating your choice of equipment. You must be a <u>current member</u> of OARC to participate.

73, OARC – W7SU

Check OARC Website home page for equipment loan inventory chart.

(repeat)

STILL WANTED—STILL NEEDED Ham Shack Photos

We have been doing this for <u>22</u> months now ...

But I am running out of photos so ...

Send me your Ham Shack Photos soon!

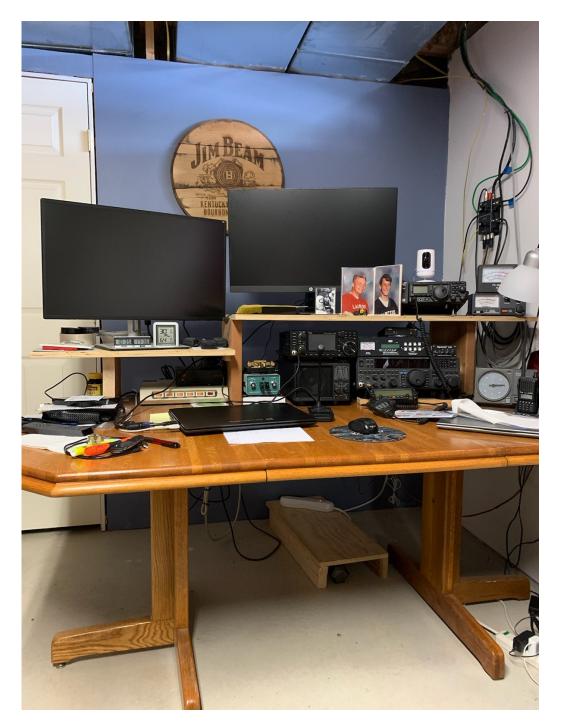
Submit to: k7hcp@arrl.net or w7su@arrl.net or 801.389.0690

Ham Shack Photos

Last month the unidentified Ham Shack Photo was ...

AI7GV

Pete Heisig



Ham Shack Photos

The <u>next</u> in the series of unidentified ham shacks is shown below.

Do you know whose ham shack this is?

We have seen his shack before but this is his new shack!



HOBBY NEWS

Jen Glifort, KC1KNL, jglifort@arrl.org

Member Spotlight

Noji Ratzlaff, KNØJI

Wherever he goes, Noji Ratzlaff, KNØJI, seeks to help connect his community. His interests and hobbies crisscross with radio and public service, spreading awareness of the hobby in his area. Whether that's through emergency preparedness and volunteer work, teaching at his karate studio, or serving as president of his local radio club, Noji keeps busy by staying linked to the people and community around him.

A Technical Mind

Noji was introduced to ham radio by his grandfather, who helped him earn his Novice-class license. However, he lost interest in radio when his grandfather passed away. Years later, a ham he met through his religious group reignited the spark. Noji's wife, Lisa, KRSLYS, also became involved in radio at that time.

Noji's interest in radio overlaps with his background in electronics. He earned a degree in electrical engineering, which initially led him to work developing programmable arrays like PALs, GALs, and FPGAs. However, he found that software was what truly held his attention, and began working as a software developer. 'That was a great move for me,' he said, 'because subsequent jobs required somebody who could develop software, while having an intimate hardware understanding, especially when it came to embedded systems.' The Radio Community "My honest favorite aspect of ham radio is helping people," Noji said, whether that's through assisting with antenna installations, programming radios for folks, or teaching radio classes and serving as a Volunteer Examiner (VE). In addition to being a VE, Noji is also a CERT instructor and ARES volunteer. He maintains his own website (www.noji.com),

which features everything from guides to local restaurants to resources for radio operators. "I love to post stuff on my website," he explained, "especially for new hams, and the ultimate ham radio glossary.

Noji also serves as President of the Utah Valley Amateur Radio Club (UVARC), formed 5 years ago to serve the Utah Valley county. With over 1,500 members, the club is now the largest in the state. In addition to hosting ham radio exam courses and VE sessions, the club participates in lots of events and get-togethers, like swap meets, potluck dinners, hamfests, and weekly nets. They even have special interest nets, like the Ladies' Net, an annual Santa Net, and a New Ham Net. The club earned first-place rankings for Utah in ARRL Field Day 2020 and Winter Field Day 2020.

On weekends during the summer, Noji hikes local mountains while volunteering for the Timpanogos Emergency Response Team. He explained, "Each of us radio people pair up with an EMT and call in to Search and Rescue" to assist injured hikers. "Depending on the situation, we might request a chopper or a



Noji Ratzlaff, KNØJI, and his wife, Lisa, KR5LYS

posse to come up and carry the patient off the mountain, if we determine they can't make it down on their own."

Long-Term Passions

Noji also owns his own karate school, where he's taught since 1997. The school focuses on Shotokan karate and self-defense. Noji's been doing karate since he was 16 years old, and still trains nearly every day, 'to keep up with the younger folks." The hobby is his "second-biggest passion, second only to my family." He also enjoys astronomy, Scouting, geocaching, camping, and hiking.

"To me, nothing compares with spending time with my kids, who are grown now." Noji said, "and now with my grandkids." He uses some of that family time to share his passions and pass down his knowledge. He said, "Most of my kids have taken karate from me, and most of my kids are hams too."

Can this be true? 1,500 members! More follows... QST May 2021 page 13

Noji also serves as President of the Utah Valley Amateur Radio Club (UVARC), formed 5 years ago to serve the Utah Valley county. With over 1,500 members, the club is now the largest in the state. In addition to hosting ham radio exam courses and VE sessions, the club participates in lots of events and get-togethers, like swap meets, potluck dinners, hamfests, and weekly nets. They even have special interest nets, like the Ladies' Net, an annual Santa Net, and a New Ham Net. The club earned first-place rankings for Utah in ARRL Field Day 2020 and Winter Field Day 2020.

Can this be true?

UVARC—1,500 members!

I had to check into this—for sure.

Further investigation reveals that the Utah Valley ARC has no membership dues and they consider anyone that has ever visited one of their meetings and anyone that has visited their website to be a member.

Well, Okay!

HINT: It's difficult to become an ARRL affiliated club this way.

With those membership guidelines, OARC could consider that we now have over 240,000 members. Just check our club website visit counter at the bottom of the OARC home page. Doing so will log your visit into the OARC website visitor log database and increase the visit counter by one, therefore increasing our membership enrollment. <u>NOT</u>!

PS: OARC current membership is at 175 wonderful members.

73, Val Campbell K7HCP

Mysterious packets of data on the repeater in April

Scott Willis KD7EKO

So around April 1st, many of us who listen to the 448.600 repeater started to hear a mysterious packet of data being sent across the 448.600 repeater for about 2 weeks, then the packets of data were being sent across the 448.575 repeater for about a week after that. This packet of data sounded a lot like APRS to myself and others, however every time I tried to decode the packet of data, I wasn't able to get any information out of the data burst. Some other HAMs in the area noticed the same thing, no data could be decoded. I tried for days, along with a few other HAMs in the area that were assisting and trying to decode the data also but none of us were able to decode any data from the short bursts. The short bursts were at random times for short periods, sometimes longer periods of time on some days. It was difficult to stop what I was doing when I heard the data burst start and then go set up equipment to start trying to decode it and I'm sure it was for the other guys also, I mean if we didn't have busy lives we could have found it earlier for sure. So anyway, the reason the bursts were difficult to decode is because if you tried to decode the bursts through the repeater, you would only get a portion of the data being transmitted because of the delay of the repeater, it would crop out the first half of the data burst, so the data had to be decoded on the input of the repeater instead so we could get the entire data burst. So in listening to 443.575 (input of 448.575) during the last week of these data bursts on the repeaters, we first noticed that Phil (W7RSS) at 22nd and Polk, and myself (KD7EKO) at about 2nd and Monroe, and Rick (W7RIK) in Riverdale none of us could hear the APRS transmitting radio via simplex (443.575) which meant that the signal was quite distant, we suspected Davis county, and probably eastern Davis county because most of us can hear western Davis county via simplex. Gil (NG7IL) was assisting finding the transmitter also, and with Gil's QTH being in Syracuse, he had the best opportunity to hear the transmitter if it was truly in Eastern Davis County as I suspected. Gil took the time to set up his computer/TNC/Radio to capture a log of APRS packets that he would receive in future transmissions and his radio was set to receive on 443.575. Gil went to work on Monday April 19, and his computer/TNC/Radio was set to log any APRS packets while he was at work. At 7:46 am Monday morning, the packets of data started being sent out on the 448.575 repeater once again. I immediately turned on my FTM-400 (and turned on the APRS) in my house attached to a Diamond X700 antenna (24' tall) on a 10' mast on my roof for my best opportunity to "hear" the simplex packets coming from a place difficult for me to receive at my location. I heard the packet bursts every 10 minutes on 448.575 on a different radio, but wasn't hearing much on my FTM-400 on 443.575 so I turned the squelch all the way down (off) and turned down the volume and a few more packet bursts later (they were being sent out every 10 minutes) I finally decoded a packet. Yesssss!!!! We've been trying to figure this out for 3 weeks! Excited we finally got it! If I hadn't turned the squelch all the way down, I'd have not been able to decode the packet due to the fact that his signal was only reaching my station at S2 signal strength. The information that displayed on my FTM-400 radio display, showed the HAM operator's call sign, his exact position, showed he was traveling 6 mph, and it also showed that he was using an FTM-400 radio. The FTM-400 radio is exactly what Rick and I suspected already because we've had one other identical incident happen with another HAM with the same radio for the same reason about a year earlier and I'll address that later. I started calling this HAM operator's call sign over the 448.575 (he should have heard it because his radio was definitely on that frequency) but he never did respond. W7RIK heard me calling for this call sign and he had a feeling I had finally decoded a packet of APRS data, and he was right. I texted Rick a screen shot of my FTM-400 display with all of the transmitter's information (Call sign etc.) and Rick looked it up and asked me if he should drive to this HAM's house and politely train the individual on how to properly transmit APRS on 144.390 like it should be, and I said "absolutely, yes please and thank you Rick". So Rick immediately drove to visit with this HAM operator in Centerville and the visit turned out very good and the HAM operator was very thankful for Rick's generous lessons on using the radio properly. This guy had just purchased the radio a few weeks earlier and had a friend of his program it for him and he had no idea it was not set up properly for APRS.

Continued...

One more thing on this, Gil was at work Monday but when he got off work, he sent me a screen shot of his computer log that was running from home while he was at work and he definitely captured the call sign of the station during the time that Gil was at work, his computer/TNC/Radio system he had set up had captured exactly what we needed, so if I hadn't decoded the data on this day, Gil already had it in his log and he was decoding the transmitter's data while at work so either way, Gil and I had both decoded the info at the same time.

So a little bit more info for those who might be interested in the details: The HAM operator's QTH was indeed all the way EAST in Centerville, which is why W7RSS, W7RIK and myself couldn't decode any information out of his packets because we couldn't hear his transmissions at all via simplex due to our location, however the 448.575 repeater was hearing his transmissions just fine, and the 448.600 repeater was hearing his APRS transmissions perfectly also in the first 2 weeks of these transmissions. On Monday the 19th, when I started hearing the transmissions on 448.575 and I immediately started listening on 443.575, I couldn't hear his packets but the operator was leaving his QTH and driving west, but when he pulled into the Taco Bell parking lot in Centerville which is near I-15, he was at that point far enough west that I was able to decode his packet while he was in the Taco Bell parking lot. How did I know it was that parking lot? I took his LAT/LON from my FTM400 display, entered it into Google Earth, and of course all I could see is a building in Centerville, but if you click on the "street view" icon on Google earth it takes you right down the street level view and bingo, Taco Bell. When W7RIK talked to the nice gentleman in Centerville at his QTH, Rick mentioned to this Centerville HAM that he had earlier in the morning gone to Taco Bell for breakfast, and the HAM confirmed that he indeed had gone to Taco Bell earlier but he was a little perplexed by how Rick had known that information, and of course Rick mentioned that APRS reports your position, so there ya go... I think it finally clicked with him and he figured it out eventually.

This experience had some fun learning/teaching elements to it, and for that reason I was asked to write about some of these techniques and details so we can all learn from it when our club members read about it in the newsletter. Phil, Rick, Gil and myself were all quite excited with the "challenge" to find this transmitter, along with a few others that were also trying to zero in on the signal, like Mike KZ70, he was also working on figuring it out over the few weeks it was going on and I know Mike would have for sure been able to decode the data bursts also, it's just sometimes difficult for some of us to drop everything and dedicate time to this issue for the short durations that it was going on each day. A few of these teaching items for our club members are:

The fact that we had to switch to simplex to decode the data because of the delay in the repeater cut out half of the data burst which prevented decoding the information.

Knowing the mountainous terrain that we live in and how to get a "feel" for where the signal could really be coming from, for instance in this case I suspected east Davis county because of the S1 to S2 signal strength at my place and Phil's place and Rick's place, yet Gill had the signal at S3 to S5 and Little Mtn. heard the signal just fine. Just thinking about it for a while and knowing our mountainous terrain, you can slowly figure out where the signal is coming from, kind of like a human RDF (radio direction finder)

Also knowing that if you have CTCSS enabled on a memory channel (448.575) and you hit REVERSE to listen for the signal, that the CTCSS is still enabled on the reverse and could possibly be causing another millisecond of delay due to the delay of the tone decoder, so I turned my radio to VFO and dialed in 443.575 to remove that delay also.

And another teaching element in this incident is this... On the FTM400 Yaesu radio, the A band on the top is for analog FM and also for C4FM (digital), but the B band on the bottom of the radio is analog only, no C4FM digital on the B band, HOWEVER, the radio transmits APRS only on the B band on the bottom side of the radio so if your APRS modem is turned on, you have to make sure that the frequency on the B band of the radio is set at 144.390 MHz. This is exactly what was going on with this incident in Centerville being broadcast over the 448.600 and 448.575 repeaters AND the previous incident with a different HAM about a year ago also, in both incidents they had a repeater frequency on the B band of the FTM400 while having the APRS modem turned on (and beacon turned on).

A lot of us have a lot of fun on FOX HUNTS that the club sponsors, and we encourage all members to learn a little bit about how transmitter hunting works and how RF propagates around mountainous terrain or around buildings or obstructions because we never know when we might need all of us to get together and figure out where a transmitter or RF interference is being transmitted from or located. The joint effort on this incident worked out very well and most of us HAM's love a challenge like this, those of us who participated in this specific challenge are "almost" excited for the next one, and practicing your own transmitter hunting makes our OARC group even more "ready" for any future incident.

CLUB NEWS

Another repeater tip from KD7EKO

Scott KD7EKO

Some of our repeater users may have noticed that the 448.600 repeater will sometimes cut out for a few seconds during the repeater's "CW-ID". All of the Yaesu System Fusion repeaters will do this, but we've only noticed the 448.600 doing it lately because of its increase in use or popularity over the last year or two. I believe that the 448.600 could possibly be the most used repeater on the Wasatch front, so this minor issue shows itself occasionally because of that usage especially during nets.

If you haven't noticed yet, the only time this happens is when the repeater "initializes" the transmission, rather than any HAM operator initializing the transmission. You may have noticed that if someone is actively talking on the repeater and the repeater needs to ID because it's been 10 minutes since last ID, then you will hear the CW-ID during the same time as the person's voice and there's no interruption or cut-out of the repeater, and that's because the HAM that was presently talking "initialized" the transmission, not the repeater's ID process. So if you hear the repeater "start to ID", please wait until the repeater is finished with the CW-ID until you press your PTT button, that way there will be no cut-out for a few seconds.

Just keep that in mind that if the repeater "initializes" the transmission for a CW-ID, don't press your PTT until it finishes, or you will be cut off for a few seconds. The Ogden Amateur Radio Club is such a fantastic group of people, which is why the club membership keeps growing, it's exciting for me and many others in our group to see the growth, and it is exciting to be an integral part of our team. If you have any questions along these lines, please call out for me.

Thanks,

Scott Willis KD7EKO

CLUB NEWS

Spencer Mark AE7IO

I was first introduced to Amateur Radio when I was about five years of age. My best friend, Garth Hobmen, lived right across the street from my house. In his backyard were some wires strung from the house to a couple of tall poles in the back yard. In his basement, was a very large console. It stood about five feet tall and 2 feet wide and 3 feet deep. Garth told me we were not allowed to touch it. I was very interested in the headphones on the desk. They reminded me of the head-phones pilots wore in the movies.

I did not quite understand that it was a Ham radio and dipole nor did I know he used it to contact people around the world.

My father was Lieutenant in the Naval Reserve. We used to go to the stone frigate every weekday in the summer while growing up to use the outdoor swimming pool. We would have to use the restrooms on occasion and since it was a reserve ship it was only manned one night a week. That made it very easy to walk the passage ways and peek in some of the rooms. The communications room was always locked but had a slot in the Dutch door to pass paper message forms back and forth. It was large enough to get a pretty good look around the room. There was another one of those big radios racks like my neighbor had. There were a couple of them and a few other electronic boxes. They fascinated me. I wanted to know more about them.

When I was about 15 or 16 years of age and in Scouts, I was given the opportunity to go see some ones Ham Shack. It was in a room in his basement. It was at night and in the winter time so we did not get to look at his antennas but we got to try to get on the air. We tried calling CQ many times on several frequencies but got no response. The operator excused himself for a few minutes while he ran upstairs and we continued to call CQ. When he came back, he had us tune to a different frequency. All of a sudden, we were able to make contact. I don't remember where the other Ham was but, I figured that it was kind of a fun thing to do, even if this contact required a quick phone call from one Ham to another to make it happen.

A few years later, I decided I wanted to serve my country and join the Naval Reserves. It was a fun way to earn some money while going to school and gave me a summer job where I could play sailor one evening a week for half a day's pay. In the summer time, instead of doing 2 weeks of training, I could do several months of training and get paid to do it. I found that I could not be a Radioman because that was not available to reserves so I had to be a Signalman. I would still learn Morse code but for flashing light instead of by ear. I would use HT's and send signals by flags and code and decode ciphers. I learned well and could read Morse code at 10 to 12 words per minute which was very fast.

As time went by, my education got in the way of life. I got married and raised four kids and I still had not become a Ham operator. Eventually about 45 years passed since my neighbor had introduced me to the big radios. I got interested in emergency preparedness. I was talking to someone in my neighborhood who told me how he had gotten his Ham radio license so he could communicate if there was an emergency and phone systems and the internet were down. We talked and he told me how easy it was to get a license since it no longer required Morse code. I decided to pursue it. In September of 2009 I found a class taught by Mike Groves KD7MG, but only got to the first one. I had bought the Gordon West book he recommended, read it and studied and was able to pass my technician test on the first try. I bought the General book and studied and a month later upgraded to General almost before my Technician License came in the mail. It took me another year of study to upgrade to my Extra ticket.

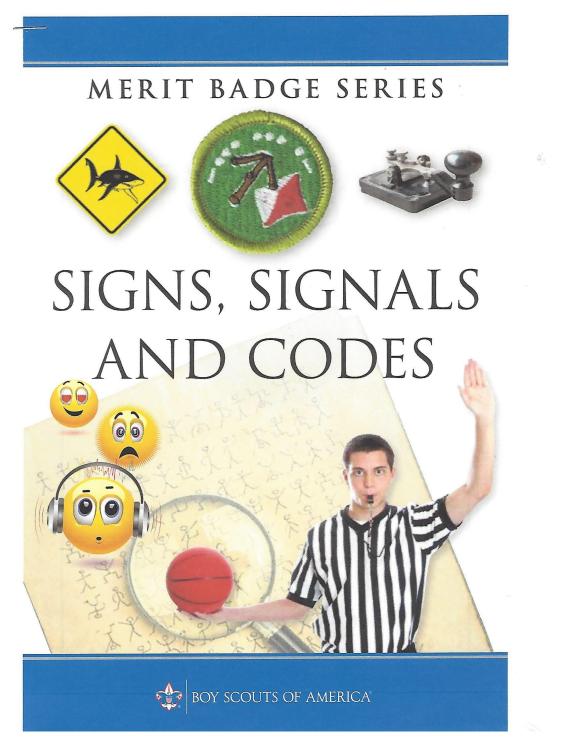
I have planted a 45' tower with a Yagi that bothers some of my neighbors. I am trying to get my Morse code skills up enough to feel comfortable to be on the air using CW, the old-fashioned way and making contacts all over the world. I am still trying to learn how to be a Ham operator.

Spencer Mark AE7IO

CLUB NEWS

Attention Scouting Merit Badge Counselors

There is a new merit badge in Scouting. It is called Signs, Signals and Codes.



Having been a merit badge counselor for Signaling many years ago, I took an interest in this new badge which included some of the original requirements such as sending and receiving Morse code via sound or visual with semaphore flags. It has been discontinued since the 1990s.

The new merit badge also includes requirements for Braille, American Sign Language, Emoticons and other visual signage such as referees hand signals. Interesting.

Normally, counselors would be proficient in all the requirements, but in this case, it would be unusual, since learning Braille and deaf signing would be specialized. The idea is to have the Scouts reach out, via recommendations from the counselor, to talk to others who might be proficient in those subjects. This would certainly broaden the Scout's experience and range of knowledge.

If any are interested in becoming a merit badge counselor, please Google it online or ask at the Scout Office. Personally, I am not registered as a full-time scouter, but did register as a merit badge counselor (no fee). One must have taken the online training for Youth Protection and Leader Specific Orientation courses.

TNX

Kent Gardner, WA7AHY

CLUB NEWS

TV Antenna vs. Scanner Antenna

This story is about radio scanners. My SportCat scanner is shown below. The display is showing the Hill Air Force Base aviation control tower frequency of 127.150 MHz.

I like to monitor the air traffic chatter a lot. For a number of years, I have kept my scanner in my bedroom where it was connected to an outside scanner antenna as shown in the second picture below. It is the ground plane on the right. The yagi antenna with lots of director elements is for "over-the-air" free TV signals from the Salt Lake Area. The scanner antenna has done quite well. I only use the original rubber ducky antenna when I go outside or am in the car.

I am spending a lot of time lately though, in my office and missed the air traffic communications. I tried the rubber ducky antenna, but it didn't receive well enough in the middle of the house to pull in the tower radio signals.



I already had two RG-6 TV cables run through the attic and into the office for my cable internet connection and for the TV so there were no extra/spare cables to patch in the scanner antenna. At my age, I didn't want to crawl up in the attic and pull in another piece of RG-6 coax.

Then, it hit me, why not see if the TV antenna cable could be split. One side for the TV and the other side for my scanner. It was like a miracle, both worked very well. Even though the antenna's elements are cut shorter for the Ultra High Frequency (UHF) TV channels they still worked surprisingly well in the Very High Frequency (VHF) band. It helped that the antenna was pointed exactly past the Hill Air Force Base tower to the TV station transmitter sites in the Oquirrh mountains West of Salt Lake. I am now receiving the air traffic signals with no noise and in full-strength.



Additional notes: When I got tired of paying for satellite tv, I experimented with "over-the-air" TV antennas. I paid \$140.00 for a quad bow-tie reflector antenna from Best Buy, but it didn't work as well as I had hoped for. I saw a neighbor's antenna that looked promising so I asked him about it. I ended up paying \$50.00 for the yagi antenna off the internet from Minnesota. It works 99 percent of the time. It sometimes "pixelates" some of the channel pictures when there are rain or snow clouds between here and Salt Lake. In some cases, I can switch to a back-up reflector antenna in the attic until the storm clouds clear.

Also, the speaker that is shown in the first picture is of the blue-tooth variety even though I have it connected directly with a standard audio cable. It has a little too much bass to suit me. I am experimenting with other speakers such as those normally used with standard two-way radios.

TNX

Kent Gardner, WA7AHY

HOBBY NEWS

Presented to

Ogden Amateur Radio Club (OARC)

at the 17 April 2021 (in-person) meeting

from

ARRL Rocky Mountain Division,

Utah Section manager,

Mel Parks - NM7P



HOBBY NEWS

This posting is from the ARRL Rocky Mountain Division,

Utah Section, Webpage (Mel Parks - NM7P)

Ogden Amateur Radio Club Marks its Centennial

03/22/2021 The Ogden Amateur Radio Club (OARC) in Utah is celebrating its 100th anniversary as an organized club. In May of 1921, Dr. W.G. Garner, W7EW, and five others gathered to establish the club, and Garner was elected president. OARC now uses the last call sign he held, W7SU, as an in-memoriam club station call sign. OARC has been an ARRL-affiliated club since 1937. Its current president is Dave Mamanakis, KD7GR, while Gil Leonard, NG7IL, heads the Centennial Committee. The observance will include a special event station in May to mark the driving of the last spike railroad commemoration at Promontory Point, Utah, and other activities around Ogden.

05/15/2021 | Ogden Amateur Radio Club Centennial Celebration Special Event Station W7SU/100 May 15-May 23, 1500Z-2300Z, W7SU/100, Ogden, UT. Ogden Amateur Radio Club (OARC) - W7SU. 14.255 7.235 7.074 7.040. QSL. Ogden Amateur Radio Club -W7SU/100, P.O. Box 3353, Ogden, UT 84409. Ogden Amateur Radio Club Centennial Celebration Special Event Station W7SU/100 celebrating 100 years. Founded May 1921, ARRL affiliated January 1937. QRZ.com (W7SU/100/) or ogdenarc.org/100 In addition we have the following websites setup to support this special event. <u>http://ogdenarc.org/100</u> And at QRZ.com check out ... the call sign W7SU/100 <u>http://qrz.com/db/w7su/100</u>

Golden Spike Special Event - W7G

SPECIAL EVENT

05/07/2021 May 7 - May 10, 1500Z-2300Z, W7G, Corinne, UT. Ogden Amateur Radio Club (OARC) - W7SU. 1500Z-2300Z. 14.255 7.235 14.040 7.040. QSL: Ogden Amateur Radio Club (OARC) - W7SU, P.O. Box 3353, Ogden, UT 84409. Golden Spike Celebration Commemorating the Anniversary of the 1869 Driving of the Golden Spike, completing the Transcontinental Railroad at Promontory Summit, Utah. Golden Spike National Historical Park - National Parks Service 6200 North 22300 West, Promontory Summit, UT 84307. <u>http://ogdenarc.org http://w7g.org</u>

OARC CENTENNIAL ARRL NEWS RELEASE

Utah Amateur Radio Club Marks its Centennial



03/22/2021

The Ogden Amateur Radio Club (OARC) in Utah is celebrating its 100th anniversary as an organized club. In May of 1921, Dr. W.G. Garner, W7EW, and five others gathered to establish the club, and Garner was elected president. OARC now uses the last call sign he held, W7SU, as an in-memoriam club station call sign. OARC has been an ARRL-affiliated club since 1937. Its current president is Dave Mamanakis, KD7GR, while Gil Leonard, NG7IL, heads the Centennial Committee.

The observance will include a special event station in May to mark the driving of the last spike railroad commemoration at Promontory Point, Utah, and other activities around Ogden. —

Thanks to OARC Historian Kent Gardner, WA7AHY

As published on ARRL.org website home page – 25 March 2021

OARC CENTENNIAL LOCAL NEWS MEDIA RELEASE



The Ogden Amateur Radio Club is celebrating the 100th year anniversary since its founding in May of 1921.

A small group of radio amateurs, led by W. Glen Garner, called all the known amateurs in the Ogden area together for the purpose of forming an active radio club to promote the exchanging of ideas and discussing progress and recent developments in the field of amateur radio communications.

Glen Garner is quoted in the club history:

"I personally contacted all the prospective members I knew in the Ogden area. The meeting was called for a Saturday afternoon, about the middle of May 1921.

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 the "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".

Those attending were: W. Glen Garner Glen Quillinan Ralph Flygare Gene "Chickey" Crawshaw George W. Cook Howard D. Harris

The Ogden Amateur Radio Club became affiliated with the Amateur Radio Relay League in 1937 which is the national association founded in 1914. Over the years the club has shown increasing growth. Amateur radio was directly involved in providing many trained technicians and radio operators during and after World War II. An increasing interest in emergency communications since the 911 attacks, has greatly bolstered the ranks. New digital technologies have done the same.

Contact Information:Kent Gardner, WA7AHY4515 Jefferson Avenue, South Ogden, Utah 84403Club Historian801 391-6341Gil Leonard, NG7ILChairman Centennial CommitteeDave Mamanakis, KD7GRClub Presidentkd7gr@arrl.net

FUTURE CENTENNIAL 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 <u>continues</u> with a series of special articles and stories about our history authored by our club historian

Kent Gardner WA7AHY. Stay tuned for upcoming features.

Update: This newsletter issue, the fifth this year in the centennial series, will not contain a special historical article as originally planned. Instead a special edition of WATTS NEWS will be released in mid-May to celebrate OARC Centennial History.

FEATURE ARTICLE

by Eugene Morgan WB7RLX



Extra Class Training System

By Eugene Morgan (WB7RLX)

I have been considering for some time trying for my Extra Class ticket. So when I heard the club was sponsoring an Extra Class online training I decided that now might be the time. The first thing I did was order the "ARRL Extra Class License Manual", aka: the Big Green Book. Throughout this article I will refer to it as the "Big Green Book." In addition I arranged to borrow the companion book, the "ARRL Extra Q&A" book, aka: the Little Green Book. I found both to be very good but also very different.

The big green book presented each sub element in an extensive deep dive into each topic associated with each element of the modules. It was clear the goal was to help the reader develop good understanding of the concepts behind each question. It's was clear that the Big Green Book was about communicating and teaching the concepts, not about memorizing answers. Consequently the answers to the questions are somewhat scatters about in each chapter and in some cases across multiple chapters.

The Little Green Book on the other hand went question by question, in sequential order and provided more of an abstract of the concepts for each question. I found both books helpful, complementary to each other, and necessary. However I did find in a few rare instances where the text in both books was lacking and in some cases Wikipedia had a better explanation and other cases the ARRL Antenna Handbook had the better explanation.

Then after attending a few classes I found that yet another book provided a different approach altogether and included some fun and interesting hints and methods for remembering some of the answers. That book is by Craig Buck and is titled, *"Pass Your Amateur Radio Extra Class Test – The Easy Way."*

Can I say one was better than other, no. It would depend on your learning style. And having to pick just one would not be fair to the other two, all three were very good and I'm sure almost anyone using any one of the three books would do fine when it came time for the test.

Of course the next consideration was all of the various online resources. Some are free, some require a subscription. I looked briefly an a couple but decided that I would write my own. Why you might ask when there is some much available online, a good question.

If any of you have been to my QRZ site you will find that I have written a lot of the software I use. The key reason for that is to keep my brain from turning to mush. In my job before retiring I use to write a lot of utilities that made my job easier and that allowed my project and program managers to be more effective at managing their various projects. I found that writing programs as well as building some fairly sophisticated Microsoft Excel tools was in some sort of twisted way, a form of relaxation for me, the way crossword and Sudoku puzzles are for some people. After several months of retirement it was clear I was starting to get soft in the brain. The other reason for writing my own program is I wanted to capture all of the good tips and tricks for studying and passing the Extra Exam. I found that they were not all included in one book or on one web site. I found that there was good information scattered across the web and in many books and not just those specific to passing the Extra Class test.

The Feature Set

I knew the programming would be fairly easy and that the real work would be in developing what I call the hints file or better yet the hints database. Following what in the software business we call the *Functional Requirements*, or as I like to say, the feature set. Unlike other programs I have written in the past where I made it up as I went, this time I had a very specific set of goals before

writing a single line of code. However I will admit to adding a couple of features toward the end of development cycle based on feedback obtained during several Zoom sessions.

The Extra Class Training System Feature Set:

- Give the user the ability to select a specific sub element to focus on. Why waste time on modules already mastered?
- Allow the user to go through the sub element questions in sequential order or in random order.
- If the user selected sequential they could also specify which question they want to start with. The thinking behind this was to make the program more useful in a multi student teaching environment such as our weekly zoom sessions.
- The answers were to be presented in a random order. This would require the user to know the correct answer not just that it's just always A,B,C or D.
- Provide immediate feedback if the user missed a question during a drill. Upon missing a questions the question would be put back into the question pool. This would require the user to ultimately answer the missed question correctly before ending the module.
- Provide the user a way to see the answer, I call this the "Peek" feature. It displays the correct answer A,B,C, or D but provides no explanation. I also wanted to be able to toggle this feature on or off at the press of the space bar or a mouse click.
- Allow the user to ask for a hint. The hint would provide an explanation of the concept and provide the correct answer and if available a memory trigger or a simple way of remembering the answer.
- Give the user the ability to edit the hints database so they can add their own hints and memory triggers.
- Provides the user the ability to take a simulated practice test that looks and behaves exactly the way the real test works with one exception.
- The one exception is the way the "*Review*" function works. Like the real test when the user selects "*Review*" the program displays a list of the question numbers and the users answer for each of the questions. It also shows which questions have not been answered. My program takes this one step further, it actually shows you what questions you have missed and your current score based on the questions that have been answered.
- The program must be able to display accompanying graphics given that some of the test questions are specific to certain graphics. This feature is also available in the practice test as well as in the sub element drills.

The Program

Now that we have looked at the programs feature set let's take a quick look at the program. Figure 1 shows the main menu. From this menu you can pick which sub element you wish to drill on or you can select to take a practice test. You can use your mouse or the keyboard to select what you want to do. You exit the program by clicking on the '**X**' in the top right corner of the screen, as is customary for all Windows programs.

If you choose to do a sub element module you will be asked if you want the questions presented in a random order or in a sequential order. If you select [**R**] andom you will go immediately into the drill. Questions will be presented in a random order until you have answered all questions correctly or until you select [**S**top Drill]. Note that missed questions will be put back into the rotation and will be presented again randomly during the drill.

If you selected to have the questions presented sequentially you will be asked which question you want to start with, in most cases this will be question one. This feature was added after a couple of Zoom sessions. It was clear that presenting the questions in

order was necessary so attendees could follow along more easily if they were running their own copy of the Extra Class Training System during the training class or using one of the many study guides.

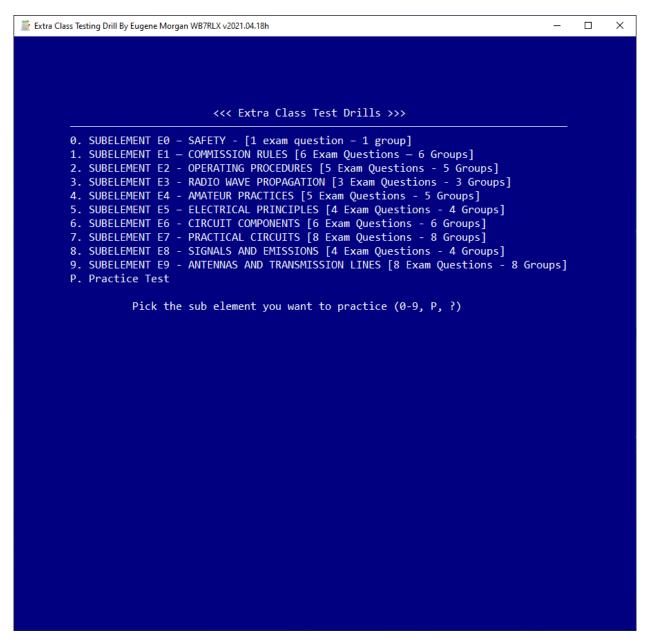


Figure 1: The Main Menu

Peek Feature: During a sub element session you can toggle the peek feature on or off by either tapping the **Space Bar** or clicking "Peek On" to turn the peek feature on, or click on "Peek Off" to turn the peek feature off. With the peek feature enabled the answer will appear to the left of the question ID in the top left portion of the screen. In Figure 2 note the letter "C" next to the question ID,

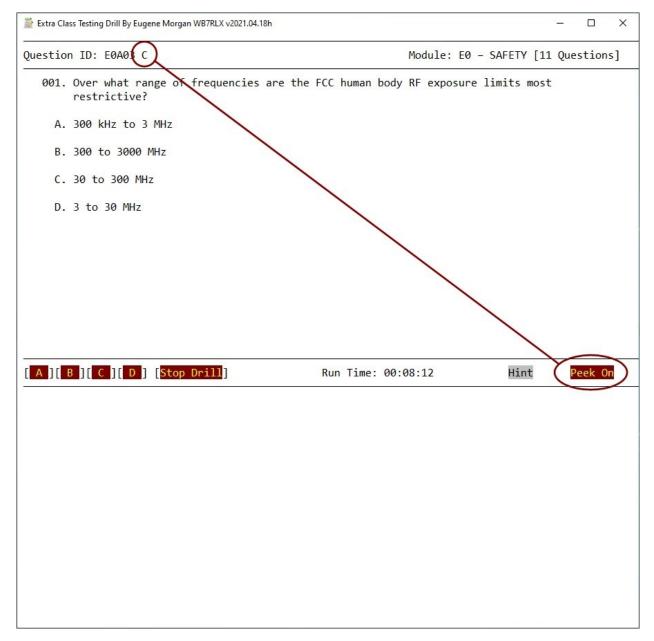


Figure 2: Sub element Drill - Peek On

Hint Feature: During the drill if you find you need some help with a question you can ask for a hint by clicking on "Hint" or pressing the "**H**" key. Refer to Figure 3. For this particular question not only is an explanation given but also a clever hint, "*Very high Fry-ability*."

📝 Extra Class Testing Drill By Eugene Morgan WB7RLX v2021.04.18h				-		×
Question ID: E0A03 C		Module: E0 - S	SAFETY [11	Ques	stion	5]
001. Over what range of frequencies are restrictive?	the FCC human body	RF exposure l:	imits most			
A. 300 kHz to 3 MHz						
B. 300 to 3000 MHz						
C. 30 to 300 MHz						
D. 3 to 30 MHz						
[A][B][C][D] [Stop Drill]	Run Time: 00:	22:38	Hint	Pe	eek Or	n
The Correct Answer is: C						
[See page 11-4] As the graph of Maximum Perr levels are from 30 to 300 MHz, rising sligh more readily absorbed by the body, particul of comparable size to the wavelength. The re exposure limits are the most restrictive are Very High Fry-ability.	tly above 300 MHz. arly when the body ange of frequencie	Shorter wavel part, such as s over which tl	ength RF en an arm or ne FCC huma	nergy head an bo	/ is d, is ody	

Figure 3: Sub Element Drill showing the hint.

Practice Test: The other feature of the program is the practice test. Refer to Figure 4. The practice test has been designed to act and feel the same as the real test. Questions are selected at random from each sub element, with one question coming from each sub group. The questions are presented in random order and the answers are also presented in a random order. In short no two tests should ever be alike. Refer to Figure 4.

And like the real test you can skip a question and go back to a question at any time. However the review feature behaves a little differently than the real test.

7	Extra Class	Testing	Drill By	Eugene	Morgan	WB7RLX	v2021.04.1	8h
---	-------------	---------	----------	--------	--------	--------	------------	----

		_
1.	hich of the following represents an inductive reactance in polar coordinates?	
	. A negative magnitude	
	. A negative phase angle	
	. A positive magnitude	
	. A positive phase angle	
[A	[B][C][D] Next Prev Review Stop Exam	

×

_

Figure 4: The Practice Test

The Practice Test, the Review Feature: Please refer now to Figure 5. Given this system was intended to be a training tool it was necessary that it provide some level of feedback. To that end the review feature works a little differently than the real test. To begin you can toggle the review feature on or off. You can leave it on during the test so as to show you every time you miss or correctly answer a question. Or you can toggle it off and only review your status when you feel it beneficial to do so. Simply toggle it on or off by clicking on the review button or pressing "R".

The Review feature will show you the questions you have missed in red and show you your score based on the questions that you have answered, see Figure 5. In referring to Figure 5 I have clearly not done very well on this practice test, I answered 40 questions and only got 10 correct for a failing score of 25% on the questions that I actually answered. Questions that were not answered are blank so before ending the test one should go back to the unanswered questions and complete them. In the real test, missed questions are not deducted from the total of 50 questions. Your actual score in the real test is based in the number of correct answers out of a possible 50 questions. A skipped question is the same as an incorrect answer in the real test.

Finally you can of course end the test at any time by selecting Stop Exam. Note also that when you have answered all 50 questions the program will inform you and then let you decided if you want to review and possibly change some of you answers or revisit any questions you might have skipped over or simply stop the test and get your final score.

46. What is resonance inA. The lowest frequence		RLC circuit	t?			
	v that wi					
		ll nass cui	rrent			
D. The bighted for a second	-					
B. The highest frequen	icy that wi	ill pass cu	urrent			
C. The frequency at wh	ich the re	eactive imp	pedance eq	uals the re	sistive impedance	
D. The frequency at wh	ich the ca	anacitive	reactance (equals the	inductive reactance	
D. The frequency at wh	iittii tile ta	apacitive		equals the	inductive reactance	
A][B][C][D] Nex	t Prev	I	Review	Stop Exa	ım	
Correct Answers: 10	01. D	11. D	21. B	31. A	41. C	
ncorrect Answers: 30	02. C	12. C	22. A	32. B	42. B	
Your Score: 25 %	03. B	13. B	23.	33. D	43. A	
Test Status: Fail	04. A	14. A 15. B	24. D	34.	44. B	
	05. A 06. B	15. В 16. С	25. C 26. D	35. C 36. B	45. C 46.	
	07. C	10. C 17. C	20. D 27. C	37. C	40.	
	08. D	18.	28.	38.	47. 48.	
	09. C	19. D	29. B	39. D	49.	
	10. D	20. C	30. A	40. D	50.	
	10. 0	20. 0	50. A			

Figure 5: The Practice Test - The Review Feature

Overall the program is pretty simple to operate, the goal after all, was to study and get ready for your exam and not waste a minute figuring out how to use the program.

Customizing the Hint's Database

One of what I think is one of the most important features of the program is the ability to add your own hints and graphics to the hints database. Although the program comes with a fairly robust set of hints and graphics you can also add your own or add your own embellishment to the existing hints. This section will explain how to include your own hints and graphics.

To begin the hints database is nothing more than a text file which means it can be edited using a common text editor such as Windows Notepad or a more feature rich text editor such as Notepad++. You should not use a program like Microsoft Word, however if you do, make sure you save the file as a DOS text file.

You will find the *hints.txt* file in the directory where you installed the program. Let's begin by opening the file and examining a typical line. The each line has a fairly specific format:

Hint ID: [Page Reference] followed by that hint text, refer to Figure 6. The hint ID is the question reference number used in the Big Green Book. The Hint ID format is 'E' for Extra, the Sub element number, followed by the sub element group ID, and finally the question number in the group, example the Question ID for E1A01 would be specific to a question from the Extra Class question pool, from sub element 1 on Commission Rules, and from group A which is about Operating Standards in regard to frequency privileges and specifically question 1 about legal carrier frequencies. See page 13-4 in the Big Green Book. Note that the page reference included in the provided hints database is specific to the Big Green Book. You can however include not only the page reference between the brackets but a book reference as well, example: [ARRL Antenna Handbook, 24th Edition, page 21-4]

A hint cannot be on more than one line and cannot be more than 1425 characters in total length. You do not need to put a blank line between hints. In the example below the blank lines were added only to make the file more readable. If there is a graphic associated with the hint the reference will be placed at the very end of the line and will be in the form of: *Figure E1A01.bmp* In this example the actual graphic is named E1A01.bmp and is located in the "*Figures*" sub folder under the main installation folder. All graphic files must be in a bit map format, aka: a .bmp file.

As long as you follow the prescribe format you can add as many hints as you like. However, only one hint per question. You are also welcome to edit the hints file and add whatever hints you have found useful. I also encourage you to send any hints you might want added to me for inclusion in future updates to the hints database.

Hints.txt - Notepad				_		×
<u>F</u> ile <u>E</u> dit F <u>o</u> rmat <u>V</u> iew <u>H</u> elp						
E0A01: [See page 11-8] The earth connection is primarily to stabilize power syst	tem voltage during lightnir	ig strikes	. All earth connectio	ons in a	a home a	and ^
E0A02: [See page 11-5] Because you do not control when your neighbor may b	e at home, the exposure	is consid	lered uncontrolled.	When p	performi	ng
E0A03: [See page 11-4] As the graph of Maximum Permissible Exposure (MPE	shows, the lowest allowa	ble leve	ls are from 30 to 300	MHz,	rising s	ligh
E0A04: [See page 11-7] In multi-transmitter sites, such as hilltop facilities where t	here may be commercial	facilities	along with amateur r	epeate	ers, prec	sis€
E0A05: [See page 11-7] Because the wavelength of microwaves is a few centim	eters or less, it is relative	y straigh	tforward to construct	anteni	nas with	ga
E0A06: [See page 11-3] In the far field of antennas, exposure from the E and H f	ields can be combined in	to a com	posite power densit	y. Nea	ir the ant	eni
E0A07: [See page 11-2] Since carbon monoxide (CO) is odorless and colorless	, the only way to detect it	is with a	carbon monoxide d	etecto	r. Simila	r tc
E0A08: [See page 11-4] Specific Absorption Rate (SAR) measures the rate at w	nich energy from an electr	omagne	ic field is absorbed	by the	human	bo
E0A09: [See page 11-2] Beryllium oxide (BeO or beryllia) is a white ceramic ins	ulator that has the unusual	property	of also being an ex	cellen	t therma	loc
E0A10: [See page 11-2] Polychlorinbated biphenyls (PCBs) were once common	nly added to insulating oils	s to impr	ove their stability and	d insula	ating qua	aliti 🗸
<					_	>
	Ln 25, Col 493	100%	Windows (CRLF)	UTF-8	3	

Figure 6: The Hints.txt file

Installation

The program is pretty easy to install. To give you a thumbnail of the process, after downloading it from the OARC web site, unzip the file and run the setup utility and then modify the shortcut. The steps below will walk you through the process in a bit more

detail. If you have any issues please drop me a note and I will be happy to help you. Before beginning the installation the program let's make sure you have the right hardware and operating system.

Program Requirements:

Required: A computer running Windows. This program was developed using Windows 10 but there's no reason it shouldn't run under Windows 7 or even Windows XP.

Required: Disc space and memory requirements are minimal, just under 85 Mb of disk space. In terms of memory the program is fairly small, the memory foot print is around 4Mb and CPU utilization is under .5%. So in terms of computer resources the requirements are minimal.

Required: A desire to learn and the time necessary to practice.

Installation Instructions:

- ✓ Download the program from the OARC web site. It should be located in the down load area on the OARC web site see: http://ogdenarc.org/downloads.html. If a class is being offered a link will be provided on the OARC home page just under the link to the Zoom meeting invite. It can also be found under *Member downloads by Eugene Morgan*. After you have downloaded the file unzip it and run the ExtraSetup.exe. If you are reading this article make sure you also do the next two steps.
- The next step requires that we configure the *Extra Class Training System* window size. On your desktop you will find the "*Extra Test*" icon. *Right Click* on it and select *Properties*. In the properties window you will see a number of tabs, click on the *Layout* tab. In the middle of the Layout Tab window you will see a box labeled *Windows Size*. Set the *Width:* to 100 and the *Height:* to 43.
- ✓ While you have the shortcut open next select the [*Options*] tab. Uncheck the [*Quick Edit Mode*] option. Then click on the [*Ok*] button. At this point you can run the Extra Class Practice program.

Just In Case You See A Warning From Windows Defender or other Anti-Virus program: When executing or installing the program for the first time you may experience a warning from Microsoft Defender or your anti-virus software warning you about this program. Don't worry. In the case of Microsoft Defender just click on the "*More info*" link then click on the "*Run anyway*" link. This only occurs the very first time the program is launched and only on some computers. I take extreme precautions to make sure that none of my programs are infected and scan each before sending on to the clubs Web Master.

Acknowledgements: I would call out two of our peers that helped me during the development and beta testing. Justin Hall (KP7LAK) for feedback, the loan of the Craig Buck book complete with highlights and notations as well as beta testing the various versions. I would also like to thank Rick Morrison (W7RIK) for some help explaining what the real test looks like, beta testing and providing feedback. I also need to send a thank you to Pete Heisig (AI7GV) for loaning me his copy of the little green book, which was well mark and truly broke in as well. Pete also shared with me his memory of the test screens. I can't express my thanks and appreciation to these three enough. Their testing, their input, and their recall of the test itself was a big help in getting the program to its final state. A heartfelt thanks Guys!

Future Plans and Possible Updates: I will continue to refine and update the hints database over time and have arrange with the clubs Web master to post these updates in the future. I will also send out updates to the hints file for those who I know are using the program. Once I complete the Extra Class Training System I will also provide a version for the Tech class and the general class courses. I hope to have them ready for the next round of testing in the fall if not sooner.

In Closing: I know there are a lot of good resources out there in the form several books, many not mentioned here, as well as a host of web sites. Regardless, I hope you will find my program just as helpful if not more so. If you decided to use my program then please accept my sincere thanks.

If you have any questions or if you have some ideas about additional features or improvements give me a call. If you find any bugs please do contact me with the specifics. If you are interested in seeing the source code or doing a deep dive into the code drop by, I love talking about this stuff. Above all and most importantly to me, I hope you enjoy using my program.

73,

Gene

(WB7RLX)

Member Downloads by member Eugene Morgan WB7RLX	
Antenna Best Practices (pdf)	
Building An End Feed Antenna (pdf)	
An Antenna Autopsy (pdf)	
Mobile Antennas Presentation (pdf) NEW!	
Prefix Locator Windows (zip) NEW!	
FT8 Assistant Windows (zip) NEW!	
WAS Manager Windows (zip) NEW!	
Extra Class Study Guide Windows (zip) NEW!	<<<<< Download

stay tuned - more to come soon!

GUEST ARTICLE

by Dan KB6NU



FCC issues second warning against using radios to commit crimes



April 24, 2021 By Dan KB6NU

Earlier this week, the FCC issued a <u>second enforcement advisory</u> reminding amateur and personal radio service operators not to use radio equipment to commit or facilitate criminal acts. It states:

As we did in our January 17 advisory earlier this year, the Bureau reminds amateur licensees that they are prohibited from transmitting "communications intended to facilitate a criminal act" or "messages encoded for the purpose of obscuring their meaning." Likewise, individuals operating radios in the Personal Radio Services, a category that includes Citizens Band radios, Family Radio Service walkie-talkies, and General Mobile Radio Service, are prohibited from using those radios "in connection with any activity which is against Federal, State or local law." Individuals using radios in the Amateur or Personal Radio Services in this manner may be subject to severe penalties, including significant fines, seizure of the offending equipment, and, in some cases, criminal prosecution.

In a <u>recent blog post</u>, Jeff, KE9V, wrote, "There were rumors that amateur radio equipment may have been used to organize and coordinate communication among the rioters." To which, someone on Twitter replied, "Not rumors, fact. I live here. The rioters used 2m and possibly other bands to coordinate their insanity. I heard it myself. FCC is preemptively reminding people who apparently need reminding."

Another commenter linked to a <u>legal document</u> from one of the ongoing trials. On page 15, there's mention of how Baofengs were used for communications during the January 6, 2021 march on the Capitol. It did not say that amateur radio frequencies were used, but, of course, Baofengs can be programmed to operate on amateur radio frequencies.

I would say that since the FCC felt compelled to issue this warning again that amateur radio frequencies were definitely used during this incident, although I'm not sure that there is any evidence that licensed amateur radio operators were involved. Perhaps the warning is just pre-emptive or an attempt to get hams to more proactively police the frequencies, i.e. if repeater operators hear illegal activity on their repeater to turn the repeater off. Or, it could just be a warning that the FCC is listening.

GUEST ARTICLE

by Dan KB6NU



Are you ready for the new RF exposure evaluation regulations?

On Tuesday, April 27, Dan, W1DAN, ARRL Eastern Massachusetts Section Technical Coordinator, gave a Zoom presentation on the latest FCC regulations on RF exposure evaluation. These are spelled out in FCC-1926A1 (https://www.fcc.gov/document/fcc-maintains-current-rf-exposure-safety-standards), "Proposed Changes in the Commission's Rules Regarding Human Exposure to Radiofrequency Electromagnetic Fields; Reassessment of Federal Communications Commission Radiofrequency Exposure Limits and Policies." The document is as long as the title might suggest—159 pages—but W1DAN boiled it down, focusing on what these changes mean for radio amateurs.

A recording of the presentation can be viewed by going to https://drive.google.com/drive/folders/1_qIGZhHyMrha-axJt87Dcu0UZuJO0t8F.

After explaining how RF exposure can be harmful, Dan explained how the rules are changing: The biggest change, he notes, is that amateur radio's categorical exclusion has been eliminated. What this means is that now every radio amateur will have to perform an RF exposure evaluation of their stations. This now includes mobile and portable stations, including HTs, SOTA/POTA stations, and Field Day and special event stations.

He noted that you must be able to prove that your station is safe. This includes not only performing the evaluation, but also documenting these evaluations, should this data be requested by FCC personnel.

One thing that's not changing are the maximum permissible exposure (MPE) limits. These are spelled out in FCC OET Bulletin 65 (https://transition.fcc.gov/Bureaus/Engineering_Technology/Documents/bulletins/ oet65/oet65.pdf), "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields." The FCC published this document in August 1997, but it's still the Bible when it comes to RF exposure. If you don't have a copy, or have never taken a look at it, you really should do so.

Be careful, though, when reading it. It contains a table (Table 1 on p. 21) that contains a list of output powers at various frequencies. If your station exceeded those limits, then you were required to perform an RF evaluation. Now, however, all amateurs (and other radio services, for that matter) must perform RF exposure evaluations if their output power exceeds 1 mW. We are no longer categorically excluded from performing these evaluations.

OET Bulletin 65 goes on to give guidance on how to calculate or measure exposure levels. Explaining how to do this is outside the scope of this article, but again, you'll want to refer to the bulletin for more information.

Besides the elimination of the categorical exclusion for amateur radio stations, what else is new is the dates on which amateur radio stations must perform evaluations. They are:

May 3, 2021(!!) for new and modified stations May 3, 2023 for stations that complied under the old rules.

Having said all that, the ARRL's RF Exposure page (http://www.arrl.org/rf-exposure) has a lot of resources to help you understand this topic and perform your own RF exposure evaluations:

An RF-exposure FAQ (http://www.arrl.org/files/file/Technology/RFsafetyCommittee/RFXFAQ.pdf) to help hams understand the new rules.

"Learning to Live with RF Safety (http://www.arrl.org/files/file/protected/Group/Members/Technology/tis/ info/pdf/QST_Mar_2009_p70-71.pdf)," *QST* March 2009 pp. 70-71.

RF Safety at Field Day (http://www.arrl.org/files/file/Technology/tis/info/pdf/9906048.pdf) *QST*, June 1999, pp. 48-51. A case study of Field Day with NSRC in a public park

 $RF\ Exposure\ Station\ Evaluation\ and\ Exemption\ Worksheets\ (http://www.arrl.org/files/file/Technology/tis/info/pdf/rfex1_2.pdf)$

RF Exposure and You (http://www.arrl.org/files/file/Technology/RFsafetyCommittee/RF%20Exposure% 20and%20You.pdf). This 8 Mbyte PDF file contains the text of the entire book by Ed Hare, W1RFI.

Chapter 5 References (http://www.arrl.org/files/file/Technology/tis/info/pdf/RF%20Exposure%20Chapter% 205.pdf) needed for filling out worksheet.

There are also links to FCC web pages with information on RF exposure.

I'm sure we'll all be hearing more about this in the days ahead. Hopefully, someone will come out with a simple way to do the modeling or make the calculations. As always, play safe.

Dan Romanchik, KB6NU, is the author of the KB6NU amateur radio blog (KB6NU.Com), the "No Nonsense" amateur radio license study guides (https://KB6NU.Com/study-guides/), and often appears on the ICQPodcast (https://icqpodcast.com). When he's not RF exposure evaluations, he teaches online ham radio classes and operates CW on the low end of the HF bands.



TV Show Featuring Fictional Ham Sparks Crop of New Hams

11/13/2013

Fans of the ABC Television show "<u>Last Man Standing</u>" may be aware that its main character, "Mike Baxter" — played by Tim Allen — is supposed to be a radio amateur, KAØXTT. While it may come as no surprise that the sitcom's producer is a ham — John Amodeo, NN6JA — several radio amateurs also are on the production crew, and their number just increased, with help from the Greater Los Angeles Amateur Radio Group (<u>GLAARG</u>) VEC. The show's "Thanksgiving" episode, which airs Friday, November 22 (8 PM ET), will feature a scene with "Baxter" in his basement ham shack. Amodeo said that for the first time in the series, Baxter will briefly talk on the radio. In response, viewers will hear a pileup created by using the voices of hundreds of real hams, sent in to the production company.

In the scene, the Mike Baxter character appears with his grandson "Boyd," played by Flynn Morrison. The episode was shot in mid-October. According to Amodeo, Mike heads to his basement ham shack to escape a houseful of guests waiting for Thanksgiving dinner to be served. This episode of the show is only the second to include ham radio as a story element and the first in which Tim Allen's character is shown operating his ham station.

At an exam session on November 9, the "Last Man Standing" crew added eight new Technician class hams to its crew as well as its first General upgrade. GLAARG volunteer examiners Norm Goodkin, K6YXH; Naomi Goodkin, WB6OHW, and Rob Antonacci, AA6RA, administered the test session. Including the additional new hams, the show's behind-the-scenes crew complement now boasts 14 Technician, one General, and two Amateur Extra class operators.

In "Last Man Standing," Allen's character Mike, a pickup-driving sporting goods marketing manager, must spend more time in his female-dominated household after his wife gets a promotion at work. The couple's three daughters are not prepared for the shift to his stricter parenting style.





Cooperative Effort Under Way to Resolve Potential 70-Centimeter Interference Issue

03/23/2021

ARRL, the FCC, and the US Department of Defense are cooperating in an effort to eliminate the possibility of amateur radio interference on 70 centimeters to a future missile control system at White Sands Missile Range (<u>WSMR</u>) in New Mexico. The Defense Department's Regional Spectrum Coordinator contacted the FCC in March, seeking information on whom to contact regarding amateur transmissions operational on 70-centimeter frequencies slotted for use on the new control system. The FCC, in turn, asked ARRL to oversee the coordination efforts. It is to be noted that the Amateur Radio Service is a secondary service on the band.

Investigation revealed that the potential problem was not with individual operators or repeaters, but with RF control links at 420 – 430 MHz used to establish a linked repeater system within New Mexico. "Based on the investigation, and with the support of the FCC, the owners of the RF control links being used in the 420 – 430 MHz portion of the amateur allocation within a certain proximity to WSMR are being asked to re-coordinate the link frequency to a new one above 430 MHz," explained ARRL Regulatory Information Manager Dan Henderson, N1ND.

ARRL enlisted the assistance of the state's designated repeater frequency coordinator for information on specific links in that part of the band. New Mexico Repeater Frequency Coordinator Bill Kauffman, W5YEJ, agreed to work with the control link operators to find new frequencies that will meet the needs of the link operators.

"Time is a factor in this request," Henderson said. "The new WSMR systems are in advanced testing and will become fully operational by early summer 2021." The negotiated deadline for the affected control links to change frequencies is set for May 31, 2021.

"It appears a total of 32 control links will have to be addressed," Henderson said. ARRL has mailed letters to each of the RF control link operators, based on the recordkeeping of the frequency coordinator, to advise them of the DoD's request. "Any links with the potential to affect the identified control systems at WSMR still in operation after May 31, 2021 will be subject to action by the FCC."

Henderson said the changes should have no direct impact on the use of any local repeater, but until all the affected RF control links are transitioned to new frequencies, certain links may be temporarily inoperative. Links unable to be relocated by May 31 will have to be shut down until the situation can be resolved. ARRL will maintain contact with the FCC to advise it of the status of the coordination efforts.

O'bay Swap

SWAP ITEM #

FOR SALE:

WANTED:

Swap Items—Advertise here!

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 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

You Tube meetings...

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

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 enewsletter 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.

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						
(*) Yaes	su Fusion digi	tal/FM co	mpatible			
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
146.780-	UVARC	100.0	Lake Mtn
146.640-	BARC	none	Logan
146.720-	BARC	103.5	Mt Logan
147.260+	BARC	103.5	Promontory Pt
449.625-	BARC	103.5	Mt Logan
145.250-	WSU	123.0	* coming soon
449.250-	WSU	123.0	* coming soon
145.490-	K7HEN	123.0	Promontory Pt
146.920-	N7TOP	123.0	Promontory Pt
449.775-	N7TOP	123.0	Promontory Pt
147.100+	Morgan	123.0	Morgan Co
448.825-	IRLP/Echo	123.0	Clearfield City
449.950-	IRLP	123.0	Clearfield City
449.425-	IRLP	100.0	Nelson Peak
147.360+	Summit Co	100.0	Lewis Peak

AREA CLUB MEETINGS & WEB SITES

CLUB	WEB SITE	DATE/TIME	LOCATION
OgdenARC	ogdenarc.org	3 rd Saturday 09:00 am	Check OARC web site
WC Sheriff		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
		ard at the second	
WsuArc	https:groups.googl e.com/forum/#!	3 rd Thursday 5:30 pm	WSU Blding #4 Room ?
	forum/wsuarc		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		
		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" web site

Webmaster: Val Campbell K7HCP

President: Dave Mamanakis KD7GR	VE Liaisons:	Richard Morrison W7RIK
		Jason Miles KE7IET (IT)
Vice President: Justin Hall KB7LAK	Repeater Engine	eers: Mike Fullmer KZ7O
		Scott Willis KD7EKO
Secretary: Barbara Siddle WB7FWW	Dhotographer	Kathrun Cutton KODVN
	Photographer:	Kathryn Sutton K8RYN
Treasurer: J. Siddle KG7CJN	Asst Photograph	ner: Rick Hansen N7EGA
	Social Media:	Tom Harrington AF7J
Program Director: Mike Wilde KJ7HEX	QSL Manager:	Pete Heisig AI7GV
Activity Director: Todd Shobe KW7TES	Historian:	Kent Gardner WA7AHY
	Equipment Man	ager: Val Campbell K7HCP
	Club Call Sign Tr	ustee: Larry Griffin AD7GL
<u>"WATTS NEWS" e-Magazine</u>	Club Elmer:	Stan Sjol WOKP
NL Editor: Val Campbell K7HCP	Centennial Com	nmittee Chair:

Gil Leonard NG7IL

Advisors: **Mike Fullmer KZ70 Kent Gardner WA7AHY** Kim Owen KO7U Larry Griffin AD7GL **Gil Leonard NG7IL Jason Miles K7IET**

